

ANNUAL REPORT 2018-19



**National
Institute of
Technology
Srinagar**

July, 2020.

© National Institute of Technology Srinagar .

Editorial Committee

Patron

Prof. (Dr) Rakesh Sehgal Director

Members

Dr. Kaiser Bukhari Registrar

Mr. Mohamad Hazik Assistant Registrar
(S&P | Legal)

Report prepared by Mohamad Hazik.

Translated to Hindi by Dr. Ravi Bhushan,

Dr. H.S Pali & Dr. Shashikant Kumar

**Printed and published on behalf of the National Institute of
Technology Srinagar by the Registrar.**

National Institute of Technology Srinagar,

(An autonomous Institute under the aegis of Ministry of HRD, Government of India)

Jammu & Kashmir, India. Pin- 190 006

Telephone : 0194-2422032 | Fax : 0194-2420475

www.nitsri.ac.in



59th ANNUAL REPORT (2018-19)

www.nitsri.ac.in

Director's Report

59th Issue

It gives me immense pleasure to present the 59th Annual Report of the National Institute of Technology Srinagar (J&K) for the year 2018-19. The Institute right from its beginnings as Regional Engineering College Srinagar, back in 1960, has nurtured the rich traditions of pursuing excellence and has continually re-invented itself in terms of Academic Programmes and Research. The Institute has, over the decades, emerged as a premier Centre for Technical Education in the region. The Students at NIT Srinagar are exposed to challenging, research-based academics along with carrying out a host of sports, cultural and organizational activities on its vibrant campus. The Institute has a legacy of distinguished alumni who have made their alma-mater proud through their achievements and contributions in diverse fields, and our engagements with them are steadily growing.



NIT Srinagar has boasts of 8 established Engineering Departments which offer Bachelor of Technology Programmes in all eight disciplines; along with an offering of 10, Masters of Technology, Degree Programmes. NIT Srinagar also has 4 Allied Departments which in turn offer both Master's Degree Programmes as well as Research Programmes.

The Faculty at NIT Srinagar are actively involved in the research activities and have presented papers on varied research areas. Faculty members regularly attend and conduct National & International Conferences/Seminars, Workshops, Expert Lectures. Apart from these activities, many R&D sponsored projects are also in progress at the Institute.

The Faculty at NIT Srinagar are actively involved in the research activities and have presented papers on varied research areas. Faculty members regularly attend and conduct National & International Conferences/Seminars, Workshops, Expert Lectures. Apart from these activities, many R&D sponsored projects are also in progress at the Institute.

NIT Srinagar has been at the forefront for rendering support & services to other sister Institutions & has continued to offer expertise & consultancy services to various government & other organizations. The Institute under Unnat Bharat Abhiyan has adopted five villages for the transforming them in model villages. NIT Srinagar has till date donated 80 computers to the schools of these villages for establishing computer labs for imparting computer knowledge to the teachers and students of these primary and middle schools.

NIT Srinagar recognizes the importance of Trainings and Job Placements at the culmination of an Academic Programme; and as such, has an established Department for Training & Placement for the same. The T&P strives to bring in National & Multinational companies for placement of students of the Institute. More than 44 reputed Companies visited the Campus for placement during the year 2018-2019. A good number of students have been placed through Campus Selection.

I would like to place on record the outstanding work done by the faculty and the staff members of the Institute in strengthening teaching, research and outreach programmes. The success of the Institute in diverse area is due to these efforts. I record my appreciation for the team under the overall supervision of Dr. S. K. Bukhari, I/C Registrar of the Institute for compilation of the Annual Report for the year 2018-19.

At the end, I place on record my sincere gratitude to Ministry of Human Resource Development, Department of Higher Education, Government of India, Members of the BOG/FC/Senate & most of all the students of this Institute for their efforts, co-operation & support

Prof. (Dr) Rakesh Sehgal
Director

Annual Report 2018-2019

59th Issue

TABLE OF CONTENTS

Points of Interest:

- Established in 1960
- Elevated to NIT in 2003
- More than 2600 Students on rolls
- 8 Engineering Departments
- 4 Applied Sciences Departments
- 5 Centers

Inside Departments

- Faculty Details 1
- Paper Publications 2
- Programmes Attended & Conducted 3
- Doctoral Programmes 4
- Sponsored Projects 5
- Testing & Consultancies 6
- Labs & More 7

1

INTRODUCTION

Pages 6 to 13
History | 7
Campus & Location | 7-8
Administration | 8
NIT Council & BOG | 9-10
Senate & Committees | 11-13

4

CENTRES

Pages 137 to 151
WRMC | 137
CSC | 140
CRFC | 142
IIEDC | 143
LIRC | 147

7

ANNUAL ACCOUNTS

Pages 174 to 185
Balance Sheet | 174
I&R Account | 175
P&R Account | 176

2

ACADEMICS

Pages 14 to 29
Education System | 16
Courses Offered | 17
Admissions & Students | 18
Exam & Evaluation | 19
Academic Statistics | 20
Seat Matrix | 21
YoY Stats | 24
Degrees Awarded | 28

5

CENTRALIZED SERVICES

Pages 152 to 163
T&P Department | 152
Central Workshop | 155
P&D Wing | 159
Other Facilities | 162

3

DEPARTMENTS

Pages 30 to 136

Engineering Departments
Civil Engineering | 30
Mechanical Engineering | 48
Electrical Engineering | 75
I.T Engineering | 88
E&C Engineering | 92
Chemical Engineering | 98
Metallurgy | 105
Computer Science | 112

Allied Departments

Mathematics | 119
Physics | 123
Chemistry | 129
Humanities | 134

6

PROJECTS & SCHEMES

Pages 164 to 173
TEQIP III | 164
UBA | 170
PMDP | 171

1.0. Introduction

The National Institute of Technology Srinagar (formerly Regional Engineering College), was established in July of 1960, by a joint venture between the Government of India & the erstwhile State Government of J&K during the Second (Five Year) Plan. It was among the first batch of 8 such Institutes that were set up across the country. The other seven Institutes were located at Allahabad, Bhopal, Durgapur, Jamshedpur, Nagpur, Surathkal & Warangal.

The Institute initially functioned at the historical Chinar garden of Naseem Bagh, Srinagar;

adjacent to the campus of the University of Kashmir on the North side. The Institute eventually shifted to its present campus in the year 1966 & has functioned here ever since.

The Institute was elevated in the year 2003, to function as one of the 30 National Institutes of Technology across the country & was granted with 'Deemed to be University' status by the Ministry of Human Resource Development (MHRD), Government of India & University Grants Commission (UGC).

Objectives

- To provide the best educational infrastructure for imparting high class education in science & technology & a creative atmosphere for inter-disciplinary research both by the students & the faculty.
- To enhance the quality of teaching by strengthening the teachers professional capabilities to meet the growing educational aspirations of students.
- To upgrade the syllabus & re-frame the course curriculum periodically in order to produce creative & capable engineers who meet effectively the growing job requirements.
- To inculcate amongst the students the highest standards of honesty, accountability, moral integrity, tolerance for diversity, & respect for ethnic & religious differences so as to make them good human beings.
- To develop amongst the students a strong personal commitment, as a member of the engineering professional, towards social outreach activities.
- To produce engineers having ethics of engineering profession, complete confidence in decision making & a good social outlook in all their activities so that they perform their duty to the best satisfaction of the organization & to the society.
- To maintain global standards in student-faculty ratio, scientific research output, research publications in technical journals of repute, & placement of students.

Vision

To establish a unique identity of a pioneer technical Institute by developing high quality technical manpower & technological resources that aim at economic & social development of the nation as a whole & the region, in particular, keeping in view the global challenges.

Mission

- To create a strong & transformative technical educational environment in which fresh ideas, moral principles, research & excellence nurture with international standards.
- To prepare technically educated & broadly talented engineers, future innovators & entrepreneur graduates with understanding of the needs & problems of the industry, society, state & the nation.
- To produce engineers who possess the highest degree of confidence, professionalism, academic excellence & engineering ethics.

The National Institute of Technology Srinagar was established in July of 1960 as Regional Engineering College

Historical Background

The National Institute of Technology Srinagar (formerly Regional Engineering College), was established in July of 1960, by a joint venture between the Government of India & the erstwhile State Government of J&K during the Second (Five Year) Plan. It was among the first batch of 8 such Institutes that were set up across the country. The other seven Institutes were located at Allahabad, Bhopal, Durgapur, Jamshedpur, Nagpur, Surathkal & Warangal.

The Institute initially functioned at the historical Chinar garden of Naseem Bagh, Srinagar; adjacent to the campus of the University of Kashmir on the North side. The Institute eventually shifted to its present campus in the year 1966 & has functioned here ever since.

The Institute was elevated in the year 2003, to function as one of the 30 National Institutes of Technology across the country & was granted with 'Deemed to be University' status by the Ministry of Human Resource Development (MHRD), Government of India & University Grants Commission (UGC).

The Institute has proved its mettle over the decades & has continued to produce professionals & academicians of repute despite the period of turmoil & post the infrastructural damage it had to bear during the 2014 deluge. The Institute through its output at various levels has gained a reputation of a premier technical education Institute of the region.

Campus

The Institute is located at Hazratbal in Srinagar, the summer capital of J&K. The campus is spread over 67 acres on the banks of world-famous Dal Lake set against the beautiful Zabarwan Mountain range. The Institute is flanked by the much revered Sufi Shrine oh Hazratbal on its North.

The Institute is residential with accommodation facility for students & staff in hostels & Residential Quarters. There are eight boys &

NIT Srinagar is a residential Institute with accommodation facility in Hostels & Staff-Quarters. There are eight Boys & two Girls hostel which have a capacity of around 2000 boys & 300 girl students.

Besides running the B.Tech. Program the Institute also offers M.Tech. program in many streams. In addition to that a large number of students are registered for M.Phil. & Ph.D. Programmes in different disciplines.

Facilities & amenities are available at the Institution such as NSS, Bank, Shopping Arcade, Recreational Centre, Dispensary with Ambulance, Guest House, Students Activity Centre, Gymnasium, Internet Centre, Fax Services, Generator, Bus Facility.

The Institution has an Industry Interaction cell which was established in 1989 with the aim to remain at the fore-front on the Scientific & Technological development & to share its experience with industries in utilizing. Man-power & other resources are available at the Institute effectively with the assistance of the participating industries. The Institute has one of the best technical libraries in J&K State. It has a collection of over 60,000 books on Engineering Science & humanities & about 6,000 bound volumes/Journals, both foreign & Indian. It has on line repository of A.S.C.E, A.S.M.E.A.E.L, J.C.C.C etc in addition to journals through I.N.S.E.S, COMSORTIEM. It also has a collection of I.S.I codes, in the form of soft copy.

two girls hostels which accommodate about 2000 boys & 300 girls with separate mess facility for each hostel.

Almost all necessary facilities & amenities are available in the campus which includes Cafeteria, Shops, Bank, Medical Unit with ambulances, Guest House, Students Activity Centre, Gymnasium, Computer Services Centre with internet facility, Bus facility, Centralized Library etc.

How to Get Here

The campus is 10 Kilometers from the City Centre, Lal Chowk (Red Square). It's a further 22 Kilometers from the Sheikh Ul Alam International Airport, Srinagar. The Nearest Railway Station of Nowgam is at a distance of about 18 kilometers from the Institute Campus. The campus is located on National Highway to Ladakh. The campus is also connected with the winter capital, Jammu & the national capital, Delhi by National Highway 44 which snakes through picturesque high mountain passes. The distance till Jammu can be covered in about 7-8 hours by private cabs.



Administration

*“To give real service,
you must add
something which
cannot be bought or
measured with
money”*

— Sir M. Visvesvaraya

National Institute of Technology Srinagar (J&K) is an autonomous Institute under the direct control of Ministry of Human Resource Development (MHRD), Government of India (GOI). The Institute functions under the overall guidance & control of Board of Governors (BOG). Director is the academic & executive head of the Institute. He is also the Ex-Officio member of the Board of Governors & is responsible for maintaining proper administration & discipline & imparting instructions for smooth functioning & overall development of the Institute.

Director is assisted in the day-to-day affairs of the Institute by the Registrar, Deans, Heads of the Departments & Centers along with various committees & other officers. The Important Committees in addition to BOG, responsible for advising in respect of the various matters of the Institute, include:

Committees at NIT Srinagar	
The Senate	For Academic Affairs
Finance Committee (FC)	For Financial Matters
Building Works Committee (BWC)	For Developmental

NIT Council

1	Minister of Human Resource Development, Government of India.	Chairman
2	Secretary, Department of Secondary & Higher Education, Ministry of HRD, Government of India.	Member
3	Chairpersons, of all Board of Governors of National Institutes of Technology.	Members
4	Directors, of all the National Institutes of Technology	Members
5	Chairman, University Grant Commission.	Member
6	Director General, Council of Scientific & Industrial Research, Government of India.	Member
7	Secretary, Department of Biotechnology, Government of India.	Member
8	Secretary, Atomic Energy, Government of India.	Member
9	Secretary, Department of Information Technology, Government of India.	Member
10	Secretary, Department of Space, Government of India.	Member
11	Chairman, All India Council of Technical Education.	Member
12	Three members of Parliament, Of whom two shall be chosen by the House of the People and one by the Council of States	Members
	<i>(Provided that the office of member of the Council shall not disqualify its holder for being chosen as or for being, a member of either House of Parlia- ment)</i>	
13	Three to Five persons (at least one of whom shall be a woman) having special knowledge or experience in respect of education, industry, sci- ence or technology nominated by the Visitor,	Members
14	Two Secretaries of Higher / Technical Education from states where NITs are located (by rotation).	Members
15	Financial Adviser, Ministry of Human Resource Development, Government of India.	Member
16	Joint Secretary, (Technical Education), Joint Educational Adviser (Technical Education), Ministry of Human Resource Development Government of India.	Member- Secretary

Board of Governors

Chairman	Nomination*	Prof. Rakesh Sehgal Director, NIT Srinagar (J&K)
Ex-Officio	(b)	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir-190006
Two persons not below the rank of the Joint Secretary to the Government of India to be nominated by the Central Government from amongst persons dealing with technical education and finance	(c)	Joint Secretary (NITs & DL), Ministry of Human Resource Development, Department of Secondary & Higher Education, Government of India, New Delhi
Two persons to be nominated by the Government of the State in which the Institute is situated, from amongst persons, who, in the opinion of that Government, are technologists or industrialists of repute	(c)	Joint Secretary & FA, Ministry of Human Resource Development, Department of Secondary & Higher, Government of India, New Delhi.
Two persons to be nominated by the Government of the State in which the Institute is situated, from amongst persons, who, in the opinion of that Government, are technologists or industrialists of repute	(d)	Mr. Talat Parvez, Commissioner Secretary, Higher & Technical Education Dept. Government of Jammu and Kashmir, Civil Secretariat, Srinagar / Jammu.
Two persons, at least one of whom shall be a woman, having special knowledge or practical experience in respect of education, engineering or science to be nominated by the Council	(e)	Dr. Prema Ramchandran, Director, Nutrition Foundation of India, Delhi
One Professor and one Assistant Professor or a Lecturer of the Institute to be nominated by the Senate	(e)	Prof. M. F. Wani, Mechanical Engineering Department, National Institute of Technology Srinagar.
	(f)	Dr. M. S. Charoo, Associate Professor, Mechanical Engineering Department, NIT Srinagar
Member-Secretary	Section 18 Clause (2)	1. Dr. Nisar Ahmad Mir, Registrar, NIT Srinagar. (upto 14-01-2019) 2. Prof. A. H. Mir Registrar I/C, NIT Srinagar. (From 14-01-2019 to 28-01-2019) 3. Dr. S. K. Bukhari, Registrar I/C, NIT Srinagar. (From 29-01-2019)

The Senate

Chairman	1	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir- 190006
Three persons, one of whom shall be a woman, not being employees of the Institute to be nominated by the Chairperson in consultation with the Director, from amongst educationists of repute, one each from the field of Science, Engineering and Humanities	1 2 3	Prof. Mehraj-ud-Din, Vice-Chancellor, Central University of Kashmir, Srinagar (J&K) Prof. S. K. Koul, Professor, Centre for Applied Research in Electronics (CARE), Indian Institute of Technology, Hauz Khas, New Delhi. Prof. Azra Nahid Kamili, Dean, Biological Sciences & HOD, Environmental Sciences, University of Kashmir
One person to be nominated from the Industry	1	Mr. Deepak Bhasin, B-134, Naraina Vihar, New Delhi.
Institute alumnus	1	Er. Mufti Musharib Gul General Manager, BSNL Srinagar
The Professors appointed or recognized as such by the Institute for the purpose of imparting instructions in the Institute.	1	All Professors
Such other members of the staff as may be laid down in the Statutes	1	All Deans, HoDs, Associate Deans, Controller of Examination, Co-ordinator 1 st & 2 nd Semester, Chairman Library Committee, Librarian and DPE.
Secretary	1 2 3	Dr. Nisar Ahmad Mir, Registrar, NIT Srinagar. (upto 14-01-2019) Prof. A. H. Mir Registrar I/C, NIT Srinagar. (From 14-01-2019 to 28-01-2019) Dr. S. K. Bukhari, Registrar I/C, NIT Srinagar (From 29-01-2019)

Building & Works Committee

Chairman	1	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir- 190006
Members: Nominated by MHRD and IFD New Delhi	1	Director OR Deputy Secretary (NITs), MHRD, Department of Secondary & Higher Education, Government of India, New Delhi
	2	Representative of Integrated Finance Division (IFD)
One person nominated by the Board of Governors	1	Mr. Fayaz A Khan, Chief Town Planner Kashmir
Dean, Planning & Development		Prof. Javed Ahmad Bhat, Civil Engineering Department, NIT Srinagar
Nominee of the CPWD / State PWD	1	Mr. Dhiraj Kumar, , Superintendent Engineer (Civil), CPWD, Chandigarh.
	2	Shri Prabhakar Kumar Verma, Chief Architect, CPWD, Chandigarh
	3	Prof. Bashir Ahmad Mir, Associate Dean, P&D, NIT Srinagar
	4	Shri Rajiv Sao, Superintendent Engineer, CPWD Chandigarh
	5	Executive Engineer (Civil), CPWD, Srinagar.
	6	Er. Aijaz Ahmad Khan, Executive Engineer, Electric Division 4th Srinagar.
Secretary	1	Dr. Nisar Ahmad Mir, Registrar, NIT, Srinagar. <i>(Up to 14-01-2019)</i>
	2	Prof. A. H. Mir Registrar I/C, NIT, Srinagar. <i>(From 14-01-2019 to 28-01-2019)</i>
	3	Dr. S. K. Bukhari, Registrar I/C, NIT, Srinagar <i>(From 29-01-2019)</i>

Finance Committee

Chairman	1	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir- 190006
Members: Two persons nominated by the Central Government	1	Joint Secretary (NITs & DL), Ministry of Human Resource Develop- ment, Department of Secondary & Higher Edu- cation, Government of India, New Delhi
	2	Joint Secretary & FA, Ministry of Human Resource Develop- ment, Department of Secondary & Higher, Gov- ernment of India, New Delhi.
Two persons nominated by the BOG from amongst its members	1	Prof. M. F. Wani, Mechanical Engineering Department, National Institute of Technology Srinagar
	2	Dr. M. S. Charoo, Associate Professor, Mechanical Engineering Department, NIT Srinagar
Director (Ex-officio)	1	Prof. Rakesh Sehgal Director, NIT Srinagar (J&K)
Secretary	1	Dr. Nisar Ahmad Mir, Registrar, NIT Srinagar. (Up to 14-01-2019)
	2	Prof. A. H. Mir Registrar I/C, NIT Srinagar. (From 14-01-2019 to 28-01-2019)
	3	Dr. S. K. Bukhari, Registrar I/C, NIT Srinagar (From 29-01-2019)

The meetings of the above statutory committees were conducted as detailed below:

Name of Statutory Committee	Date of the meeting
Senate	08-08-2018
Building Works Committee	28-09-2018
Finance Committee	29-09-2018 14-12-2018
Board of Governors	29-09-2018 14-12-2018

2.0 Academics

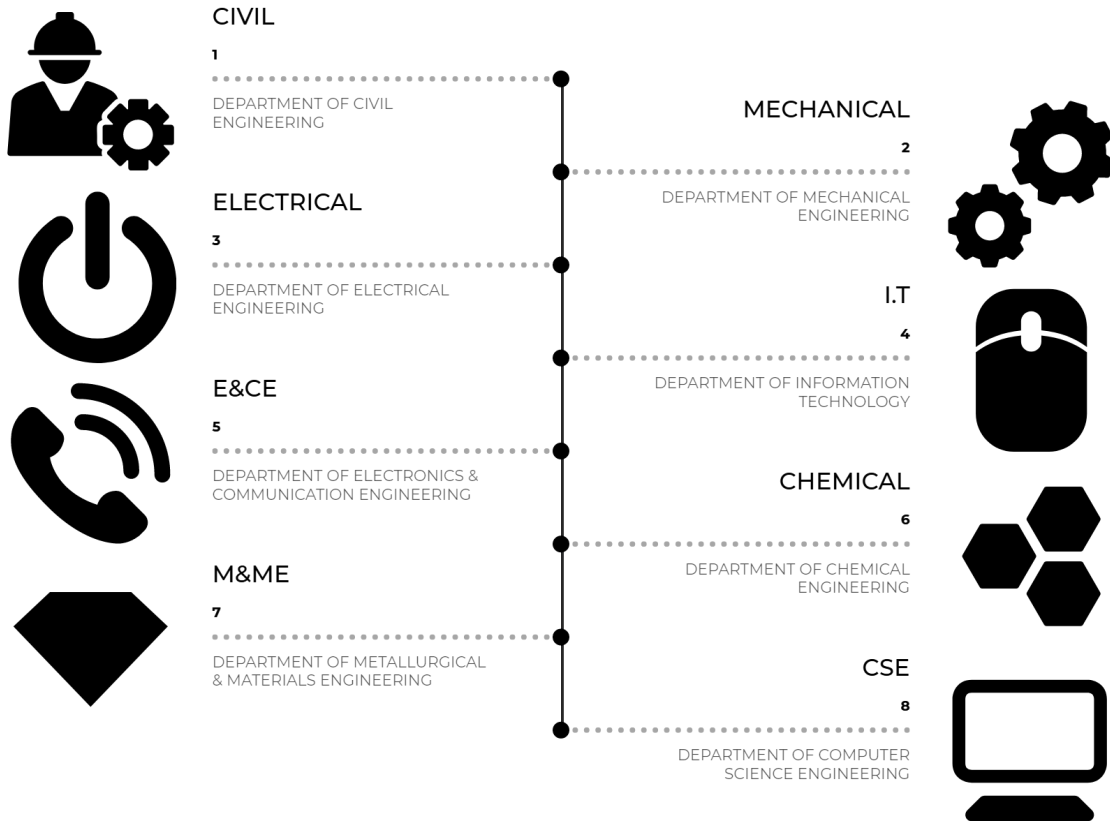
The Institute offers various academic Programmes comprising of (08) B.Tech. Programmes in eight disciplines of engineering; (10) M.Tech.. Programmes in 05 Engineering Departments,

The Institute offers M.Phil. programme in Sciences & HSS departments along with Ph.D. Pro-

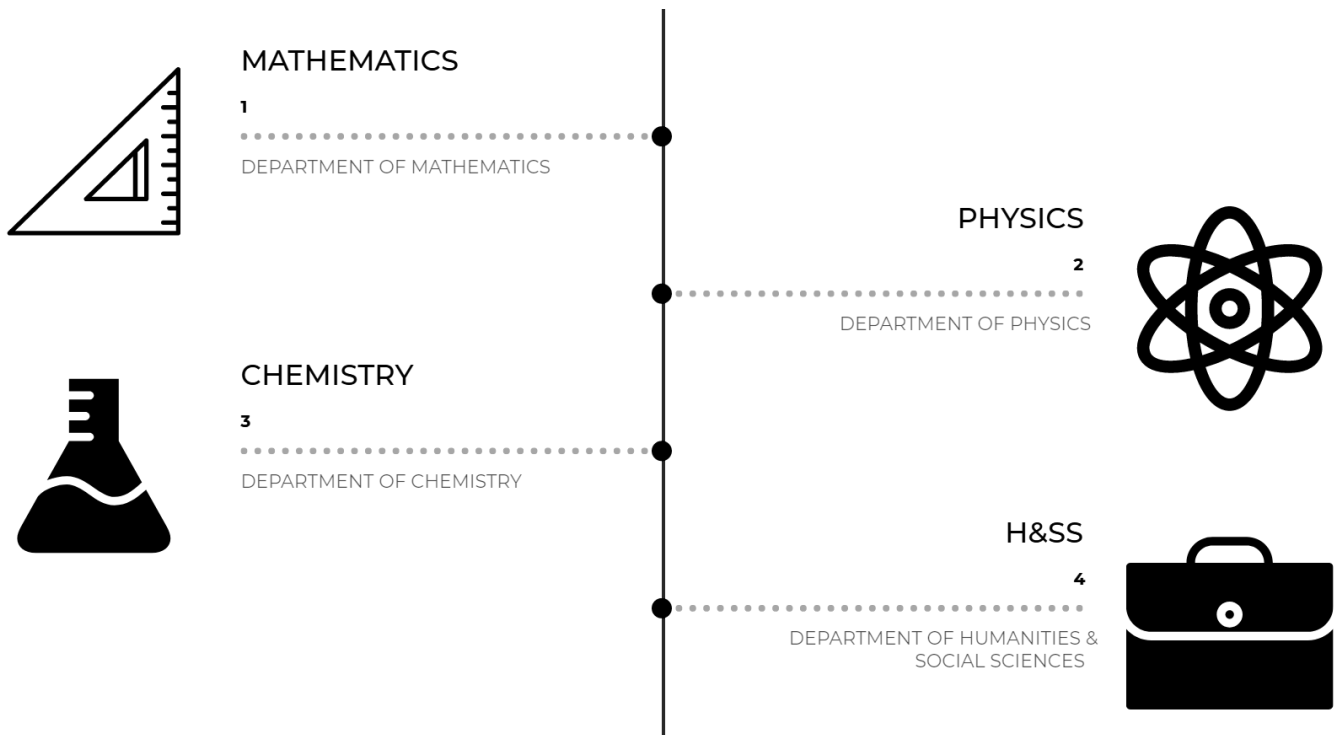
grammes in all the engineering, science & HSS departments.

The Institute has eight Engineering Departments, four Allied Departments & Five Centres. These are:

Engineering Departments



Allied Departments



Centres at NIT Srinagar



Education System

- The Institute offers 4 Year, full time Bachelor of Technology degree courses in 8 Engineering disciplines.
- Master of Technology Degree Courses are offered on both full time & part-time basis in 5 Engineering disciplines
- A Two Year Masters in Science Degree Course is offered in Applied Physics.
- Doctor of Philosophy (Ph.D.) degree is awarded by the Faculty of Engineering in all branches of engineering available in the Institute.
- Master of Philosophy & Doctor of Philosophy is awarded by the faculty of Allied Sciences' & Humanities & Social Science Department.
- The Institute also offers Post Doctoral Programmes at its various Engineering Departments
- The Academic Session is divided into two semesters, an Autumn semester (August–December) & a Spring semester (March–July).
- The Semester system is enforced at both under-graduate (U.G.) & post graduate (P.G.) levels.
- The Senate approves the academic calendar consisting of schedule of activities for the whole year including dates for registration, semester examinations, inter-semester breaks, sports activities, annual day etc.
- Medium of instructions & examination for all courses including writing of dissertations of B.Tech. /M.Tech. /M.Phil. & Ph.D. thesis is British English.
- 05 days week period with at least 90 working days in each semester.
- Week days used for E.C.A. & other such activities.
- Credit based continuous Assessment System with one midterm & one major examination in each semester.
- Compulsory Practical training & visits to the work sites both at graduate & post graduate levels

“One man’s

“magic” is another

man’s engineering.

“Supernatural” is a

null word. – Robert

A. Heinlein

Courses Offered

B.Tech. Degree Programme

The 4 Year full time Bachelor of Technology degree courses are offered in:

- Chemical Engineering
- Civil Engineering,
- Computer Science Engineering,
- Electrical Engineering,
- Electronics & Communication Engineering
- Information Technology
- Mechanical Engineering
- Metallurgical & Materials Engineering



M.Tech. Degree Programme

The Institute offers both Full time & Part Time Master of Technology degree courses in:

- Structural Engineering
- Water Resources Engineering
- Geotechnical Engineering
- Transportation Planning & Engineering
- Communication & Information Technology
- Micro Electronics
- Mechanical System Design
- Industrial Tribology & Maintenance Management
- Electric Power & Energy System
- Chemical Engineering

The duration of a M.Tech. Course is of two years (four semesters) for full time students & 3 years for those admitted under part-time. Part time enrolment is given only to sponsored candidates.

M.Sc. Degree Programme

The Institute offers a 2 Year Master of Science Postgraduate degree course at its Physics department in

- Applied Physics

M. Phil Programme

The Institute offers both Full time & Part Time Master of Philosophy degree courses at following departments:

- Mathematics
- Physics
- Chemistry
- Humanities & Social Sciences

Ph.D. Programme

The Doctoral Degree Programmes are being offered in all the Engineering & Allied Departments. These Programmes are offered on both full-time & part-time basis. About 150 research fellowships have been sanctioned with Scholarships at the rate as approved by MHRD from time to time. Currently, there are more than 450 Scholars pursuing research at NIT Srinagar

Post Doctoral Programme

The Post Doctoral Programmes are being offered at the various Engineering Departments.

Admissions

Undergraduate Courses

As per the policy of Government of India for NITs, admission to U.G. Programmes is made on the basis of the merit in National Level Test Joint Entrance Examination (JEE) Mains, conducted by Central Board of Secondary Education (CBSE) New Delhi.

50% of sanctioned Intake of 672 seats for B.Tech. is filled from domicile candidates of J&K State & 50% from candidates of other States, purely based on the merit/ranking in JEE Main Examination through a centralized online counseling system devised by the CSAB/JOSAA. In addition the Institute also has a sanctioned intake of 53 seats for students under DASA program.

Post-graduate courses

The admission for Post graduate courses is made through CCMT based on GATE scores. However, admissions through a written test & Gate Score for sponsored candidates on full

time & part-time basis is also available for in-service candidates interested in seeking admission in Post graduate Programmes.

The M.Tech. Program is of two years spread (four semesters) & a total number of 60 credits are required to be earned for its award. The coverage of various courses, labs, seminars, field work, dissertation etc is an essential part of the M.Tech. Programmes.

M. Phil / Ph.D.

The Selection of candidate for M. Phil/ Ph.D. Program is made through an Entrance test followed by viva voce examination conducted by the concerned Departmental Research Committee (DRC). The candidates with satisfactory performance are selected for M. Phil/ Ph.D. Program.

*“All religions, arts
and sciences are
branches of the
same tree” —
Albert Einstein*

Students

The student strength of the Institute is around 2627 (B.Tech/M.Tech/M.Sc./Ph.D.). The Institute has been able to attract the students from all parts of the Country. Students of NIT Srinagar in addition to doing well in academics, also take part in other co-curricular & extra-curricular activities as well with lot of enthusiasm. The students actively participate in the Institute affairs. The welfare of students is one of the major priorities of the Institute. For this purpose Students' welfare wing works towards the holistic development of the students.

Examination & Evaluation

.All under graduate, post graduate & M.Phil./ Ph.D. Examinations, of the Institute are conducted centrally by the Examination Section of the Institute. The medium of examination for all examinations including dissertations & thesis is British English.

The performance of a student is evaluated in terms of two indices viz; the Semester Grade Point Average (SGPA) for a semester & Cumulative Grade Point Average (CGPA) which is the Grade point index for all the completed Semesters at any point of time. The Semester Grade Point Average (SGPA) is calculated on the basis of grades obtained in all courses in a semester & Cumulative Grade Point Average (CGPA) is calculated on the basis of pass grade in all completed semesters.

For each course, a grade is awarded on

Examination & Evaluation *(contd)*

the basis of two written examinations in the case of theory papers i.e. Mid-term & Major Examinations with weight-age of 30 & 60 marks, respectively. 10 marks are reserved for class performance & attendance of the student in the course. The paper setting & evaluation is done by the concerned Faculty Members of the respective Departments in the Common Evaluation Centre of the Institute. The award rolls are being uploaded on the ERP Portal by the concerned faculty member under the supervision of DUGC. Mid-Term examination answer scripts are returned to students & major answer scripts are shown to them before submission of grades to the DUGC.

B.Tech. students are required to submit a project report of their project at the end of the 8th semester, which starts in 7th semester. It is to be submitted in the form of a bound thesis. The Heads of the Departments constitute a Project Evaluation Board (PEB) which assesses each individual project of the students. The evaluation is done in the following manner:-

The Project Evaluation Board comprises of:-

- Head of the Department concerned
- One senior most faculty member of the concerned department
- Supervisor concerned &
- One expert from any other sister Department of the Institute for B.Tech.

In case of M.Tech. the expert is from outside the Institute, nominated by Director from an approved panel.

SUPERVISOR	
Based on the work done by the student during the tenure of the Project)	40 %
EVALUATION BOARD	
20% For Project Report Contents & Quality	60 %
40 % For Presentation & viva voce	

Academic Statistics *(for 2018-2019)*

B.Tech. COURSES

Discipline	Sanctioned Intake	Admissions Undertaken
Chemical Engineering	79 + 3 (DASA)	69
Civil Engineering	136 + 10 (DASA)	132
Computer Science Engineering	63 + 7 (DASA)	65
Electrical Engineering	84 + 7 (DASA)	78
Electronics & Communication Engineering	83 + 7 (DASA)	77
Information Technology	65 + 7 (DASA)	62
Mechanical Engineering	85 + 9 (DASA)	83
Metallurgical Engineering	77 + 3 (DASA)	58

M.Tech. COURSES

Discipline	Sanctioned	Admissions
Water Resources Engineering	15	8
Structural Engineering	25	19
Communication & Information Technology	25	9
Micro Electronics	13	8
Mechanical System Design	25	12
Industrial Tribology &	26	11
Electric Power & Energy System	26	21
Transportation Engineering	18	13
Geo-Tech Engineering	17	13
Chemical Engineering	18	2

M.Sc. PHYSICS

Discipline	Sanctioned Intake	Admissions Undertaken
M.Sc. Physics	25	05

“Failure is the opportunity to begin again more intelligently.” – Henry Ford

Ph.D. Programmes total Sanctioned Intake capacity per year is 150.

B.Tech. Seat Matrix

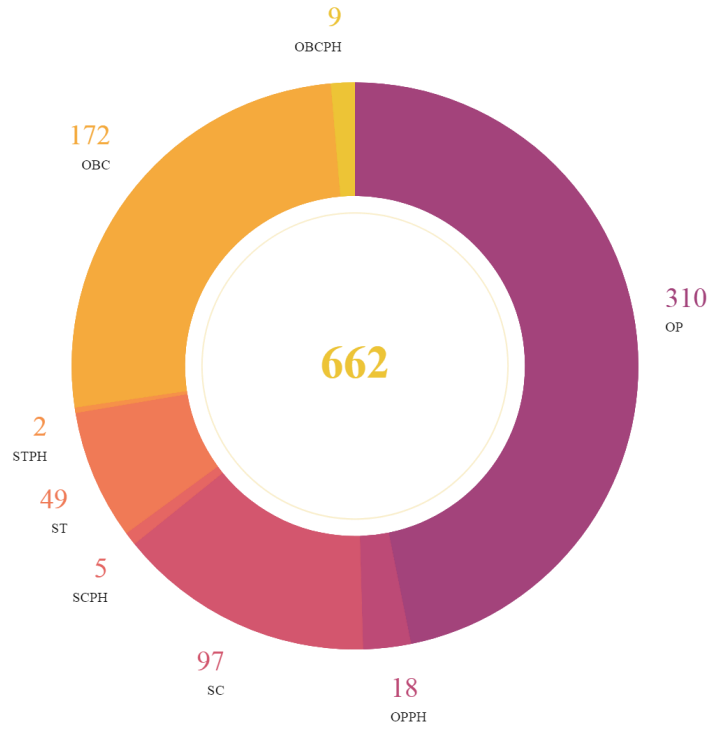
Other States Student Quota

Branch	OP	OPPH	SC	SCPH	ST	STPH	OBC	OBCPH	TOTAL
CSE	16	1	5	-	1	-	8	-	31
IT	16	1	5	-	2	-	9	-	33
Civil	32	2	9	1	5	-	18	1	68
Mech.	19	1	6	1	3	0	11	1	42
Elect.	19	1	6	1	2	1	11	1	42
E&C	20	1	6	0	3	0	10	1	41
Chem.	19	1	6	0	2	1	10	1	40
M&MT	19	1	6	0	3	0	10	0	39
Total	160	9	49	3	21	2	87	5	336

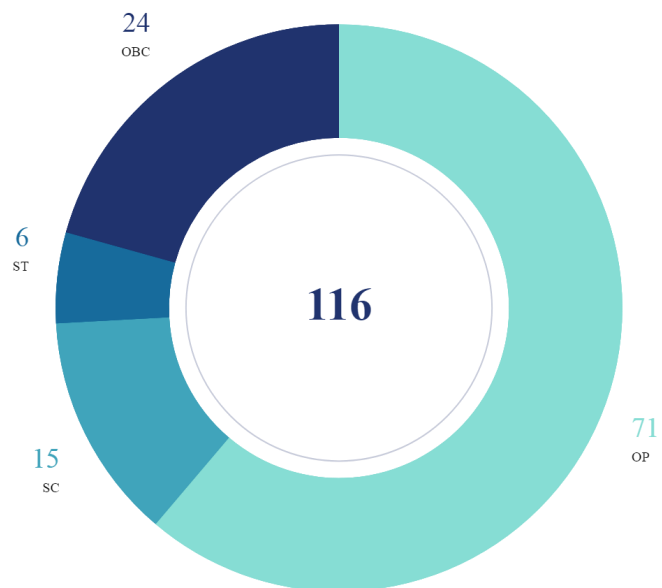
Home State Student Quota

Branch	OP	OPPH	SC	SCPH	ST	STPH	OBC	OBCPH	TOTAL
CSE	15	1	4	0	3	0	9	0	32
IT	16	1	5	0	2	0	8	0	32
Civil	33	2	9	1	5	0	17	1	68
Mech.	19	1	6	1	4	0	11	1	43
Elect.	20	1	6	0	4	0	10	1	42
E&C	20	1	6	0	4	0	10	1	42
Chem.	19	1	6	0	3	0	10	0	39
M&MT	18	1	6	0	3	0	10	0	38
Total	160	9	48	2	28	0	85	4	336

Seat Matrix (B.Tech)



Seat Matrix (M.Tech)



M.Tech. Seat Matrix

Program	OP	SC	ST	Spon- sored	OBC	Total
Water Resource Engineering	4	1	0	0	3	8
Mechanical System Design	6	1	1	0	4	12
Structural Engineering	11	3	0	0	5	19
Industrial Tribology & Maintenance Management	10	0	0	0	1	11
Communication Information Technology	7	1	1	0	0	9
Electric Power & Energy System	12	3	1	0	5	21
Transportation Engineering	8	2	1	0	2	13
Geo-Tech	7	2	1	0	3	13
Micro Electronics	5	2	1	0	0	8
Chemical Engineering	1	0	0	0	1	2
TOTAL	71	15	6	0	24	116

M. Sc Seat Matrix

Program	OP	SC	ST	Spon- sored	OBC	Total
M. Sc Physics	4	0	0	0	1	5
TOTAL	4	0	0	0	1	5

Ph.D. Admissions

Program	Adm.	Program	Adm.
Chemical Engineering	6	Information Technology	5
Civil Engineering	12	Mechanical Engineering	12
Computer Science Engineering	5	Mathematics	0
Electrical Engineering	10	Physics	9
Metallurgical & Materials Engineering	4	Chemistry	9
Electronics & Communication Engineering	7	Humanities & Social Sciences	0

Year on Year Statistics

B.Tech. Enrollments (Category wise)					Year	2015
Batch	OP	SC	ST	OBC	DASA	Total
Civil	51	17	07	34	01	110
ELE	32	12	06	23		73
ECE	32	12	05	22		71
Chem.	36	12	05	09		62
Mech.	35	12	06	21		74
M&ME	26	11	04	10		51
C. Sc.	29	08	05	16	02	60
I.T.	24	09	05	18		56
Total	265	93	43	153	03	557
					Year	2016
Civil	32	16	08	22		78
ELE	22	09	05	18		54
ECE	18	07	04	15		44
Chem.	21	08	01	07		37
Mech.	24	08	02	21		55
M&ME	13	04	02	06		25
C. Sc.	25	06	05	12	03	51
I.T.	16	05	02	13		36
Total	171	63	29	114	03	380
					Year	2017
Civil	39	15	09	42	0	105
ELE	26	12	05	24	0	67
ECE	30	10	04	23	0	67
Chem.	24	18	03	11	0	56
Mech.	25	12	06	28	0	71
M&ME	04	04	03	0	0	11
C. Sc.	24	09	04	22	0	59
I.T.	24	08	02	18	0	52
Total	196	88	36	168	0	488
					Year	2018
Civil	45	19	11	56	1	132
ELE	32	12	6	28	0	78
ECE	39	11	6	21	0	77
Chem.	23	17	5	24	0	69
Mech.	40	14	7	22	0	83
M&ME	18	12	2	26	0	58
C. Sc.	27	9	4	23	2	65
I.T.	35	10	3	14	0	62
Total	259	104	44	214	3	624

M.Tech. Enrollments (Category wise)

Program	OP	SC	ST	Spon- sored	OBC	Total
						Year
						2016
Water Resource Engineering	06	01/	01	02	-	10
Mechanical System Design	06	04	0	05	03	18
Structural Engineering	13	03	01	03	02	22
Industrial Tribology & Maintenance Management	09	02	0	03	01	15
Communication Information Technology	12	01	01	05	-	19
Electric Power & Energy System	11	02	01	05	01	20
Transportation Engineering	06	02	01	05	03	17
Geo-Tech	06	01	01	05	01	14
Micro Electronics	05	01	0	02	01	09
Chemical Engineering	02	0	0	01	-	03
TOTAL	76	17	06	36	12	147
						Year
						2017
Water Resource Engineering	08	01	0	01	0	11
Mechanical System Design	09	01	0	01	02	13
Structural Engineering	16	03	0	01	03	23
Industrial Tribology & Maintenance Management	09	0	0	-	-	09
Communication Information Technology	15	0	0	01	-	16
Electric Power & Energy System	11	01	01	01	04	17
Transportation Engineering	10	0	0	01	02	13
Geo-Tech	08	01	01	01	03	13
Micro Electronics	08	0	0	-	01	09
Chemical Engineering	02	0	0	-	01	03
Total	96	07	07	07	16	127
						Year
						2018
Water Resource Engineering	4	1	0	0	3	8
Mechanical System Design	6	1	1	0	4	12
Structural Engineering	11	3	0	0	5	19
Industrial Tribology & Maintenance Management	10	0	0	0	1	11
Communication Information Tech.	7	1	1	0	0	9
Electric Power & Energy System	12	3	1	0	5	21
Transportation Engineering	8	2	1	0	2	13
Geo-Tech	7	2	1	0	3	13
Micro Electronics	5	2	1	0	0	8
Chemical Engineering	1	0	0	0	1	2
Total	71	15	6	0	24	116

Year on Year Statistics

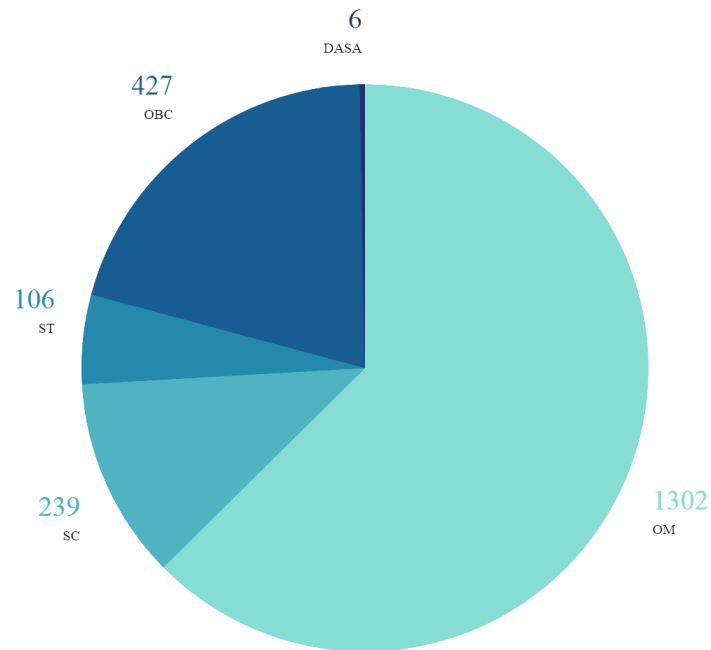
B.Tech. Enrollments (Gender wise)																
Batch	CIVIL		ELE		ECE		CHEM.		MECH.		M&ME		CSE		IT	
Year	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	109	09	61	12	64	09	54	11	74	01	56	10	50	08	48	08
2015	96	14	60	13	58	13	56	06	74	-	41	10	59	01	48	08
2016	64	14	50	04	35	09	31	06	55	-	21	04	48	03	32	04
2017	95	11	60	07	56	11	46	11	71	01	12	02	53	07	43	10
2018	112	20	66	12	64	13	60	9	72	11	50	8	52	13	52	10
Total	476	68	297	48	277	55	247	43	346	13	180	34	262	32	223	40

M.Tech. & M.Sc. Enrollments (Gender wise)																						
Batch	WRE		MSD		SE		IT&MM		CIT		EP&ES		TE		GTE		ME		CE		MSc P	
Year	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2016	09	01	13	05	19	03	12	07	13	02	14	06	16	01	13	01	05	04	3	-	06	01
2017	06	06	13	0	22	02	11	07	11	0	16	01	13	01	11	03	04	05	04	0	11	25
2018	6	2	12	0	19	0	11	0	6	3	19	2	12	1	12	1	7	1	1	1	3	2

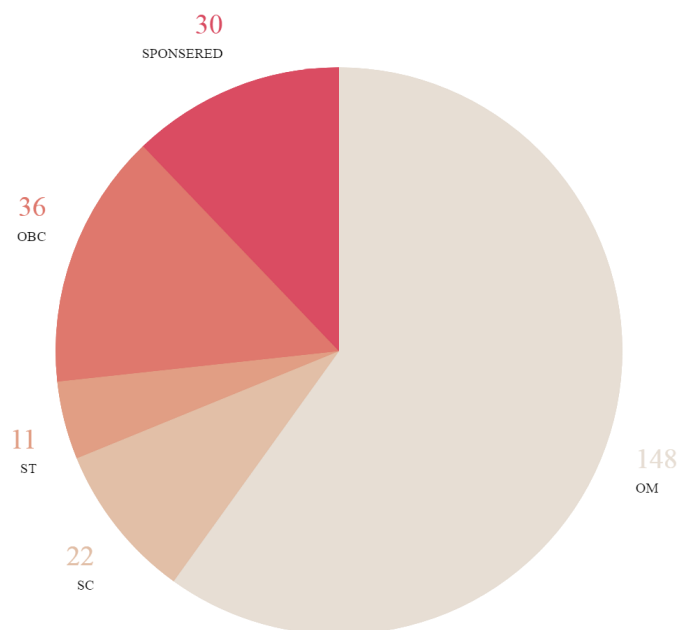
Ph.D. Faculty of Engineering Enrollments (Gender wise)																
Batch	CIVIL		ELE		ECE		CHEM.		MECH.		M&ME		CSE		IT	
Year	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
2014	-	01	-	-	01	-	-	-	03	-	-	-	-	-	-	-
2015	06	03	09	03	02	-	15	-	-	-	02	01	15	03	-	-
2016	03	04	01	-	02	02	09	01	1	-	01	01	08	02	-	-
2017	04	14	13	07	06	05	17	03	01	0	02	01	37	09	-	-
2018	4	3	7	3	2	3	10	2	6	0	4	0	10	2	4	1

Ph.D. Faculty of Sciences Enrollments (Gender wise)									
Batch	PHYSICS		CHEMISTRY		MATHS		HSS		
Year	M	F	M	F	M	F	M	F	F
2013	13	-	11	4	5	2	-	-	1
2014	01	-	-	02	-	-	-	-	-
2015	05	01	06	01	02	-	02	-	-
2016	01	-	04	-	-	-	-	-	-
2017	09	03	08	02	0	0	0	0	0
2018	9	0	8	1	0	0	0	0	0

Student Strength in Undergraduate Programmes



Student Strength in Postgraduate Programmes



Ph.D. Degrees awarded during the period

S. No.	Regd No	Scholar	Department	Date	Supervisor
1	2013-Ph.D- Autumn-FOE- 07	Mir Bintul Huda	Civil	10-05-2018	Dr. M.A Lone Dr. J.A Bhat
2	2013-Ph.D- Autumn-FOE- 11	Nasir Ahmad Ra- ther	Civil	18-05-2018	Dr. M.A. Lone Dr. A.Q Dar
3	2014-Ph.D- FOE-08	Malik Parveez	Chemical	08-06-2018	Dr. G.A Harmain Dr. Amit Kumar Diman
4	2014-Ph.D- FOE-07	Tanveer Rasool Dar	Chemical	29-06-2018	Dr. Mohd Noor Salam Khan Dr Vimal Chan- dra Srivastava
5	2010-Ph.D- FOE-02	Shabir Ahmad Sofi	CSE	09-04-2018	Dr. Roohi Naaz mir
6	2013-Ph.D- Autumn-FOE- 10	Sukh Kirandeep Kaur	CSE	14-09-2018	Dr. Roohi Naaz mir
7	2013-Ph.D- FOE-Autumn- 63	Mubashar Yaqoob Zargar	Electrical	05-11-2018	Dr.S.A.Lone Dr.M.D.Mufti
8	2013-Ph.D- FOE-23	Deepak Sharma	Electrical	28-07-2018	Dr.A.H.Bhat
9	2013-Ph.D- FOE-10	Riyaz Ahmad Khan	ECE	17-05-2018	Dr. A.H Mir
10	2013-Ph.D- FOE-09	Saba Mushtaq	ECE	17-08-2018	Dr. A.H Mir
11	2011-Ph.D- FOE-05	Mohd Mursaleen	Mechanical	23-05-2018	Dr. Sheikh Nazir
12	Ph.D(Mech) 01/2008	Sheikh Shahid Saleem	Mechanical	04-06-2018	Dr. M.F. Wani
13	2015-Ph.D- FOE- AUTUMN-35	Parveen Kumar	Mechanical	25-06-2018	Dr.M.F Wani
14	2013-Ph.D- FOE-18	Shuhaib Mushtaq	Mechanical	27-06-2018	Dr.M.F Wani

Ph.D. Degrees awarded during the period

S. No.	Regd No	Scholar	Department	Date	Supervisor
15	2011-Ph.D- FOE-06	Saad Parveez Qadir	Mechanical	11-07-2018	Dr. G.A Harmain
16	2013-Ph.D- FOS-01	Ishtaq Ahmad Najar	Mathematics	18-04-2018	Dr Niyaz Ahmad Sheikh
17	2013-Ph.D- FOS-03	Irfan Ahmad Faiq	Mathematics	10-05-2018	Dr Abdul Limaan
18	2011-Ph.D- FOS-20	Shabir Ahmad Akhoon	Physics	03-05-2018	Dr Seeman Rubab Dr M.A Shah
19	2015-Ph.D- FOS-08	Muzffar Ahmad Boda	Physics	28-08-2018	Dr M.A Shah
20	2014-Ph.D- FOS-Spring-05	Farooq Ahmad Dar	Physics	28-12-2018	Dr.M.A.Shah
21	2013-Ph.D- FOS-Autumn- 03	Ashaq Hussain Sofi	Physics	28-12-2018	Dr.M.A.Shah
22	2013-Ph.D- FOE-16	Mohd. Junaid Mir	Mechanical	20-03-2019	Dr. M. F. Wani
23	2013-Ph.D- Spring- FOE-07	Abida Yousuf Waza	ECE	25-03-2019	Dr. Najeeb-ud- Din Mir
24	2013-Ph.D- FOE-21	Suman Chahar	ECE	25-03-2019	Dr. G. M. Rather Mir

3.0 Academic Departments at NIT Srinagar

The detailed report of all 8 Engineering departments and 4 Allied Departments functional at NIT Srinagar are given as under:



“Go for civil engineering, because civil engineering is the branch of engineering which teaches you the most about managing people. Managing people is a skill which is very, very useful and applies almost regardless of what you do.”

—Sir John Harvey Jones

3.1 Department Of Civil Engineering

The department of Civil Engineering is the largest & one of the pioneering departments of National Institute of Technology Srinagar. It was established at the inception of the Institute (then REC Srinagar) in 1960. Over the years, since then, the Department has progressed with a considerable development in its infrastructure, both in terms of its faculty & the other learning facilities. The Department has produced several eminent professionals who have made excellent contribution in the field of Civil Engineering, both at National & the International levels.

The Department offers a four-year course leading to the Bachelors Degree in Civil Engineering & two-year courses leading to Master's degree in four major specializations of civil engineering (viz., Water Resources Engineering, Structural Engineering, Geotechnical

Engineering, & Transportation Engineering & Planning. The Department, in addition to Under-graduate & Post-Graduate Programmes is offering Doctoral Programmes in all the specializations of Civil Engineering.

The Department is known for its reputed & well qualified faculty having experience in diverse fields. The faculty is supported by experienced technical staff & well-equipped laboratories. The faculty strives its level best in imparting the latest technical knowledge to the students & conducting the high quality of research. The faculty also offers technical advice on the live & challenging civil engineering problems to various Governments, semi-government & the Private organizations.

Vision

To create a unique identity of the Department by achieving excellent standards of quality technical education keeping pace with the rapidly changing technologies and to produce Civil Engineers of global standards with the capability of accepting new challenges.

Mission

- To promote academic growth in the field of Civil Engineering by offering state-of-the-art undergraduate & postgraduate programmes.
- To develop graduates to compete at the global level.
- To inculcate higher moral & ethical values among the students to become competent Civil Engineers with overall leadership qualities.
- To provide knowledge base & consultancy services in all areas of Civil Engineering for industry

Faculty

Head of Department	Prof. Shagufta Rasool
Professor	Prof. Abdul Rashid Dar
Professor	Prof. M. Akbar Lone
Professor	Prof. Abdul Qayoom Dar
Professor	Prof. Manzoor A Ahangar
Professor	Prof. Javid Ahmad Bhat
Professor	Prof. M Shafi Mir
Professor	Prof. Bashir A Mir
Professor	Prof. Manzoor A Tantray
Associate Professor	Er. Fayaz Ahmed Mir
Associate Professor	Dr. Javaid A Naqash
Associate Professor	Er. Danish Ahmad
Associate Professor	Er. Aijaz A Masoodi
Associate Professor	Dr. S Kaiser Bukhari
Associate Professor	Dr. Jan Mohammad Bandy
Associate Professor	Dr. M. Yousuf Shah
Associate Professor	Mrs. Rubina Rashid Mir
Assistant Professor	Dr. Shakeel A Waseem
Assistant Professor	Dr. Fayaz Ahmad Sofi
Assistant Professor	Dr. Abdullah Ahmad
Teachers Trainee	Er. Falak Zahoor
Lecturer on Contract	Er. Ahmar Malik
Lecturer on Contract	Er. Amer Iliyas Rather
Lecturer on Contract	Er. Asif Farooq
Lecturer on Contract	Er. Ishfaq Amin
Lecturer on Contract	Er. Manzoor Ahmad Allie
Lecturer on Contract	Er. Sualiheen Ahmad Pirzada
Lecturer on Contract	Er. Syed Rayid Andrabi
Lecturer on Contract	Er. Bushra Mushtaq
Lecturer on Contract	Er. Faiza Manzoor
Lecturer on Contract	Er. Hafsa Farooq
Lecturer on Contract	Er. Naiyara Khan

HoD

Civil Engineering

Professor Shagufta

Rasool

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Prof. M. A. Tantray	Experimental investigation on transmission of light in green buildings using translucent concrete	International Research Journal of Engineering and Technology (IRJET)	2018
2	Prof. M. A. Tantray	Implementation of translucent concrete in green buildings to economize energy utilization	i-manager's Journal on Civil Engineering	2018
3	Prof. M. A. Tantray	A Review on Green Buildings Using Translucent Concrete as Energy Efficient Source	Iconic research and engineering journals	2019
4	Prof. M. A. Tantray	A Promising Light Weight Future Material – Translucent Concrete	International Journal of Recent Technology and Engineering (IJRTE)	2019
5	Prof. M. A. Tantray	Life Cycle Cost Analysis of Translucent Concrete	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075,	2019
6	Prof. M. A. Tantray	Mechanical and Durability Properties of Self-Compacting Concrete Reinforced With carbon Fibers	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878	2019
7	Prof. M. A. Tantray	Prediction of Shear Strength of Steel Fibre Based Concrete Beams without Shear Stirrups	International Journal of Recent Technology and Engineering (IJRTE)	2019
8	Prof. M. A. Tantray	Mechanical and Durability Properties of Self-Compacting Concrete Reinforced With Carbon Fibers	International Journal of Recent Technology and Engineering (IJRTE)	2019
9	Prof. B. A. Mir	Strength Behavior of Cement Stabilized Dredged Soil.	International Journal of Geosynthetics and Ground Engineering 2018, © Springer International Publishing AG	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
10	Prof. B. A. Mir	Mechanical behavior of fly ash treated expansive soil.	Proceedings of the Institution of Civil Engineers - Ground Improvement, ICE, UK,	2019
11	Prof. B. A. Mir	Applications of Nanometric Additives in Geotechnical Engineering.	In Procc. of Int'l Conf. on Theoretical and Experimental Advances in Civil Engineering, (ICONTEACE 2018) SRM Institute of Science And Technology, SRM Nagar, Kattankulathur, Tamil Nadu, India,	2018
12	Prof. B. A. Mir	Improvement of the strength of subgrade of flexible pavements using geogrid.	In Procc. of Int'l Conf. on Theoretical and Experimental Advances in Civil Engineering, (ICONTEACE 2018) SRM Institute of Science And Technology, SRM Nagar, Kattankulathur, Tamil Nadu, India,	2018
13	Prof. B. A. Mir	Influence of nano-materials on compaction and strength behavior of clayey soils	Proceedings of Indian Geotechnical Conference 2018, December 13-15, 2018, IGS Bangalore, India, © Springer International Publishing AG 2018	2018
14	Prof. B. A. Mir	Load-settlement behavior of surface footing on reinforced stiff soil layer overlying soft soil	Proceedings of Indian Geotechnical Conference 2018, December 13-15, 2018, IGS Bangalore, India, © Springer International Publishing AG 2018	2018
15	Prof. B. A. Mir	Mechanical behavior of boulder crusher dust stabilized dredged soil	Proceedings of Indian Geotechnical Conference 2018, December 13-15, 2018, IGS Bangalore, India, © Springer International Publishing AG 2018	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
16	Prof. B. A. Mir	Some Studies on Mechanical Behavior of Cement Stabilized Dredged Soil from Flood Spill Channel of Jhelum River Srinagar.	Book Chapter: Contemporary Issues in Geoenvironmental Engineering: Civil Engineering Infrastructures	2018
17	Prof. M A Lone	'Significance of Shape factor of Obstacle on Local Scour'	Iranian Journal of Science and Technology'	2018
18	Prof. M A Lone	Laboratory Investigations for Development of Design Criteria for varying shapes of Protective filters.	International Journal of Geotechnical Engineering	2018
19	Prof. M A Lone	Design Criteria of blade shape filter material for graded cohesion less bases	International Journal of Geotechnical Engineering	2019
20	Prof. M A Lone	Laboratory investigation for development of local scour depth model for varying shapes of obstruction	International Journal of Hydrology Science and Technology	2018
21	Prof. M A Lone	Waste free Srinagar City'	International Journal of Engineering, Technology, Science and Research	2018
22	Prof. M A Lone	Solid Waste Management of Kashmir Valley	International Journal of Engineering, Technology, Science and Research	2018
23	Prof. M A Lone	Experimental Determination Of Permeability Of Filter Material Based On Controlling Constriction Size	7th World Conference on Applied Science ,Engineering and Management, 26-27 Oct.2018, ABS Paris France	2018
24	Dr Kaiser Bukhari	Seismic Vulnerability Assessment of major construction pattern of the of Srinagar city	International Journal of Advance Research and Engineering	2018
25	Dr Kaiser Bukhari	Consequences and hazard assessments of natural catastrophes. A case study from Ganderbal district-NW Himalaya	Disaster Advances	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
26	Dr Kaiser Bukhari	A study of seismic resilience and construction techniques of Srinagar city, Jammu and Kashmir, India	Disaster Advances	2018
24	Dr Kaiser Bukhari	Seismic Vulnerability Assessment of major construction pattern of the of Srinagar city	International Journal of Advance Research and Engineering	2018
27	Dr Kaiser Bukhari	Potential alkali silica reactivity of aggregates from different sources of Kashmir and mitigation measures thereof	Asian Journal of Civil Engineering	2019
28	Dr Kaiser Bukhari	Impact of geological and environmental complexities over infrastructure development in Kashmir Himalaya	Disaster Advances	2019
29	Dr Kaiser Bukhari	Earthquake phenomenon and the delineation of Faults/ Lineaments through remote sensing techniques. A case study from Himalayan segment.	Journal of Civil Engineering and Environmental Technology	2019
30	Dr. Abdul Qayoom Dar	Laboratory investigations for development of design criteria for varying shapes of protective filters	International Journal of Geotechnical Engineering	2018
31	Dr. Abdul Qayoom Dar	Design criteria of Round shape filters for cohesionless bases	International Journal of Advanced Structures and Geotechnical Engineering	2018
32	Dr. Abdul Qayoom Dar	Experimental Determination of Permeability of Filter Material Based on Controlling Construction Size	7th World Conference on Applied Sciences, Engineering and Management. 26-27 October 2018, The American Business School of Paris, France	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
32	Dr. Abdul Qayoom Dar	Experimental Determination of Permeability of Filter Material Based on Controlling Constriction Size	7th World Conference on Applied Sciences, Engineering and Management. 26-27 October 2018, The American Business School of Paris, France	2018
33	Dr. Abdul Qayoom Dar	Comparison of soil infiltration models under varying land cover conditions in a micro watershed of Western Himalayan Region.	HYDRO-2018 conference	2018
34	Dr. Abdul Qayoom Dar	Applying artificial neural networks algorithms to rainfall-runoff modeling - (case study Jhelum river basin)	ISHMMT 2018	2018
35	Dr. Abdul Qayoom Dar	An Over look on Watershed Management with a case study of Ganderbal Watershed, Kashmir, India	International Journal of Advance Research in Science and Engineering	2018
36	Dr. Abdul Qayoom Dar	Design criteria of blade shape filter material for graded cohesion less bases	International Journal of Geotechnical Engineering	2019
37	Dr. Abdul Qayoom Dar	Spatial variability Analysis and Mapping of Infiltration rate in NIT Srinagar campus using GIS	HYDRO-2019 conference	2019
38	Dr. Abdul Qayoom Dar	Analysis of Bayesian Regularization and Levenberg Marquadt training algorithms of the Feed-Forward Neural Network Model for the floe prediction in an alluvial Himalayan river	International Conference on Cybernetics, Cognition and Machine Learning Applications (ICCCMLA) 2019	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
39	Dr. Abdul Qayoom Dar	Varitaion in physio-chemical parameters of Dal lake, Jammu and Kashmir.	Journal of Civil Engineering and Environmental Technology	2019
40	Dr. Abdul Qayoom Dar	Chemical quality of Dal lake	The Institution of Engineers India	2019
41	Dr. Abdullah Ahmad	Calibrating HCM model for roundabout entry capacity under heterogeneous traffic	Journal of Modern Transportation, Springer	2019
42	Dr. Fayaz Ahmad Sofi	Nonlinear Flexural Distribution Behavior and Ultimate System Capacity of Skewed Steel Girder Bridges	Engineering Structures (Elsevier)	2019
43	Dr. Shagoofa Rasool Shah	The Application of metal organic frameworks in capture and storage of CO ₂ Gas.	ICANN 2019	2019
44	Dr. Shakeel A Waseem	An experimental study on shear capacity of interfaces in recycled aggregate concrete	Structural Concrete	2018
45	Dr. Shakeel A Waseem	Temperature dependent bond strength model for GFRP laminate externally bonded to heat-damaged concrete	Construction and Building Materials	2018
46	Prof. A.R.Dar	Structural performance of cold-formed steel composite beams	Steel & Composite Structures	2018
47	Prof. A.R.Dar	Performance of self-compacting concrete using different waste materials and industrial by-products	Disaster Advances	2018
48	Prof. A.R.Dar	Incremental effect of saccharum officinarum addition on strength characteristics of geopolymer composite specimens	IOP Conference Series Materials Science and Engineering	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
49	Prof. A.R.Dar	Role of Supplemental Cementitious Materials on the Strength Characteristics of Green-Concrete Specimens	IOP Conference Series Materials Science and Engineering	2019
50	Prof. A.R.Dar	Improved performance of coal bottom ash co-mixtured concrete	IOP Conference Series Materials Science and Engineering	2019
51	Prof. A.R.Dar	Non-destructive evaluation of a steel plate subjected to mechanical damage	IOP Conference Series Materials Science and Engineering	2019
52	Prof. A.R.Dar	Advanced performance of fly ash co-mixtured self-compacting concrete	IOP Conference Series Materials Science and Engineering	2019
53	Prof. A.R.Dar	Influence of cold temperature on performance of concrete in J&K - Comparison studies	IOP Conference Series Materials Science and Engineering	2019
54	Prof. A.R.Dar	Effect of angle stiffeners on the flexural strength and stiffness of cold-formed steel beams	Steel & Composite Structures	2019
55	Prof. A.R.Dar	Seismic Performance Evaluation of a Proposed Buckling-Restrained Brace for RC-MRFS	Civil And Environmental Engineering Reports	2019
56	Prof. A.R.Dar	Strengthening of capacity deficient RC beams - An experimental approach	Structural Engineering & Mechanics	2019
57	Prof. A.R.Dar	Structural efficiency of various strengthening schemes for cold-formed steel beams: Effect of global imperfections	Steel & Composite Structures	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
58	Prof. A.R.Dar	Seismic safety assessment of masonry buildings through rapid visual screening-Case studies	Disaster Advances	2019
59	Prof. A.R.Dar	Behaviour of partly stiffened cold-formed steel built-up beams: Experimental investigation and numerical validation	Advances in Structural Engineering	2019
60	Prof. Javed	Laboratory Investigation for development of local scour depth model for varying shapes of obstruction	International Journal of Hydrology Science and Technology	2018
61	Prof. Javed	Effect of Gradation of Bed Material on Local Scour Depth	Geotechnical and Geological Engineering	2019
62	Prof. M.A. Ahanger	Hydrological response to climate change in a high altitude catchment	International Journal of Water	2018
63	Prof. M.A. Ahanger	Water Balance Study of a High Altitude Catchment in Indus Basin of Himalayas: application of physics based distributed hydrologic model-MIKE SHE	Int. Journal of Hydrology Science and Technology	2019
64	Prof. M.A. Ahanger	Climate modelling using ANN	Int. Journal of Hydrology Science and Technology	2019
65	Prof. Mohamad Shafi Mir	Performance of WMA additives under freeze-thaw action	International Journal of Road Materials and Pavement Design	2018
66	Prof. Mohamad Shafi Mir	Laboratory study on use of RAP in WMA pavements using rejuvenator	International Journal of Construction and Building Materials	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
67	Prof. Mohammad Shafi Mir	Sustainable Transportation: Indicators, Frameworks, and Performance Management	Evaluation and Program Planning	2019
68	Prof. Mohammad Shafi Mir	Performance Evaluation of Nanosilica modified asphalt binders	Innovative Infrastructure Solutions	2019
69	Prof. Mohammad Shafi Mir	Application of Nano-Technology in Pavement Engineering- A review	Canadian Journal of Civil Engineering	2019
70	Prof. Mohammad Shafi Mir	Effect of Freeze-Thaw Cycles on the Properties of Asphalt Pavements in Cold Regions: A Review	Transportation Research Procedia	2019
71	Prof. Mohammad Shafi Mir	Study of Warm Mix Asphalt using Reclaimed Asphalt Pavement and Copper Slag: A Review	Canadian Journal of Civil Engineering	2019
72	Prof. Mohammad Shafi Mir	Development of Bicycle Safety Index Models for Safety of Bicycle Flow at 3-legged Junctions on Urban Roads Under Mixed Traffic Conditions	Transportation Research Procedia	2019
73	Prof. Mohammad Shafi Mir	Development of Pedestrian Safety Index Model at Mid-block Crossings for Urban Roads in Developing Countries Using Multiple Linear Regression	International Journal on Emerging Technologies	2019
74	Prof. Mohammad Shafi Mir	Non-Motorized Transport (NMT) User Safety Guidelines in Urban Areas of Developing Countries	International Journal of Innovative Technology and Exploring Engineering	2019

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
1	Prof. B. A. Mir	Recent Advances in Soil-Structure Interaction and Retaining Walls (Workshop on ISSMGE TC-207)	Indian Institute of Science, Bangalore	December 12, 2018
2	Prof. B. A. Mir	Indian Geotechnical Conference 2018, Publishing AG 2018	IGS Bangalore Chapter in association with Indian Institute of Science, Bangalore, India, © Springer International	December 13-15, 2018
3	Dr Javed Ahmed Naqash	Fifth International Congress on Engineering & Technology 2019 (ICET2019)	Trinity College of Engineering , Pune	February 27-28, 2019
4	Er. Danish Ahmed	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
5	Er. Aijaz Ahmad Masoodi	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
6	Er. R. R. Mir	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
7	Dr. Fayaz Ahmad Sofi	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
8	Dr. Shakeel Ahmad Waseem	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
9	Dr. Abdullah Ahmad	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
10	Er. Falak Zahoor	Outcome Based Education	NIT Srinagar (TEQIP-III Sponsored)	2019
11	Dr. Fayaz Ahmad Sofi	Pedagogy	NIT Srinagar (TEQIP-III Sponsored)	2019
12	Dr. Abdullah Ahmad	Pedagogy	NIT Srinagar (TEQIP-III Sponsored)	2019

Sponsored Project(s)

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	Briquetting of Dal Lake Weeds	Experimental investigation on transmission of light in green buildings using translucent concrete	23.90 Lakhs	MHRD

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Kh Mohammad Najmu Saquib Wani	Prof. B. A. Mir	Ongoing
2	S. Hari Prasad Reddy	Prof. B. A. Mir	Ongoing
3	Sabreena Mohammad	Prof. B. A. Mir	Ongoing
4	Nadeem Gul	Prof. B. A. Mir	Ongoing
5	Rufaidah Shah	Prof. B. A. Mir	Ongoing
6	Tawseef Rasool Haji	Prof. B. A. Mir	Ongoing
7	Nadeem Gulzar	Dr. M. A. Tantray	Ongoing
8	Arvind Cholkar	Dr. M. A. Tantray	Ongoing
9	Iftikhar Gull	Dr. M. A. Tantray	Ongoing
10	Aliya Naseer	Dr. M. A. Tantray	Ongoing
11	Zubair Rashid	Dr. M. A. Tantray	Ongoing
12	Manan Hashim	Dr. M. A. Tantray	Ongoing
13	Mir Basar Suhaib	Dr. M. A. Tantray	Ongoing
14	Suhail Aijaz Khan	Dr. M. A. Tantray	Ongoing
15	Mr P V Narasimha Reddy	Dr Javed Ahmed Naqash	Ongoing
16	Mr Mudasir Deewani	Dr Javed Ahmed Naqash	Ongoing
17	Mr Aabid Ahmad	Dr Javed Ahmed Naqash	Ongoing
18	Mr Mohammad Zakir	Dr Javed Ahmed Naqash / Dr Fayaz Ahmad Sofi	Ongoing
19	Mir Bintul Huda	Prof. M A Lone Prof. J A Bhat	Awarded in 2018
20	Nasir Ahmed Rather	Prof. M A Lone Prof. A . Q . Dar	Awarded in 2018
21	Owais Ahmad Bhat	Prof. M A Lone Prof. Rohitashw	Ongoing
22	Shiekh Umar	1.Prof. M A Lone 2.Prof. NK Goel (IIT Roorkee)	Ongoing
23	Syed Mohsin Shabir	Prof. M. A .Lone	Ongoing
24.	Ms. Melath Shah	Prof. M. A .Lone	Ongoing
25.	Ms. Rehab Jan	Prof. M. A .Lone	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
26	Mr. Bilal Ahmad Malik	Prof. M. A .Lone	Ongoing
27	Ruhhee Tabbussum	Dr. A. Q. Dar	Ongoing
28	Mohd Ayoub Malik	Dr. A. Q. Dar	Ongoing
29	Junaid Ahmad Dar	Dr. A. Q. Dar	Ongoing
30	Aamir Hassan	Dr. J. A. Bhat	Ongoing
31	Asif Akbar	DR. J. A. Bhat (S) Dr. B. A. Mir (CS)	Ongoing
32	Mohd Zakir	Dr. J. A. Naqash	Ongoing
33	Aanisa Gani	Dr. J. M. Banday	Ongoing
34	Tariq Ahmad Sheikh	Dr. J. M. Banday	Ongoing
35	Saika Manzoor	Dr. M. A. Ahangar	Ongoing
36	Aamer Majid Bhat	Dr. M. A. Ahangar	Ongoing
37	Taroob Bashir Naqash	Dr. M. A. Ahangar	Ongoing
38	Sakiba Nabi	Dr. M. A. Ahangar (S) Dr. A. Q. Dar (CS)	Ongoing
39	Ishfaq Mohi Ud Din	Dr. M. S. Mir	Ongoing
40	Faheem Sadiq Bhat	Dr. M. S. Mir	Ongoing
41	Peerzada Mosir Shah	Dr. M. S. Mir	Ongoing
42	Ubaid Illahi	Dr. M. S. Mir	Ongoing
43	Mohammad Asif	Dr. M. S. Mir	Ongoing
44	Ishfaq Rashid Sheikh	Dr. M. Y. Shah	Ongoing
45	Bilal Ahmad Malik	Dr. M. Y. Shah	Ongoing
46	Iftikhar Hussain Beigh	Dr. S.K. Bukhari	Ongoing
47	Mohmad Ashraf Ganaie	Dr. S.K. Bukhari	Ongoing
48	Suehail Aijaz Shah	Prof J. M. Banday	Ongoing
49	Syeedah Raazia	Prof. A. Q. Dar	Ongoing
50	Ishtiyah Ahmad Rather	Prof. A. Q. Dar	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
51	Tabasum Rasool	Prof. A. Q. Dar(S) Prof. M. A. Wani (CS)	Ongoing
52	Jasir Mushtaq Kaloo	Prof. A. Q. DAR(S) Dr. Naveed Ahsan (CS)	Ongoing
53	Sheikh Asim Aejaaz	Prof. J. A. Bhat	Ongoing
54	Nahida Nisar	Prof. J. A. Bhat	Ongoing
55	Shakeel Ahmad Rather	Prof. J. A. Bhat	Ongoing
56	Showkat Ahmad Kumar	Prof. J. A. Bhat	Ongoing
57	Nayeem Altaf Malik	Prof. J. M. Bandy	Ongoing
58	Ikhlaz Ahmed	Prof. J. M. Bandy	Ongoing
59	Towseef Ahmed Gilani	Prof. M. S. Mir	Ongoing
60	Badveeti Adinarayana	Prof. M. S. Mir	Ongoing
61	Kifayat Ramzan	Prof. M. Y. Shah	Ongoing
62	Sana Fayaz	Prof. M. Y. Shah	Ongoing
63	Lateef Ahmad Dar	Prof. M. Y. Shah	Ongoing
64	Ameer Ullah Ganai	Prof. M. Y. Shah (S) Prof. B. A. Mir (CS)	Ongoing
65	Maqbool Yousuf	Prof. S. K. Bukhari	Ongoing
66	Ayaz Mohmood Dar	Prof. S. K. Bukhari	Ongoing
67	Arfaat Bashir	Prof. S. R. Shah	Ongoing
68	Mohammad Aasif Khaja	Prof. S. R. Shah	Ongoing
69	Dar Sarvat Gull	Prof S. R. Shah	Ongoing
70	Muzamil Ahmad Rafiqi	M.A Lone	Ongoing
71	Aatuif Muslim	Dr. J.A Naqash	Ongoing
72	Mehboob Ul Hassan Chowdhary	Dr. J . M Bandy	Ongoing
73	Daniyal Rasool	Dr M A Ahanger	Ongoing
74	Azeem Bashir	Dr. M A Ahanger	Ongoing
75	Mohsin Farooq	Dr S R Shah	Ongoing
76	Mohammad Adnan Wani	Dr Manzoor A Ahanger	Ongoing
77	Mohammad Marouf Khan	Dr S R Shah	Ongoing

Testing & Consultancy Services

Testing & Consultancy services rendered by the department.

S. No.	Title of the Project	Consultancy rendered to (name of the agency)	Amount Earned (in INR)
1	Soil investigation for construction of Three Storey Indoor Sports Facility Complex at NIT Campus Srinagar	M/S CPWD NIT Srinagar Special Division, NIT Srinagar No.: 20(33)/CPWD/2018-19/149 Dated: 02/05/2018	2,70,000.00
2	Soil investigation for construction of Sumbal-Bandipora Road	Executive Engineer PWD (R&B) Bandipora No.: EE/R&B/BPR C313-15 Dated: 21/06/2018	47,000.00
3	Soil investigation for construction of Retaining Wall at RD 110.922km to RD 110.972km along the bank of River Jhelum	Executive Engineer, Irrigation & Flood Control Sumbal Bandipora No.: IFCD/1336-38; Dated: 10/07/2018	1,08,000.00
4	Soil investigation for preparation of Master Plan for River Jhelum, Srinagar	General Manager WAPCOS Pvt Ltd., Delhi (office at Rajbagh Srinagar) No.: WAP/Ward/NIT-Sri/Jhelum/2018/2778 Dated: 03/08/2018	2,22,500.00
5	Soil investigation construction of foundation for Lift Irrigation System at Shopian	Executive Engineer, Irrigation & Flood Control Shopian, Kashmir No.: S-13707615; Dated: 19/03/2019	1,05,000.00
6	Testing of Tube Well Water	Contractor	18,000.00
7	Water Test for construction	Contractor	12,000.00
8	Water Test for construction	Contractor	12,000.00
9	Bridge Design Proof Checking	REW Kashmir & R&B Kashmir PMGSY Various Local Agency	4,23,000.00

Purchase(s) Made

Purchases made by the department during the period.

S. No.	Name of Equipment
1	(MASW) multi channel analysis of surface waves (measuring instrument) MOD, GEA, 24 with standard accessories HSN code: 90158030
2	Slurry mixture Machine (fabricated)
3	Stainless steel slurry mould and loading frame
4	Automatic volume change device for existing triaxial equipment
5	Triaxial conversion kit for existing triaxial equipment
6	Hand pellet truck (Cap.2.5 ton
7	TML earth soil pressure guage type: kdj-200 kPa <ul style="list-style-type: none"> • Earth soil pressure guage type: kdj-500 kPa • Calibration certificate of 6 pressure gauges • TML displacement transducer type/ COP-100 • Calibration certi. Of 4 displacement transducer • TML high performance 20ch.st. data logger type/ TDS-540-20 • Static measurement software visual LOG TDS- 7130 • Calibration certificate

Laboratories

S. No.	Name of Lab	S. No.	Name of Lab
01	Structural Engineering Laboratory	09	Advanced Geotechnical Laboratory
02	Strength of Materials Laboratory	10	Rock Mechanics Laboratory
03	Concrete Laboratory	11	Pavement Engineering Laboratory
04	Structural Dynamics Laboratory	12	Traffic Engineering Laboratory
05	Fluid Mechanics/ Hydraulics Laboratory	13	Advanced Asphalt Facility Laboratory
06	Geotechnical Laboratory-I	14	CAD Laboratory
07	Geotechnical Laboratory-II	15	Surveying Laboratory
08	Geotechnical Computational Labor- atory	16	Geology Laboratory

3.2 Department Of Mechanical Engineering

Established in 1963, The Department of Mechanical Engineering offers a unique opportunity in terms providing first-class pedagogy & world class facilities for conducting cutting-edge research. Being one of the oldest departments of NIT Srinagar, the department has evolved into one of the finest in terms of teaching curriculum & methodology supported by a well-organised & adequately funded research program. We have a very well-established B.Tech. program complemented by two M.Tech. Programmes in Mechanical System Design & Industrial Tribology & Maintenance Management. The masters' students are admitted on the basis of a valid GATE score, & some additional seats are reserved for meritorious sponsored candidates. The Research Scholars (PhD) are admitted to the department every year on the basis of a rigorous examination conducted by the department. The curriculum is designed to cater to the needs & aspirations of the industry, & our top class faculty ensures that the students acquire the necessary technical & decision making skills to be the leaders in the dynamic world of industry.

faculty members who specialize in Haptics & MEMS on one end to High-temperature Tribology, Manufacturing Strategies & Quality Control on the other. The traditional areas of Mechanical Engineering such as Machine Design, Fluid Mechanics & Thermal Sciences are also well-represented. The department has a very strong group working in the area of Friction, Lubrication & Wear, with state-of-the-art research facilities & equipment. Our academic curriculum has improved considerably with the passage of time. Regular Board of Studies meetings are conducted to remove any inadvertent deficiencies. Periodic feedback is taken from the students to improve the quality of the education imparted. Feedback is also taken from the visiting companies during the placement season to orient the curriculum towards the needs of the Industry. Specialized courses are floated to cater to the needs of the PhD scholars, preparing them for subsequent research. We strive to produce engineering graduates of high quality who are team players, accountable, resourceful & above all, technically competent.

“There is nothing I believe more strongly than getting young people interested in science and engineering, for a better tomorrow, for all humankind.” – Bill Nye

Mechanical Engineering department is, perhaps, the most versatile in terms of the range of specializations of its faculty members. We have

Vision

To nurture Mechanical Engineers with a passion for professional excellence, who are ready to take on global challenges & serve the society with high human values.

Mission

- To provide facilities & infrastructure for academic excellence in the field of Mechanical Engineering.
- To inculcate in the students a passion for understanding professionalism, ethics, safety, & sustainability, & enable them to contribute to the society.
- To nurture creativity of the students & encourage them to come up with innovative solutions to real life problems.
- To prepare the student for lifelong learning with global perspective.



Faculty

Head of Department	Prof. Babar Ahmed
Professor	Prof. M Farooq Wani
Professor	Prof. Gh Ashraful Harmain
Professor	Prof. Nazir A. Sheikh
Professor	Prof. Adnan Qayoom
Professor	Prof. M. Marouf Wani
Associate Professor	Dr. Mohammad Hanief
Associate Professor	Dr. M Shafi Charoo
Associate Professor	Dr. Saad Parvez
Associate Professor	Dr. Sheikh Shahid Saleem
Associate Professor	Dr. Anjana Kak
Assistant Professor	Dr. Mohammad Mursaleen
Assistant Professor	Dr. Majid Hamid Koul
Assistant Professor	Dr. Mukund Dutt Sharma
Assistant Professor	Dr. Noor Zaman Khan
Assistant Professor	Dr. M Mohsin Khan
Assistant Professor	Dr. Harveer S Pali
Assistant Professor	Dr. Abhijit Dey
Assistant Professor	Dr. Manoj Kumar
Trainee Teacher	Mr. Ved Prakash Sharma
Lecturer (on contract)	Shuhaib Mushtaq
Lecturer (on contract)	Kaleem Ahmad
Lecturer (on contract)	Himanshu Gupta
Lecturer (on contract)	Younis Ahmed Dar

HoD

Mechanical

Engineering

Professor Babar

Ahmed

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Prof. G.A. Harmain	Azher Jameel, G. A. Harmain, "Fatigue crack growth analysis of cracked specimens by the coupled finite element-element free Galerkin method".	Mechanics of Advanced Materials and Structures, Taylor and Francis.	2018
2	Prof. G.A. Harmain	G. A. Harmain Aazim Shafi Lone, Azher Jameel, "A coupled finite element-element free Galerkin approach for modeling frictional contact in engineering components."	Materials Today, Elsevier.	2018
3	Prof. G.A. Harmain	Ghulam Harmain, Azher Jameel, "A coupled FE-IGA technique for modeling fatigue crack growth in engineering materials",	Mechanics of Advanced Materials and Structures, Taylor and Francis.	2018
4	Prof. G.A. Harmain	Showkat Ahmad Kanth, GA Harmain, Azher Jameel, "Modeling of Nonlinear Crack Growth in Steel and Aluminum Alloys by the Element Free Galerkin Method".	Materials Today: Proceedings, Elsevier.	2018
5	Prof. G.A. Harmain	Aditya Kumar Singh, Azher Jameel, GA Harmain, "Investigations on crack tip plastic zones by the extended iso-geometric analysis".	Materials Today: Proceedings, Elsevier.	2018
6	Prof. G.A. Harmain	Azher Jameel, G. A. Harmain, "Extended Iso-Geometric Analysis for modeling Three Dimensional Cracks".	Taylor and Francis.	2018
7	Prof. G.A. Harmain	Malik Parveez, Amit Dhiman, GA Harmain, "Aiding buoyancy driven flow and heat transfer features of converging and diverging trapezoidal cylinders".	Sādhanā, Springer India.	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
8	Prof. G.A. Harmain	Malik Parveez, Amit Kumar Dhiman, GA Harmain, "Influence of height ratio on flow and heat transfer around trapezoidal geometry (a generic sharp-edged body) covering transition to periodic flow"	International Journal of Heat and Mass Transfer	2018
9	Prof. G.A. Harmain	Saad Parvez, G.A. Harmain "Building Taxonomy for developing strategic partnerships with Original Equipment Manufacturers of a firm".	Materials Today: Proceedings.	Pro- 2018
10	Prof. G.A. Harmain	G. A. Harmain c Aazim Shafi Lone, Showkat Ahmad Kanth a, Azher Jameel b, "A state of art review on the modeling of Contact type Nonlinearities by Extended Finite Element method".	Materials Today Proceedings, 9th International Conference of Materials Processing and Characterization, IC-MPC.	Pro- 2019
11	Prof. G.A. Harmain	Showkat Ahmad Kanth, Aazim Shafi Lone, G. A. Harmain b, Azher Jameel c "Elasto Plastic Crack Growth by XFEM: A Review".	Materials Today Proceedings, 9th International Conference of Materials Processing and Characterization, ICMPC	Pro- 2019
12	Prof. G.A. Harmain	Irshad Qadri Ghulam Ashraf UI Harmain and M. F. Wani, "A Study on Effect of Tool Tip Temperature on Wear of Ceramic Cutting Tools".	IOP, Journal of Physics: conference series.	2019
13	Prof. G.A. Harmain	Irshad Qadri Ghulam Ashraf UI Harmain and M. F. Wani, An Experimental Study on Investigation of Machining of nickel based Super Alloy 718.	Materials Today Proceedings, Elsevier	Pro- 2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
14	Prof. G.A. Harmain	F. A. Najar and G. A. Harmain, "Influence on temperature profile in an oil film in thrust bearings using an embedded cooling circuitry beneath the pad surface".	Proc Engineering Tribology, IMECH, SAGE	2019
15	Prof. G.A. Harmain	G. A. Harmain, Anuranjan Kumar, Rajneesh Kumar Gupta, Kanwar Singh Arora, "Investigation on Interface Morphology and Joint Configuration of Dissimilar Sheet Thickness FSSW of Marine Grade Al Alloy",	The Brazilian Society of Mechanical Sciences and Engineering, Springer.	2019
16	Prof. G.A. Harmain	Irshad Qadri Ghulam Ashraf UI Harmain and M. F. Wani, "The effect of cutting speed and work piece hardness on turning performance of nickel based super alloy – 718 using ceramic cutting insets".	Journal of Engineering Research Express, IOP Publishing Ltd.	2019
17	Prof. G.A. Harmain	Irshad Qadri Ghulam Ashraf UI Harmain and M. F. Wani, "A study on wear analysis of mixed ceramic cutting tool".	Journal of Materials Science and Mechanical Engineering.	2018
18	Prof. G.A. Harmain	Irshad Qadri Ghulam Ashraf UI Harmain and M. F. Wani, "Assessment of machinability of super alloy inconel 718 using Aluminum oxide and mixed oxide ceramic cutting tools".	IOP Conference series: Materials Science and Engineering.	2019
19	Prof. Babar Ahmad	Omer Hussain, Babar Ahmed, Shahid Saleem, M.F. Wani, M. Jebran, "Effect of counter-face material on the tribological characteristics of UHMW polyethylene under synovial fluid lubrication"	Materials Today, Elsevier.	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
20	Prof. Babar Ahmad	Diyan Ul Iman, Fasil Qayoom Mir, Babar Ahmad, "Preparation and Characterization of Nano-size Gamma Alumina and PVA Composite Membranes"	Krishi Sanskriti Publications	2018
21	Prof. Babar Ahmad	Fasil Qayoom Mir, Babar Ahmad, Anupam Shukla, "Influence of Concentration and Temperature on Transport Properties in Cation-Exchange Membrane"	SEEC	2018
22	Prof. Babar Ahmad	Omar Hussain, Shahid Saleem, Babar Ahmad, "Implant materials for knee and hip joint replacement: A review from the tribological perspective"	Material Science and Engineering, IOP	2019
23	Prof. Babar Ahmad	Diyan Ul Imaan, Fasil Qayoom Mir, Babar Ahmad, "Preparation and Characterization of a novel nano-size titanium oxide-PVA composite ion exchange membrane"	Journal of Physics, IOP	2019
24	Prof. Babar Ahmad	Hannan Gada, Deepa Mudgal, Saad Parvez, Babar Ahmad, "Experimental Evaluation of High Temperature Corrosion Performance of Ni25Cr Coated and Bare 347H SS in Air and Simulated Husk Fired Boiler Environment"	Journal of Physics, IOP	2019
25	Prof. Babar Ahmad	Suhail Ganiny, Majid H Koul, Babar Ahmad, "Stability Analysis of Dual-rate Haptics Controller Using Two Control Architectures"	Journal of Physics, IOP	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
26	Prof M. F. Wani	M. Mir, M. Wani, "Modelling and analysis of tool wear and surface roughness in hard turning of AISI D2 steel using response surface methodology"	International Journal of Industrial Engineering Computations	2018
27	Prof M. F. Wani	RG M J Khan, M F Wani, "Tribological properties of glass fiber filled polytetrafluoroethylene sliding against stainless steel under dry and aqueous environments: enhanced tribological performance in sea water"	Materials Research Ex-press, IOP	2018
28	Prof M. F. Wani	P Kumar, MF Wani, "Tribological Characterization of Hypereutectic Al-25Si Alloy Under Dry and Lubricated Sliding Conditions"	Journal of Tribology	2018
29	Prof M. F. Wani	RA Khan, A Anand, MF Wani, "A holistic framework for environment conscious based product risk modelling and assessment using multi criteria decision making"	Journal of Cleaner Production	2018
30	Prof M. F. Wani	PK, MF Wani, "Effect of Temperature on the Friction and Wear Properties of Graphene Nano-Platelets as Lubricant Additive on Al-25Si Alloy"	Material Research Ex-press	2019
31	Prof M. F. Wani	MF Wani, Deepak Kumar, K. B. Deepak, S. M. Muzakkir, "Enhancing tribological performance of Ti-6Al-4V by sliding process."	Tribology - Materials, Surfaces & Interfaces	2018
32	Prof M. F. Wani	S Mushtaq, MF Wani, "High-temperature friction and wear studies of Fe-Cu-Sn alloy with graphite as solid lubricant under dry sliding conditions".	Materials Research Ex-press	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
33	Prof M. F. Wani	MJ Mir, MF Wani, "The influence of cutting fluid conditions and machining parameters on cutting performance and wear mechanism of coated carbide tools."	Jurnal Tribologi	2018
34	Prof M. F. Wani	D Kumar, B Lal, MF Wani, JT Philip, B Kuriachen, "Dry sliding wear behaviour of Ti-6Al-4V pin against SS316L disc in vacuum condition at high temperature."	Tribology-Materials, Surfaces & Interfaces	2019
35	Prof M. F. Wani	H Singh, M Singh, J Singh, BS Bansod, T Singh, A Thakur, MF Wani, "Composition dependence study of thermally evaporated nanocrystalline ZnTe thin films".	Journal of Materials Science: Materials in Electronics	2019
36	Prof M. F. Wani	S B , M F W a n i , "Nanomechanical and nanotribological characterization of multilayer self-lubricating Ti/MoS ₂ /Si/MoS ₂ nanocoating on aluminium-silicon substrate."	Surface and Interface analysis	2019
37	Prof M. F. Wani	S Bandy, MF Wani, "Nanoscratch Resistance and Nanotribological Performance of Ti/MoS ₂ Coating on Al-Si Alloy Deposited by Pulse Laser Deposition Technique"	Journal of Tribology	2019
38	Prof M. F. Wani	SIA Qadri, GA Harmain, MF Wani, "An experimental study on investigation of machining of nickel based super alloy 718"	Materials Today	2019
39	Prof M. F. Wani	MF Wani, Mohammad Jebran Khan, "Tribological properties of bronze filled PTFE under dry sliding conditions and aqueous environments (distilled water and sea water)	International Journal of Surface Science and Engineering	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
40	Prof M. F. Wani	S Mushtaq, MF Wani, "Tribological characterization of Fe-Cu-Sn alloy with graphite as solid lubricant"	Industrial Lubrication and Tribology	2018
41	Prof M. F. Wani	MJ Mir, MF Wani, S Bandy, S Mushtaq, J Khan, J Singh, SS Saleem, "Comparative assessment of coated CBN and multilayer coated carbide tools on tool wear in hard turning AISID2 steel"	Proceedings of TRI-BOINDIA-2018 An International Conference on Tribology	2018
42	Prof M. F. Wani	S Mushtaq, MF Wani, SS Saleem, S Bandy, MJ Mir, J Khan, J Singh, "Tribological Characteristics of Fe-Cu-Sn Alloy with Molybdenum Disulfide as a Solid Lubricant under Dry Conditions"	Proceedings of TRI-BOINDIA-2018 An International Conference on Tribology	2018
43	Prof M. F. Wani	S Bandy, MF Wani, MJ Mir, J Singh, S Mushtaq, J Khan, SS Saleem, "Nanoscratch Property of Self-lubricating Ti/MoS2 Nanocoating at Nano-scale Level"	Proceedings of TRI-BOINDIA-2018 An International Conference on Tribology	2018
44	Prof M. F. Wani	J Singh, MF Wani, S Bandy, MJ Mir, J Khan, S Mushtaq, SS Saleem, "Nanomechanical Property of Max Phase Material Ti2AlC"	Proceedings of TRI-BOINDIA-2018 An International Conference on Tribology	2018
45	Prof M. F. Wani	J Khan, MF Wani, R Gupta, SS Saleem, S Mushtaq, MJ Mir, J Singh, "Tribological performance of polytetrafluoroethylene (PTFE) in aqueous environments and dry sliding"	Proceedings of TRI-BOINDIA-2018 An International Conference on Tribology	2018
46	Prof M. F. Wani	MJ Mir, MF Wani, "Hard turning of high-carbon high chromium tool steel using CBN tools under different lubricating/cooling conditions"	Anadolu Üniversitesi Bilim Ve Teknoloji Dergisi-B Teorik Bilimler	2018
47	Prof. S.N. Ahmed	S. H. Din, M. A. Shah, and N. A. Sheikh, "Tribological Performance of Titanium Alloy Ti-6Al-4V via CVD-diamond Coatings".	Journal of Superhard Materials, Springer	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
48	Prof. S.N. Ahmed	Sajad Hussain Din, N. A. Sheikh, and M. Mursaleen Butt, "Mechanical and Tribological Behavior of Microcrystalline CVD Diamond Coatings"	Journal of Bio- and Tribo -Corrosion, Springer	2018
49	Prof. S.N. Ahmed	Sajad Hussain Din, M. A. Shah, M. Mursaleen Butt, "CVD Diamond".	Transactions of Indian Institute of Metals, Springer	2019
50	Prof. M.M.Wani	M. Marouf Wani, "Octane Demand as a Criteria for Designing a Spark Ignition Engine Alternatively for Minimum CO Emissions and Maximum Power Generation".	Scientific & Academic Publishing, USA	2019
51	Prof. M.M.Wani	R. Hussain Vali & M. Marouf Wani, "The effects of nano additives on performance and emission characteristics of a vcr diesel engine fuelled with diesel-water emulsion".	International Journal Of Mechanical And Production Engineering Research And Development (IJMPERD)	2019
52	Prof. M.M.Wani	S. Naresh Kumar Reddy and M. Marouf Wani, "Engine performance and emission studies by application of antioxidant as additive in biodiesel diesel blends".	AIP Conference Proceedings 2200, 020015 , USA	2019
53	Prof. Adnan Qayoum	O Gulzar, A Qayoum, R Gupta, "Photo-thermal characteristics of hybrid nanofluids based on Therminol-55 oil for concentrating solar collectors"	Applied Nanoscience	2018
54	Prof. Adnan Qayoum	A Qayoum, P Panigrahi, "Experimental investigation of heat transfer enhancement in a two-pass square duct by permeable ribs"	Heat Transfer Engineering	2019
55	Prof. Adnan Qayoum	A Rasool, A Qayoum, "Numerical analysis of heat transfer and friction factor in two-pass channels with variable rib shapes"	International Journal of Heat Transfer	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
56	Prof. Adnan Qayoum	Mukhtar Ahmad and Adnan Qayoum, "Experimental Investigation of Fluid Flow and Heat Transfer Characteristics of Synthetic Jet Actuator using Flat Tube and Diamond shape orifice"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018. CONFERENCE	2018
57	Prof. Adnan Qayoum	A Ahmed, A Qayoum, FQ Mir, "Investigation of the thermal behavior of the natural insulation materials for low temperature regions"	Journal of Building Engineering	2019
58	Prof. Adnan Qayoum	O Gulzar, A Qayoum, R Gupta, "Experimental study on stability and rheological behaviour of hybrid Al ₂ O ₃ -TiO ₂ Therminol-55 nanofluids for concentrating solar collectors"	Powder Technology	2018
59	Prof. Adnan Qayoum	A Rasool, A Qayoum, "Numerical Investigation of Fluid Flow and Heat Transfer in a Two-Pass Channel with Perforated Ribs"	Pertanika Journal of Science & Technology	2018
60	Prof. Adnan Qayoum	O Gulzar, A Qayoum and R Gupta, "Behavior of Copper Oxide Nanofluids for Use in Solar Collectors"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018.	2018
61	Prof. Adnan Qayoum	K Sumanth, A Qayoum, R Gupta, "Numerical Investigation of the Effects of the Leading Edge Protuberances on the Aerodynamic Performance of an Airofoil in Turbulent Flow Regime"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018. CONFERENCE	2018
62	Prof. Adnan Qayoum	M Bashir, A Qayoum, SS Saleem, "Influence of lignocellulosic banana fiber on the thermal stability of brake pad material"	Materials Research Express	2019
63	Prof. Adnan Qayoum	K Sumanth, A Qayoum, R Gupta, "Computational Investigation of Airfoil noise in a turbulent regime"	3rd International ISHMT-ASTFE Heat and Mass Transfer Conference	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
64	Prof. Adnan Qayoum	M Bashir, A Qayoum and S Saleem, "Analysis of frictional heating and thermal expansion in a disc brake using COM-SOL"	Journal of Physics: Conference Series	2019
65	Prof. Adnan Qayoum	M Ahmad, A Qayoum, "Investigation of Impingement of Double Orifice Synthetic Jet for Heat and Fluid Flow Characteristics in Quiescent Flow"	Pertanika Journal of Science & Technology	2019
66	Dr. Saad Parvez	Saad Parvez, G.A. Harman, "Building Taxonomy for developing strategic partnerships with Original Equipment Manufacturers of a firm".	Science Direct, Elsevier, Materials today	2018
67	Dr. Saad Parvez	Hannan Gadaa, Deepa Mudgala, Saad Parvez, B a b a r A h m a d, "Investigation of high temperature corrosion resistance of Ni25Cr coated and bare 347H SS in actual husk fired boiler atmosphere".	Engineering Failure Analysis	2019
68	Dr. Sheikh Shahid Saleem	Shuhaib Mushtaq, M. F. Wani, Sheikh Shahid Saleem, Muhammad Junaid Mir, "Tribological and mechanical properties of PM Fe-Cu-Sn alloy containing graphite as a solid lubricant".	World Review of Science, Technology and Sustainable Development, 14,2/3, 119, doi: 10.1504/wrstd.2018.093216	2018
69	Dr. Sheikh Shahid Saleem	Bisma Ali, Adnan Qayoum and Shahid Saleem, "Preparation Characterization and Thermo-Physical Property models for Nanofluids"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018. CONFERENCE	2018
70	Dr. Sheikh Shahid Saleem	K. R. Yellu Kumar, Adnan Qayoum and Shahid Saleem, "Review of Effusion Cooling in Combustion Chambers of Gas Turbine Engines"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018. CONFERENCE	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
70	Dr. Sheikh Shahid Saleem	K. R. Yellu Kumar, Adnan Qayoum and Shahid Saleem, "Review of Effusion Cooling in Combustion Chambers of Gas Turbine Engines"	7 th International Fluid Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018. CONFERENCE	2018
71	Dr. Sheikh Shahid Saleem	Shuhaib Mushtaq, M F Wani, S S Saleem, Summera Bandy, M Junaid Mir, Jebran Khan, Jagtar Singh, "Tribological Characteristics of Fe-Cu-Sn Alloy with Molybdenum DiSulfide as a solid Lubricant under Dry Conditions".	International Conference on Tribology, TRIBOINDIA 2018, "Tribology for Reliability and Life", 13-15 December, 2018, VJTI, Mumbai. CONFERENCE	2018
72	Dr. Sheikh Shahid Saleem	Jebran Khan, M F Wani, Rajat Gupta, S Shahid Saleem, Shuhaib Mushtaq, M Junaid Mir, Jagtar Singh, Summera Bandy, "Friction and Wear Behaviour of Polytetrafluoroethylene under Dry and Aqueous Environments".	International Conference on Tribology, TRIBOINDIA 2018, "Tribology for Reliability and Life", 13-15 December, 2018, VJTI, Mumbai. CONFERENCE	2018
73	Dr. Sheikh Shahid Saleem	Jagtar Singh, M F Wani, Summera Bandy, M Junaid Mir, M Jebran Khan, Shuhaib Mushtaq, S Shahid Saleem, G u r t e j S i n g h , "Nanomechanical Property of Max Phase Material Ti2AlC,. International Conference on Tribology"	International Conference on Tribology, TRIBOINDIA 2018, "Tribology for Reliability and Life", 13-15 December, 2018, VJTI, Mumbai. CONFERENCE	2018
74	Dr. Sheikh Shahid Saleem	Summera Bandy, M F Wani, M Junaid Mir, Jagtar Singh, Shuhaib Mushtaq, M Jebran Khan, S Shahid Saleem, "Nanoscratch Property of Self-lubricating Ti/MoS2 Nano Coating at Nano-Scale Level, International Conference on Tribology"	International Conference on Tribology, TRIBOINDIA 2018, "Tribology for Reliability and Life", 13-15 December, 2018, VJTI, Mumbai. CONFERENCE	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
75	Dr. Sheikh Shahid Saleem	M Junaid Mir, M F Wani, Summera Bandy, Shuhaib Mush-taq, Jebran Khan, Jagtar Singh, S Shahid Saleem, "Comparative Assessment of Coated CBN and Multilayer Coated Carbide Tools on Tool Wear in Hard Turning AISI D2 Steel."	International Conference on Tribology, TRIBOINDIA 2018, "Tribology for Reliability and Life", 13-15 December, 2018, VJTI, Mumbai. CONFERENCE	2018
76	Dr. Sheikh Shahid Saleem	Jebran Khan, Himanshu Gandotra, Shahid Saleem and M F Wani, "Correlating the effect of material hardness, counterface hardness and load on the friction and wear of virgin and glass filled Polytetrafluoroethylene (PTFE) using Taguchi approach and statistical analysis"	2 nd Intl Conference on New Frontiers in Engineering, Science & Technology in NIT Kur-kushetra, NFEST 2019, Feb 18-22, 2019. CONFERENCE	2019
77	Dr. Sheikh Shahid Saleem	Masrat Bashir, Adnan Qayoum and Shahid Saleem, "Analysis of fractional heating and thermal expansion in a disc brake using COM-SOL"	2 nd Intl Conference on New Frontiers in Engineering, Science & Technology in NIT Kur-kushetra, NFEST 2019, Feb 18-22, 2019. CONFERENCE	2019
78	Dr. M. S. Charoo	MSC, Pranav Dev Srivyas, "Role Of Reinforcements On The Mechanical And Tribological Behavior Of Aluminum Metal Matrix Composites – A Review"	Materials Today Proceedings	2018
79	Dr. M. S. Charoo	MSC, P.D. Srivyas, "A Review on Tribological Characterization of Lubricants with Nano Additives for Automotive Applications"	Tribology in Industry	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
80	Dr. M. S. Charoo	MSC, Wani Khalid Shafi, "NanoLubrication Systems: An Overview"	Materials Today Pro-ceedings	2018
81	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Effect of load on the tribological behavior of self-lubricating hybrid aluminum composite under dry sliding conditions"	Materials Research press	Ex- 2019
82	Dr. M. S. Charoo	MSC, Pranav Dev Srivyas, "Aluminum metal matrix composites a review of reinforcement; mechanical and tribological behaviour"	International Journal of Engineering & Technology	2018
83	Dr. M. S. Charoo	P DevSrivyas, MS Charoo, "Role of Fabrication Route on the Mechanical and Tribological Behavior of Aluminum Metal Matrix Composites – A Review"	Materials Today Pro-ceedings	2018
84	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Effect of load on the friction and wear properties of aluminum hybrid composite/ chromium plated chrome steel tribopair under boundary lubrication conditions"	Materials Today: Pro-ceedings	2019
85	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Fabrication and micro-hardness properties of nano-Al ₂ O ₃ reinforced aluminium metal matrix composite by field-assisted sintering technique/spark plasma sintering processing route"	International Journal of Rapid Manufacturing	2019
86	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Application of Hybrid Aluminum Matrix Composite in Automotive Industry"	Materials Today: Pro-ceedings	2019
87	Dr. M. S. Charoo	SA Bhat, MS Charoo, "Bio-Tribological Study of Synovial Fluid in the Orthopedic Implants"	Advances in Interdisciplinary Engineering	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
88	Dr. M. S. Charoo	WK Shafi, MS Charoo, "Rheological Properties Of Sesame Oil Mixed With H-Bn Nanoparticles As Industrial Lubricant"	Materials Today: Proceedings	2019
89	Dr. M. S. Charoo	M.S. Charoo, M. Hanief, "Improving the Tribological characteristics of lubricating oil by nano sized additives"	Materials Today: Proceedings	2019
89	Dr. M. Hanief	M.S. Charoo, M. Hanief, "Improving the Tribological characteristics of lubricating oil by nano sized additives"	Materials Today: Proceedings	2019
90	Dr. M Mursaleen	Mohammad Mursaleen & Sheikh Nazir " Finite Element Modelling & Analysis of debonded smart beam in Actuation"	IJRTE-Elsevier	2019
91	Dr. M Mursaleen	M A Reshi & M Mursaleen "Study of the failure of condenser tube in a water cooled centrifugal chiller"	IOP Publishing Ltd, IOP Conference Series, Journal of Physics	2019
92	Dr. H.S Pali	N Kumar, A Sonthalia, HS Pali, "Alternative fuels for diesel engines: New frontiers"	Diesel and Gasoline Engines	2018
93	Dr. H.S Pali	V Saxena, PS Yadav, HS Pali, "Effect of magnetic abrasive machining process parameters on internal surface finish"	Materials Today: Proceedings	Pro- 2019
94	Dr. H.S Pali	S Raghu, TG Mamatha, HS Pali, R Sharma, JR Vimal, V Kumar, "A comparative study of circularity of artefact detecting circle using CMM and form tester with different filters"	Materials Today: Proceedings	Pro- 2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
95	Dr. H.S Pali	PS Yadav, V Saxena, HS Pali, N Kumar, SN Singh, "Effect of Mast Modification in Ingress Problem in Gas Turbine of Naval Ship"	Journal of Physics: Conference Series	2019
96	Dr. H.S Pali	PS Yarav, HS Pali, N Kumar, "EFFECT OF HIGHER INJECTION PRESSURE ON BIODIESEL FOR SPRAY FORMATION"	SAE Technical Paper	2019
97	Dr. H.S Pali	HS Pali, "Experimental Investigations of Storage Stability of Kusum Biodiesel"	Journal of Biofuels	2019
98	Dr. H.S Pali	N Kumar, HS Pali, S Bansal, "Some Studies on NOX Reduction From a Diesel Engine Using Stabilized Emulsion"	ASME 2018 International Mechanical Engineering Congress and Exposition	2018
99	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandey, "Wire electrical discharge machining characteristics of AA6061/cenosphere as-cast aluminum matrix composites".	Materials and Manufacturing Processes, Taylor and Francis.	2018
100	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandey, "Selection of optimal processing condition during WEDM of compo-casted AA6061/cenosphere AMCs based on grey-based hybrid approach"	Materials and Manufacturing Processes, Taylor and Francis	2018
101	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandey, "Wear behaviour of Mg alloys and their composites—a review"	International Journal of Materials Research	2018
102	Dr. Abhijit Dey	N Niraj, KM Pandey, A Dey, "Tribological behaviour of Magnesium Metal Matrix Composites reinforced with fly ash cenosphere"	Materials Today: Proceedings	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/ Journal where published	Date of Publication
103	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandey, "Machinability of cenosphere particulate-reinforced AA6061 aluminium alloy prepared by compocasting".	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, SAGE publication	2018
104	Dr. Abhijit Dey	G Manohar, A Dey, KM Pandey, SR Maity," Fabrication of metal matrix composites by powder metallurgy: a review".	AIP Conference Proceedings	2018
105	Dr. Abhijit Dey	AK Yadav, KM Pandey, A Dey, "Aluminium Metal Matrix Composite with Rice Husk as Reinforcement: A Review".	Materials Today: Proceedings	2018
106	Dr. Abhijit Dey	N Behera, KM Pandey, AB Deoghare, A Dey, "Modeling & Simulation of Interface Stability in Metal Matrix Composites Subjected to off-axis loading using Cohesive Zone Model under Elevated Temperature: A Review".	Materials Today: Proceedings, Elsevier	2018
107	Dr. Abhijit Dey	A Dey, VRR Bandi, KM Pandey "Wire electrical discharge machining characteristics of AA6061/cenosphere aluminium matrix composites using RSM".	Materials Today: Proceedings.	2018
108	Dr. Abhijit Dey	A.K. Dey, U. Kumar , A. Dey, "Use of response surface methodology for the optimization of process parameters for the removal of Congo Red by NaOH treated jute fibre".	Desalination and Water Treatment	2018
109	Dr. M. Mohsin Khan	MM Khan, G Dixit, "Abrasive Wear Characteristics of Silicon Carbide Particle Reinforced Zinc Based Composite"	Silicon	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
110	Dr. M. Mohsin Khan	A Nisar, MM Khan, S Bajpai, K Balani, "Processing, micro-structure and mechanical properties of HfB ₂ -ZrB ₂ -SiC composites: Effect of B ₄ C and carbon nanotube reinforcements"	International Journal of Refractory Metals and Hard Materials	2019
111	Dr. M. Mohsin Khan	MM Khan, G Dixit, "Evaluation of Microstructure, Mechanical, Thermal and Erosive Wear Behavior of Aluminum-Based Composites"	Silicon	2019
112	Dr. M. Mohsin Khan	A Nisar, MM Khan, K Balani, "Enhanced thermo-mechanical damage tolerance of functionally graded ZrB ₂ -20SiC ceramic reinforced with carbon nanotubes"	Ceramics International	2019
113	Dr. Majid H Koul	M Koul, M Manivannan, SK Saha, "Effect of dual-rate sampling on the stability of a haptic interface"	Journal of Intelligent & Robotic Systems	2018
114	Dr. Majid H Koul	S Ganiny, MH Koul, B Ahmad, "Stability Analysis of Dual-rate Haptics Controller Using Two Control Architectures"	Journal of Physics: Conference Series	2019
115	Dr. Majid H Koul	A Showkat, D Rafiq, S Majeed, V Ahmed, MH Koul, SA Nahvi, "Disturbance Rejection of a Single-Axis of a Quadcopter Using Lead Compensation"	Advances in Control & Optimization of Dynamical Systems, ACODS	2018
116	Dr. Noor Zaman Khan	SK Shihab, NZ Khan, P Myla, S Upadhyay, ZA Khan, AN Siddiquee, "Application of MOORA method for multi optimization of GMAW process parameters in stainless steel cladding"	Management Science Letters (Growing Science)	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/ Journal where published	Date of Publication
117	Dr. Noor Zaman Khan	NZ Khan, AN Siddiquee, ZA Khan, M Ubaid, D Bajaj, M Atif, A Khan, "Microstructure evolution of Friction Stir Welded Dissimilar Aerospace Aluminium Alloys"	IOP Conf. Series: Materials Science and Engineering (IOP Science)	2018
118	Dr. Noor Zaman Khan	NZ Khan, M Ubaid, AN Siddiquee, ZA Khan, A Al-Ahmari, X Chen, MH Abidi, "Microstructural features of friction stir welded dissimilar Aluminum alloys AA2219-AA7475"	Materials Research Express (IOP Science)	2018
119	Dr. Noor Zaman Khan	NZ Khan, AN Siddiquee, ZA Khan, D Bajaj, M Ubaid, "Understanding the dissimilar friction stir welding through force and temperature evolution"	Materials Today: Proceedings (Elsevier)	2018
120	Dr. Noor Zaman Khan	P Goel, NZ Khan, ZA Khan, A Ahmari, N Gangil, MH Abidi, AN Siddiquee, "Investigation on material mixing in dissimilar Friction stir welding of AA7475 and AISI 304 Stainless steel"	Materials and Manufacturing Processes (Taylor & Francis)	2018
121	Dr. Noor Zaman Khan	NZ Khan, AN Siddiquee, ZA Khan, "Proposing a new relation for selecting tool pin length in friction stir welding Process"	Measurement (Elsevier)	2018
122	Dr. Noor Zaman Khan	R Latif, S Wakeel, NZ Khan, AN Siddiquee, SL Verma, ZA Khan, "Surface treatments of plant fibers and their effects on mechanical properties of fiber-reinforced composites: A review"	Journal of Reinforced Plastics and Composites (SAGE)	2019
123	Dr. Noor Zaman Khan	NZ Khan, TSA Ansari, AN Siddiquee, ZA Khan, "Selection of E learning websites using a novel Proximity Indexed Value (PIV) MCDM method"	Journal of Computers in Education (Springer)	2019

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
1.	Prof. Babar Ahmad	7th International Conference on Hydrogen Energy, ANM, 2019	University of Aveiro, Aveiro-Portugal	2019
2.	Prof. G.A. Harmain	Workshop on Outcome Based Education (OBE) for Engineering Programmes	AICTE Auditorium Nelson Mandela Marg Road Vasant Kunj, New Delhi	February 8-9, 2018
3.	Prof. G.A. Harmain	International Conference on Contemporary Issues in Engineering, Agriculture, Applied Science & Humanities	Department of Metallurgical and Materials Engineering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	2019
4.	Prof. G.A. Harmain	Fifth International Conference on Nanotechnology for Better living	SKUAST Shalimar Srinagar (jointly organized by NIT Srinagar and IIT Kharagpur)	2019
5.	Prof. G.A. Harmain	International Conference on Materials Science and Manufacturing Technology 2019	Hotel Alfot, Coimbatore, Tamil Nadu	2019
6.	Prof. G.A. Harmain	International conference on Recent trends in "Engineering, Technology, Agriculture, Applied Sciences, Humanities and Business Management for sustainable Development"	Department of Metallurgical and Materials Engineering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	October 20-21, 2018
7.	Prof. G.A. Harmain	International Conference on Contemporary Issues in Engineering, Agriculture, Applied Science & Humanities	Department of Metallurgical and Materials Engineering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	October 20-21, 2018
8.	Dr. Noor Zaman Khan	FDP on "Precision Manufacturing and Circular Economy"	Delhi Technological University, Delhi	June 4-8, 2018

Program(s) Conducted

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator	Sponsoring Agency (if any)
1.	TEQIP III Sponsored One-week Faculty Program on Outcome Based Education	2019	Dr. H. S. Pali Dr. Mukund Dutt Sharma Dr. M. Mohsin Khan Dr. N. Z. Khan	TEQIP III (NIT Srinagar)
2.	Outcome Based Education (OBE) (under TEQIP III)	February 17-18 2018	Prof. G.A Har-main	TEQIP III (NIT Srinagar)
3.	Faculty Development Programme on "Pedagogy".	2019	Prof. M.F Wani, Dr. Mukund Dutt Sharma	TEQIP III (NIT Srinagar)
4.	Short-Term Course on "Pinch Technology: A heat exchanger Network Analysis Tool".	2019	Dr. M. Hanief	NIT Srinagar
5.	2nd International Indo-Tunisian Symposium on "Tribology for Sustainability"	2019	Prof M F Wani Dr. Sheikh Shahid Saleem Dr. Mukund Dutt Sharma Dr. Abhijit Dey	DST (GOI) and TEQIP- III (NIT Srinagar)
6.	One week Short Term Course on Advanced Materials Processing and Characterization.	2019	Dr. Abhijit Dey	TEQIP III (NIT Srinagar)
7.	Lectures on "The Fascinating of World Materials".	2019	Dr. Abhijit Dey Dr. M. Mohsin Khan Dr. Abhijit Dey	NIT Srinagar
8.	Lectures on "NanoPhysics".	2019	Dr. Abhijit Dey Dr. M. Mohsin Khan Dr. Abhijit Dey	NIT Srinagar

Program(s) Conducted

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
9.	Lectures on Renewables in Power System		Dr. Abhijit Dey Dr. M. Mohsin Khan Dr. Abhijit Dey	
10.	Lectures on "Computer Programming	17-05-2019 to 19-05-2019	Dr. Abhijit Dey	
11.	One Week Summer Training Programme on Production Planning and Control with Primavera in association with Vaanahaa.	11-07-2018 to 16-07-2018	Dr. Saad Parvez	IIED Center,
12.	4 Days Workshop on Total Quality Management (TQM) to Unleash the Creativity of Young Minds.	26-08-2018 to 31-08-2018	Dr Saad Parvez	IIED Center, (NIT Srinagar)

Sponsored Projects

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	MGNREGA, A project of national importance, "Time and Motion Study in Jammu, Kashmir & Ladakh Regions".	Dr. Saad Parvez, Dr. Sheikh Shahid Saleem	25,00,000.00	Ministry for Rural Development and Panchayati Raj, Government of India
2	Development & Tribological Characterization of Self Lubricating Nano-Silicon Nitride and Nano-Silicon Ceramic Composites	Prof. M.F. Wani, Dr. Sheikh Shahid Saleem, Prof. Rajat Gupta	21,60,000.00	DST
3	Low Cost Scrap Crusher for Local Junk Yards	Dr. M. Hanief, Dr. M. S. Charoo	1,00,000.00	TEQIP-III
4	Tribological Sustainable Investigation of Hazelnut oil mixed Metal Oxide Nanoparticles	Dr. M. S. Charoo, Prof. M.F. Wani	1,00,000.00	TEQIP-III
5	Bio-Gas Generation from Kitchen Waste of Hostel Mess	Dr. Harveer Singh Pali, Dr. M. Hanief	1,00,000.00	TEQIP-III

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Jagtar Singh	Prof. M F Wani	Ongoing
2	Qurat Ul Ain	Prof. M F Wani, Prof. Rakesh Sehgal	Ongoing
3	Chandra Shekhar	Prof. M F Wani, Prof. Rakesh Sehgal	Ongoing
4	Ishfaq Amin Maekai	Prof. G A Harmain	Ongoing
5	Zehab Ud Din	Prof. G A Harmain	Ongoing
6	Showkat Ahmad	Prof. G A Harmain	Ongoing
7	Ashutosh Kumar	Prof. G A Harmain	Ongoing
8	Azim Shafi Lone	Prof. G A Harmain	Ongoing
9	C Chandrakant	Prof. G A Harmain	Ongoing
10	Mr. Junaid Ah Bhat	Prof. G A Harmain	Ongoing
11	Mr. Saif	Prof. G A Harmain	Ongoing
12	Sheikh Idrees Ali	Prof. S N Ahmad	Ongoing
13	Aijaz Ali	Prof. S N Ahmad, Prof. M M Wani	Ongoing
14	Aqib Hussain Mir	Prof. S N Ahmad	Ongoing
15	Yunis Ahmad Dar	Prof. S N Ahmad	Ongoing
16	Mushtaq Ahmad Rather	Prof. M M Wani	Ongoing
17	Gurtej Singh	Prof. M M Wani, Prof. M.F. Wani	Ongoing
18	S Naresh Kumar Reddy	Prof. M M Wani	Ongoing
19	R Hussain Vali	Prof. M M Wani	Ongoing
20	Diyan Ul Imaan	Prof. Babar Ahmad	Ongoing
21	Omar Hussain	Prof. Babar Ahmad, Dr. Shahid Saleem	Ongoing
22	Suhail Ganiny	Prof. Babar Ahmad, Dr. M H Koul	Ongoing
23	Suhail Ahmad Manru	Prof. Babar Ahmad, Dr. N Z Khan	Ongoing
24	Hanan Gadda	Prof. Babar Ahmad, Dr. Saad Parvez	Ongoing
25	Shahid Manzoor Wani	Prof. Babar Ahmad, Dr. Shahid Saleem	Ongoing
26	Mukhtar Ahmad	Prof. Adnan Qayoum	Ongoing
27	Ovais Gulzar	Prof. Adnan Qayoum	Ongoing
28	Ayaz Ahmad	Prof. Adnan Qayoum	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
29	Masrat Bashir	Prof. Adnan Qayoum, Dr. Shahid Saleem	Ongoing
30	Koyilakonda Sumanth	Prof. Adnan Qayoum	Ongoing
31	Bisma Ali	Prof. Adnan Qayoum, Dr. Shahid Saleem	Ongoing
32	K R Yellu Kumar	Prof. Adnan Qayoum, Dr. Shahid Saleem	Ongoing
33	Afreen Nissar	Dr. M . Hanief	Ongoing
34	Zahid Mushtaq	Dr. M . Hanief	Ongoing
35	Mir Mohsin John	Dr. M . Hanief	Ongoing
36	Uzma Ashraf	Dr. M . Hanief	Ongoing
37	Zahid Maqbool	Dr. M . Hanief	Ongoing
38	Mehak Nisar	Dr. M S Charoo	Ongoing
39	Pranav Dev Srivyas	Dr. M S Charoo	Ongoing
40	Wani Khalid Shafi	Dr. M S Charoo	Ongoing
41	Shariq Ahmad Bhat	Dr. M S Charoo	Ongoing
42	Ahmad Hafeeyi Mir	Dr. M S Charoo	Ongoing
43	Misba Jan	Dr. Mohammad Mursaleen	Ongoing
44	Mubashir Ahmad Reshi	Dr. Mohammad Mursaleen	Ongoing
45	Praveen Kumar	Prof M F Wani	Awarded in 2018
46	Mohammad Mursaleen	Prof S N Ahmad	Awarded in 2018
47	Shahid Saleem	Prof M F Wani	Awarded in 2018
48	Saad Parvez	Prof G A Harmain	Awarded in 2018
49	Shuhaib Mushtaq	Prof M F Wani	Awarded in 2018
50	Junaid Mir	Prof M F Wani	Awarded in 2019
51	Dr. Junaid Hassan Masoodi	Prof G A Harmain	Ongoing
52	Dr. Arjumand Rasool	Prof. Adnan Qayoum	Ongoing
53	Dr. Ufaid Hussain Qadri	Prof M M Wani	Ongoing
54	Mohammad Jebran Khan	Prof M F Wani	Ongoing
55	Dr. Malik Parvez Ahmad	Prof. G. A. Harmain	Ongoing
56	Firdous Ahmed	Dr. Saad Parvez	Ongoing
57	Shabir Ahmad Lone	Prof M.F.Wani	Ongoing
58	Amit Shivgotra	Prof Nazir Ahmad Sheikh	Ongoing

Testing & Consultancy Services

Testing & Consultancy services rendered by the department.

S. No.	Title of the Project	Consultancy rendered to (name of the agency)	Amount Earned (in INR)
1	NDT of Steel frame structure of Multi level car Parking (Prof. G.A. Harmain)	JK ERA	4,00,000.00
2	Vetting of Design and Drawings for Central Heating System "Prov. Of Night Servicing Facilities at Airforce Station, Srinagar". (Prof. Adnan Qayoum, Dr. M. Mursaleen)	IAF	40,000.00
3	Vetting the scheme and drawing of 2No of barracks for ITBP at LEH for Central Heating System (Prof. Adnan Qayoum)	CPWD	98,000.00

Purchase(s) Made

S. No.	Name of Equipment
1	Servo Hydraulic Fatigue Testing Machine
2	Impact Testing Machine
3	Video Gauge
4	Universal Testing Machine
5	Rockwell and Brinell Hardness Tester
6	Micro Vickers Hardness Tester
7	Torsion Testing Machine
8	3D scanner + Reverse Engineering Software (Geomagic)
9	Turbine Erosion testing Lab (Pelton and Francis Experimental Rig)

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab	S. No.	Name of the Lab
1	Dynamics Lab	11	Production Engineering Lab
2	CNC Lab	12	CAD Lab
3	Advanced Materials Testing Lab	13	I.C. Engine Lab
4	Heat Transfer Lab	14	Steam Lab
5	Industrial Engineering Lab	15	Materials Testing Lab
6	Fluid Mechanics Lab	16	Turbine Erosion Testing Lab
7	Mechatronics Lab	17	Tribology Lab
8	Advanced Computation Lab	18	Fuel Cell Lab
9	Energy Research Lab	19	Turbulence Research Lab
10	Advanced Strength of Materials Lab	20	Advanced Thin Film Lubrication Lab

Achievements

S. No.	Patent Title	Status	Details	Agency / Country
1	Universal Friction Stir Welding/Processing Tool Adopter	Applied (Published)	20191100 2618 22/01/2019	Intellectual Property India

3.3. Department Of Electrical Engineering

The Department of Electrical Engineering is now 53 years old. For many years, the Department offered courses in both Electrical Engineering & Electronics & Communications Engineering. In 1984, the Department was bifurcated into two Departments viz Electrical Engineering & Electronics & Communications Engineering. The history since then has been one of continuous expansion & modernization. The Department has contributed & is contributing in several ways to the growth of Electrical Engineering, technology & industry in the Country.

Ever since its establishment, the department of electrical engineering has produced scientists and technocrats of high caliber. In order to ascertain these achievements, a committee was established in the supervision of Head of department, to develop vision, mission and pro-

gram educational objectives for a span of next 10 years. It comprises of analysis yearly achievements for all previous years. This assessment is used for interdepartmental achievements/ progress on annual basis.

To complete more result-oriented tasks, the committee carried out thorough discussions in order to understand the gaps in the present scenario and the desirable future of the department as well as institute.

*“If you want
to find the
secrets of the
universe, think
in terms of energy,
frequency and vibration.”*

— Nikola Tesla



Vision

The department of Electrical Engineering aims to be a front-runner in producing globally competent technocrats who can set a benchmark in innovation and research to contribute in nation building by making a demonstrable environmental, social and economic impact.

Mission

- To create technocrats by imparting quality education to meet industrial and societal needs.
- To provide a cordial environment that attracts and develops talent for excellence in research, innovation and leadership.
- To inspire students to become responsible citizens and inculcate value based, socially committed professional ethics to cause of holistic development.
- To enable sustainable and cost-effective innovations, showcasing the importance of green energy technology with a focus on energy efficiency.
- M5. To bridge the gap between academia and industries by framing appropriate curricula and syllabi.

Faculty

HoD

Electrical

Engineering

Professor

Abdul Hamid Bhat

Head of Department	Prof. Abdul Hamid Bhat
Professor	Prof. Aijaz Ah Zargar
Professor	Prof. Mufti Miraj-Ud-Din
Professor	Prof. Shameem A Lone
Associate Professor	Dr. Sh Javed Iqbal
Associate Professor	Dr. M Abid Bazaz
Associate Professor	Dr. Chandrasekhar Obbu
Assistant Professor	Dr. Chilaka Ranga
Assistant Professor	Dr. Jagtap Kushal M Rao
Assistant Professor	Dr. Neeraj Gupta
Assistant Professor	Dr. Ravi Bhushan
Assistant Professor	Dr. Asadur Rahman
Assistant Professor	Dr. Farhad Ilahi Bakhsh
Trainee Teacher	Ms. Tabish Nazir Mir
Lecturer (on contract)	Mr. A. Ali Abass
Lecturer (on contract)	Mr. M. ul Bashir
Lecturer (on contract)	Ms. S. Ashraf

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	A. H. Bhat	A single phase shift based Isolated Bidirectional DC-DC Converter for bidirectional energy transfer in DC-Microgrid with identification of optimum operating zone	International Journal of Industrial Electronics & Drives	2019
2	A. H. Bhat	A Novel Reduced-Rule Fuzzy Logic Based Self-Supported Dynamic Voltage Restorer for Mitigating Diverse Power Quality Problems	International Journal of Electrical Engineering and Informatics	2019
3	O. C. Sekhar	Implementation of zero current switch turn-ON based buck-boost-buck type rectifier for low power applications	International Journal of Electronics	2019
4	O. C. Sekhar	A review of recent advancements in flux reversal permanent magnet machine (FRPMM)	International Journal of Recent Technology and Engineering	2019
5	A. H. Bhat	Reduced Rule Based Fuzzy Logic Controlled Isolated Bidirectional Converter Operating in Extended Phase Shift Control for Bidirectional Energy Transfer	International Journal of Electrical and Computer Engineering	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
6	R. Bhushan	HVDC tie-link modeling for restructured AGC using a novel fractional order cascade controller	Electric Power Systems Research (Elsevier)	2019
7	A. Ali Abass	SimPower-based analysis and design of a hybrid wind–diesel–superconducting	Wind Engineering	2019
8	M. A. Bazaz	Modified SVPWM Technique for a Sensorless Controlled Induction Motor Drive using Neural Network Observer and Predictive Controller	Int. Journal of Advanced Intelligence Paradigms	2019
9	O. C. Sekhar	Performance and dynamic analysis of single switch AC-DC buck-boost buck converter	International Journal of Innovative Technology and Exploring Engineering	2019
10	O. C. Sekhar	Design of non-isolated integrated type AC-DC converter with extended voltage gain and high power factor for Class-C&D applications	International Journal of Recent Technology and Engineering	2019
11	O. C. Sekhar	Power Quality Enhancement by MPC based Multi-level Control Employed with Improved Particle Swarm Optimized Selective Harmonic Elimination	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
12	O. C. Sekhar	Amplifying power quality and diminishing harmonic distortion in mg via adaptive mpc based robust ekf through ipso-she	International journal of power electronics.	2019
13	T. N. Mir & A. H. Bhat	Speed-Sensorless DTC of a Matrix Converter Fed Induction Motor using an Adaptive Flux Observer	IETE Journal of Research, Taylor and Francis	2018
14	A. H. Bhat	PLL-Less Adaline-Based Control of self-Supported DVR for Grid Voltage Distortion and Imbalances	Journal of Electrical Engineering	2018
15	N. Gupta	Gauss quadrature based probabilistic load flow method with voltage dependent loads including WTGS, PV and EV charging uncertainties	IEEE Transactions on Industry Applications, U.S.	2018
16	A. H. Bhat	Design and Performance Evaluation of Self-Supported Dynamic Voltage Restorer For Mitigating Various Power Quality Problems	Int. Journal Power Electronics	2018
17	A. H. Bhat	A current source inverter-based unified power quality conditioner for mitigation of voltage and current harmonics	Int. J. Industrial Electronics and Drives	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
18	F.I. Bakhsh	A comparative simulation study of different sensorless permanent magnet synchronous motor drives using neural network and fuzzy logic	Journal of Intelligent and Fuzzy Systems, IOS Press (SCI)	2018
22	A. H. Bhat	Power quality improvement in hybrid filter using fuzzy logic controller	Int.J. Industrial Electronics and Drives	2018
23	M. A. Bazaz	Simulation acceleration of high-fidelity nonlinear power electronic circuits using model order reduction	IFAC-Papers online (Elsevier)	2018
24	A. H. Bhat	Review and comparative analysis of dual active bridge isolated DC to DC converter with different control techniques	Int. J. Industrial Electronics and Drives	2018
25	T. N. Mir & A. H. Bhat	Constant Frequency Switching DTC for Matrix Converter Fed Speed Sensorless Induction Motor Drive	Journal of The Institution of Engineers (India, Springer): Series B	2018
26	M. Ud- Din Mufti	Integrating a superconducting magnetic energy storage system for intelligent control of LFC characteristic in multi-area power system	International Journal of Industrial Electronics and Drives	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
27	F.I. Bakhsh	Generation of Firing Pulse for TRIAC using PIC 16F877A Micro-controller	ICASE-19	2019
28	M.A. Bazaz	Accelerated Simulation Across Multiple Resolutions for Power Electronic Circuits	ICC 2019	2019
29	N. Gupta	Probabilistic optimal reactive power planning with wind generation	IEEE Power Electronics, Drives and Energy Systems Conference, IIT Madras	2018
30	M.A. Bazaz	Model Order Reduction of Two Area Electric Power System	ICCCA 2018	2018
31	M.A. Bazaz	Reduced Order Modeling of Ring Oscillator System with POD-DEIM	ICCCA 2018	2018
32	T. N. Mir & A. H. Bhat	New Modulation Methods for Single Phase to Three Phase Matrix Converters	PEDES 2018	2018
33	A. Ahmad & A. H. Bhat	Power Quality Improvement of Utility-Distribution System using Self-Supported DSTATCOM based on Unit Template based Control Algorithm in PFC and ZVR Modes	ETAHBS-2018, NIT Srinagar	2018
34	A. H. Bhat	Power Quality Improvement using three-phase, three-wire Self-supported DVR Based on SRF-theory	ETAHBS-2018, NIT Srinagar	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
35	A. H. Bhat	Back Flow Power Analysis and Identification of Optimum Operating Zone of Single Phase Shift and External Phase Shift Control Modes in Dual Active Bridge Converter	ETAHBS-2018, NIT Srinagar	2018
36	A. H. Bhat	Adaline-Based Control of Self Supported DVR for Mitigation of Various Source Side Power Quality Problems	ETAHBS-2018, NIT Srinagar	2018
37	A. Ahmad	A control strategy for STATCOM in Alleviation of sub synchronous Resonance in power systems	ICPEICES-2018	2018
38	A. Ahmad	Grid tied hybrid photovoltaic fuel cell power system for residential load	ICPEICES-2018	2018
39	F.I. Bakhsh	Book chapter: Modeling and Analysis of the Photovoltaic Array Feeding a SPWM Inverter	Book Name: Applications of Artificial Intelligence Techniques in Engineering	2018
40	F.I. Bakhsh	Efficiency Enhancement of a Solar Power Plant Using Maximum Power Point Tracking Techniques	CCTES 2018	2018
41	M.A. Bazaz	Neural Network Observer for Sensorless Direct Torque Controlled Induction Motor Drive	PEEIC 2018	2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
1	Dr. A. Rahman	National Short Term Course on "Recent Advances in Applied Optimization"	IIT Guwahati	24-28 Dec, 2018
2	Dr. F. I. Bakhsh	Four Week Orientation Program	UGC HRDC, AMU, Aligarh	18 July-14 Aug, 2018
3	Dr. F. I. Bakhsh	Summer Training Program on Active Learning Workshop	IIT Bombay	4-8 July, 2018
4	Dr. K. M. Jagtap	Workshop on "Smart grid Internet of things"	NIE Mysore	18- 22 June, 2018
5	Dr. K. M. Jagtap	Workshop on "Recent Advance in Power System and Facts Controller"	NIE Mysore	11 April, 2018

Program(s) Conducted

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
1	Workshop on "Real Time simulation using OPAL-RT technologies"	March 21-22, 2018	Dr. K. M. Jagtap	TEQIP-III

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	Model order reduction for fast simulation of Power electronics circuits	Dr. M. A. Bazaz	7.02 Lakhs	CPRI

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

	Scholar	Supervisor(s)	Status of Degree
1	Zahid Nabi Dar	Prof. M. D. Mufti	Ongoing
2	Deepak Sharma	Prof. A. H. Bhat & Prof. A. Ahmad	Awarded in 2018
3	Mubashir Yaqoob Zargar	Prof. M. D. Mufti	Awarded in 2018
4	Hailiya Ahsan	Prof. M. D. Mufti	Ongoing
5	Shubendra Pratap Singh	Prof. A. H. Bhat	Ongoing
6	Anupam Kumar	Prof. A. H. Bhat & Prof. P. Agarwal	Ongoing
7	Faisal Jamsheed	Dr. S. J. Iqbal	Ongoing
8	Hadhiq Khan	Dr. M. A. Bazaz & Dr. S. Nahvi	Ongoing
9	Meenakshi Rastogi	Prof. A. Ahmad & Prof. A. H. Bhat	Ongoing
10	Satyavir Singh	Dr. M. A. Bazaz & Dr. S. A Nahvi	Ongoing
11	Sheikh Suhail Mohammad	Dr. S. J. Iqbal	Ongoing
12	Asima Syed	Prof. M. D. Mufti	Ongoing
13	Mukul Chanakaya	Prof. A. Ahmad & Dr. Ikhtlaq Hussain	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
14	Viqar Yousuf	Prof. Aijaz Ahmad	Ongoing
15	Gazala Rashid	Prof. S. A. Lone & Prof. M. D. Mufti	Ongoing
16	Danish Rafiq	Dr. M. A. Bazaz & Dr. S. Nahvi	Ongoing
17	G. Madhu Mohan	Prof. Aijaz Ahmad	Ongoing
18	Humeera Altaf	Prof. A. H. Bhat	Ongoing
19	Masood Nazir	Prof. A. Ahmad & Dr. Ikhlaq Hussain	Ongoing
20	Amit Kumar	Prof. A. H. Bhat & Prof. P. Agarwal	Ongoing
21	Baziga Yousuf	Dr. S. J. Iqbal	Ongoing
22	Suhail Ahmad Suhail	Dr. M. A. Bazaz & Dr. Shoaib Hussain	Ongoing
23	Abdul Waheed Kumar	Prof. M. D. Mufti	Ongoing
24	Bisma Hamid	Dr. S. J. Iqbal	Ongoing
25	Raja Owais	Dr. S. J. Iqbal	Ongoing
26	Basit Mushtaq	Prof. M. D. Mufti	Ongoing
27	Sheikh Safiullah	Prof. S. A. Lone & Dr. Asadur Rahman	Ongoing
29	Zahid Farooq	Prof. S. A. Lone & Dr. Asadur Rahman	Ongoing
30	Chandan Kumar	Prof. S. A. Lone & Dr. Ravi Bhushan	Ongoing
31	Nasir Rehman	Prof. M. D. Mufti & Dr. Neeraj Gupta	Ongoing
32	Farhat Samon	Dr. S. J. Iqbal	Ongoing
33	Masiha Aijaz	Prof. S. A. Lone	Ongoing
34	Aquib Nissar	Dr. Sheikh Javed Iqbal	Ongoing
35	Anha Farooq	Dr Abdul Hameed Bhat	Ongoing
36	Vijay Pal Singh	Dr. Ajaz Ahmad	Ongoing
37	Zahid Afzal Thoker	Dr. Shameem Ahmad Lone	Ongoing
38	Uzmah Javed	Dr M A Bazaz	Ongoing

Purchase(s) Made

Purchases made by the department during the period.

S. No.	Name of Equipment
1	OPAL-RT OP4510
2	LTECH Make 750VA AC Power Supply
3	CHATRE 20 AMP
4	SO219011A Computer Work Station Model
5	Bread Board
6	RC Half Wave Triggering
7	SCR Triggering
8	UJT Characteristic

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab
1	Basic Electrical Engineering
2	Control Systems Lab
3	Electric Measurement Lab
4	Power Systems Lab
5	Power Electronics Lab
6	Electrical Machines Lab
7	Microprocessor and DSP Lab
8	Computation Lab
9	High Voltage Engineering Lab
10	Virtual Instrumentation Lab



Achievements

- Dr. Farhad Ilahi Bakshi has delivered a talk on “New Technological Opportunities in Networking and Science” dated 8-10 JUNE, 2018 at SIT Pithoragarh.
- Dr. Farhad Ilahi Bakshi has chaired a session for “MARC 2018” dated 19-20 July, 2018 at HMR Institute of Technology & Management, Delhi, India.
- Dr. Dr. Subhash Kak (Our Esteemed Alumnus, 1962-1967 Batch, Electrical Engineering), in 2019, Government of India awarded him with “Padma Shri award”. On 28 August 2018, he was also appointed member of “Indian Prime Minister’s Science, Technology and Innovation Advisory Council (PM-STIAC)”.
- Dr. Farhad Ilahi Bakshi has delivered a talk on “Hybrid Solar Wind Energy Systems” dated 14-15 Sept., 2018 at Integral University Lucknow.
- Dr. Farhad Ilahi Bakshi has chaired a session for “CCCTES-2018” dated 14-15 Sept., 2018 at Integral University Lucknow.
- Dr. Ravi Bhushan, Assistant Professor, EED, delivered an expert lecture for the FDP on “Advances in Industrial Automation” jointly organized by Electronics and ICT Academy, NIT Patna & EEE Department, NSIT Bihta under the “Scheme of financial assistance for setting up of E & ICT Academy” by the Ministry of Electronics and Information Technology (MeitY), Government of India from 10th – 14th December, 2018.
- Dr. Neeraj Gupta, Assistant Professor, EED, has been elected to the grade of “Senior Member IEEE (USA)” on dated 16th Feb, 2019

3.4 Department Of Information Technology

The Department of Information Technology was established in 2007, offering four year undergraduate program (B.Tech) in Information Technology. This undergraduate program is of 4 years duration with the first year spread over two semesters which is common to all the branches. The intake capacity of the department was 40 in 2007 & then subsequently increased to 60 in 2011. The Department offers a broad curriculum including: Database Management, Software Engineering, Management of Information Systems, Data Mining, Computer Graphics, Advanced Internet Technology, Computer Networks, Operating System, Data Structures & Algorithms as the main courses & other courses in collaboration with the other departments of the Institute at the undergraduate level.

The Department of Information Technology embodies the Institute's tradition of excellence

as a world-class leader in IT education & research. IT sector is in a period of bloom in terms of growth & opportunity. In the current ever evolving industrial scenario contents delivered to the students are regularly updated by the faculty members who have themselves are well acquainted with path breaking research & innovations in the present technology-oriented world.



*“Technology is best
when it brings
people together.”
–Matt Mullenweg,*

Vision

To attain global recognition in Information Technology education and research by producing “Creators of Innovative Technology”.

Mission

- To provide state-of-the-art research facilities to generate knowledge and develop technologies in the thrust areas of Information Technology.
- To participate in the design and development process in the Research and Development establishment and industry.
- To collaborate with world-class organizations to strengthen industry-academia relationships for mutual benefit.
- To develop IT professionals imbued with high moral and ethical values.

Faculty

Head of Department	Mrs. Arooj Nissar
Assistant Professor	Dr. Shabir Ahmad Sofi
Assistant Professor	Mrs. Arooj Nissar
Trainee Teacher	Dr. Janibul Bashir
Trainee Teacher	Ms. Iqra Altaf Gillani
Lecturer (on contract)	Ms. Deebha
Lecturer (on contract)	Mr. Kalimullah
Lecturer (on contract)	Mr. Jehangir
Lecturer (on contract)	Ms. Insha Altaf
Lecturer (on contract)	Ms. Jasra
Lecturer (on contract)	Ms. Asra Nisar
Lecturer (on contract)	Ms. Huvaida
Lecturer (on contract)	Ms. Rumaisa
Lecturer (on contract)	Mr. Muzaffar
Lecturer (on contract)	Ms. Usma Niyaz
Lecturer (on contract)	Ms. Ifra
Lecturer (on contract)	Mr. Khursheed
Lecturer (on contract)	Mr. Aafaq

*HoD
Information
Technology
Mrs. Arooj
Nissar*

Publications

Papers published and presented by the Faculty:

S. No.	Staff Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Dr. Shabir Ahmad Sofi	Comparative Advantages of System on Chips in Intelligent Traffic System	International Journal of Robotic Engineering	2018
2	Dr. Janibul Bashir	Bigbus: A scalable optical interconnect	ACM Journal on Emerging Technologies in Computing Systems (JETC)	2019
3	Dr. Janibul Bashir	SpliESR: Tunable Power Splitter Based on an Electro-Optic Slotted Ring Resonator	Optics Communications	2019
4	Dr. Janibul Bashir	Slotted electro-optic ring resonator as a tunable optical power splitter	The International Society for Optical Engineering	2019
5	Usma Niyaz	Evaluation of Deep Learning model with Optimizing and Satisficing metrics for Lung Segmentation	8th International Conference on Soft Computing for Problem Solving - SocProS 2018 Proceedings in Advances in Intelligent Systems and Computing (AISC), Springer	2019
6	Usma Niyaz	Advances in Deep Learning Techniques for Medical Image Analysis	IEEE Conference 2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC),	2018

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S.No	Scholar	Supervisor(s)	Status of Degree
1	Nadeem Yousuf Khanday	Shabir Ahmad Sofi	Ongoing
2	Shahid Sultan Hajam	Shabir Ahmad Sofi	Ongoing
3	Kalimullah Lone	Shabir Ahmad Sofi	Ongoing
4	Jahangeer Ali	Shabir Ahmad Sofi	Ongoing
5	Ravesa Akhter	Shabir Ahmad Sofi	Ongoing



Purchase(s) Made

Purchases made by the department during the period.

S. No. Name of Equipment

1	LED TV
2	UPS with batteries (16 no)
3	Projector (Infocus)
4	Amron Quanta batteries

Laboratories Available

Laboratory facilities available at the department

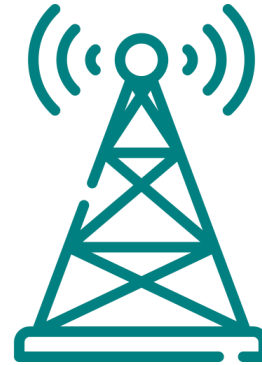
S. No. Name of the Lab

1	Computer Vision and Image Processing lab
2	Data mining & Analytics lab
3	Data Communication and Computer Networks lab
4	Artificial Intelligence and Machine learning lab
5	Programming lab
6	Embedded IoT lab
7	Security lab

3.5 Department Of Electronics & Communication Engineering

The Department of Electronics & Communication Engineering was established in the year 1984. The department conducts a four (04) years under-graduate academic program leading to the award of B.Tech. Degree in Electronics & Communication Engineering. In addition, the department started M.Tech. program in Communication & Information Technology in the year 2004.

Opportunity to do project work over a span of two semesters is provided to the students of B.Tech. to utilize their knowledge in several areas of Electronics, Communication & Computer Engineering. The students work either on design & fabrication of equipment of innovative nature or on other specific & relevant research topics as decided in consultation with the project advisor.



“Not only is it important to ask questions and find the answers, as a scientist I felt obligated to communicate with the world what we were learning.”

— Stephen Hawking,

Vision

To contribute to nation and the world by developing a high quality human and technological resource through excellence in the field of Electronics and Communication Engineering and research.

Mission

- To generate new knowledge by engaging in cutting edge research.
- To impart quality teaching-learning-experience with state of the art curriculum.
- To increase the visibility of academic Programmes globally and attract talent at all levels.
- To undertake collaborative projects which offer opportunities for long term interaction with academia and industry.
- Sustained interaction with the alumni, students, parents, faculty and other stake holders to stay relevant in the globalized environment.
- To develop human potential to its fullest extent so that intellectually capable and imaginative gifted leaders can emerge in a range of professions

Faculty

Head of Department	Dr. Farida Khursheed
Professor	Prof. Ajaz Hussain Mir
Professor	Prof. G.M Rather
Professor	Prof. Najeeb Ud-Din
Associate Professor	Er. Ajaz A Mir
Associate Professor	Dr. Gousia Qazi
Associate Professor	Er. Ab Gaffar Mir
Associate Professor	Dr. Gh Rasool Beigh
Assistant Professor	Dr. Shiekh Aamir Ahsan
Assistant Professor	Dr. Shahid Mehraj Shah
Assistant Professor	Dr. Omkar Singh
Assistant Professor	Dr. Amandeep Singh Rehal
Trainee Teacher	Ms. Uferah Maqbool
Lecturer (on contract)	Ms. Basreet Khan
Lecturer (on contract)	Ms. Mahwash Manzoor
Lecturer (on contract)	Ms. Asifa Amin
Lecturer (on contract)	Ms. Humairah Hamid
Lecturer (on contract)	Ms. Rameesa Mushtaq

HoD

ECE

Dr. Farida

Khursheed

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Khandelwal, S., Chauhan, Y.S., Fjeldly, T.A., Ghosh, S., Pampori, A., Mahajan, D., Dangi, R, Ahsan, S.A.	ASM GaN: Industry Standard Model for GaN RF and Power Devices - Part I: DC, CV, and RF Model	IEEE Transactions on Electron Devices, 66 (1), art. no. 8476221, pp. 80-86	2018
2	Singh, A., Khosla, M., Raj, B.	Design and analysis of dynamically configurable electrostatic doped carbon nanotube tunnel FET	Microelectronics Journal	2018
3	Banday, Y., Rather, G.M., Rasool Begh, Gh.	Effect of atmospheric absorption on millimetre wave frequencies for 5G cellular networks	IET Communications	2018
4	Qayoom, T., Qazi, G. A	A Comparative Study and Radial Performance Evaluation for Reflective EDFA Configurations with Optimized Intrinsic Parameter Sets	Optik	2018
5	Mehraj, T., Sheheryar, M.A., Lone, S.A., Mir, A.H	A critical insight into the identity authentication systems on smartphones	Indonesian Journal of Electrical Engineering and Computer Science	2018
6	Khan, A.A., Mir, R.N., Najeeb-Ud-Din	Fault-tolerant buffer aware round robin arbiter design for NoC architectures	International Journal of Computing and Digital Systems,	2019
7	Singh, O., Sunkaria, R.K.	A new approach for identification of heartbeats in multimodal physiological signals	Journal of Medical Engineering and Technology,	2018
8	Bashir, A., Mir, A.H.	Internet of things security issues, threats, attacks and counter measures	International Journal of Computing and Digital Systems,	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
9	Banday, M., Mir, A.H.	Forensic dental biometry-a human identification system using panoramic dental radiographs based on shape of mandibular bone	International Journal of Biometrics	2018
10	Khan, R.A., Mir, A.H.	A buffering mechanism for IP mobility support in 6LoWPAN-WSN under critical environment	International Journal of Internet Protocol Technology	2018
11	Yousuf, A., Najeeb-uddin, H.	Investigation on chirping characteristics of a 1.55- μ m directly modulated distributed feedback laser	Journal of Optics (India)	2019

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	Design of an optical transmitter using optimized DFB laser and EDFA	Dr Gausia Qazi	60,00,000.00	Science and Engineering Research Board (SERB)
2	Development and Augmentation of the Industry Standard ASM-GaN-HEMT Model for State-of-the-art Integrated Circuit Design	Dr Sheikh Aamir Ahsan	30,00,00.00	Science and Engineering Research Board (SERB)

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Riaz Ahmad Khan	Prof A H Mir	Awarded in 2018
2	Saba Mushtaq	Prof A H Mir	Awarded in 2018
3	Suman Chahar	Prof G M Rather	Awarded in 2018
4	Abida Yousuf	Prof Najeeb-U-Din	Awarded in 2018
5	Reheela Rasool	Dr. Najeeb Ud Din	Ongoing
6	Adil Bashir	Dr. A H Mir	Ongoing
7	Umar Farooq	Dr. G.M. Rather	Ongoing
8	Hushmat Amin Kar	Dr. G.M. Rather	Ongoing
9	Mahroosh Banday	Dr. A.H Mir	Ongoing
10	Sakshi Koul	Dr. Najeeb Ud Din	Ongoing
11	Haider Mehraj	A. H . Mir	Ongoing
12	Ankita Wanchoo	Dr. A. H . Mir	Ongoing
13	Suhail Ahmad	Dr. A. H . Mir	Ongoing
14	Mir Mohsina Rehman	Dr. G. M Rather	Ongoing
15	Yusra Sharief Banday	Dr. G.M. Rather	Ongoing
16	Ummer Iqbal	Dr. A H Mir	Ongoing
17	Misbah Manzoor	Dr. Roohie Naaz Mir	Ongoing
18	Samiksha	Dr. G.M. Rather	Ongoing
19	Taban Qayoom	Dr. Gausia Qazi	Ongoing
20	Sahar Fayaz	Dr. Najeeb Ud Din	Ongoing
21	Omar Rafique	Dr. A.H Mir	Ongoing
22	Shakeel Ahmad Malik	Dr. A.H Mir	Ongoing
23	Saima Bashir	Dr. Najeeb Ud Din	Ongoing
24	Mehvish Shah	Dr. Najeeb Ud Din	Ongoing
25	Mohassin Ahmad	Dr. Farida Khursheed	Ongoing
26	Bisma Bukhari	Dr. G.M. Rather	Ongoing
27	Bisma Bilal	Dr. Najeeb Ud Din	Ongoing
28	Umer Ashraf	Dr. G.R Begh	Ongoing
29	Beenish Habib	Dr. Farida Khursheed	Ongoing
30	Shaika Mukhtar	Dr. G.R Begh	Ongoing
31	Aejaz Farooq Ganai	Dr. Farida Khursheed	Ongoing
32	Shaiqa Nasreen	Dr. A H Mir	Ongoing
33	Injila	Dr. G.R Begh	Ongoing
34	Insha Ashraf	Dr. A.H Mir	Ongoing
35	Mursal Ayub Hamdani	Dr. Gausia Qazi	Ongoing
36	Ifrah Amin	Dr. Gausia Qazi	Ongoing
37	Mohsin Suharwerdi	Dr. Gausia Qazi	Ongoing
38	Suhail Khursheed Naik	Dr. Gausia Qazi	Ongoing
39	Zahid Gulzar Khaki	Dr. Gausia Qazi	Ongoing

Purchase(s) Made

Purchases made by the department during the period

S. No.	Name of Equipment
1	Finger print sensors
2	IRIS Scanner (Single)
3	IRIS Scanner (Dual)
4	Digital Cameras
5	Wireless Microphones
6	Workstations
7	Fibercom optical and digital communication experimenter(x 7)
8	FOL-MOEDS (Mode Observation Trainer) Includes two helium neon LASER 2mW output
9	Fiber Optic Analog transmitter kit-FCL-01
10	Fiber Optic Analog receiver kit- FCL-02
11	Fiber Optic Analog and Digital Modulation and demodulation kit- FCL-03
12	Fiber Optic Advance Digital Communication kit-FCL-04
13	Wavelength division multiplexing kit- Scientech- 2505
14	Thermal Imager
15	Power Analyzer
16	Insulation Tester

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of Lab	S. No.	Name of Lab
1	Analog Electronics Lab	10	Information & Network security Lab
2	Digital Electronic Lab	11	Advanced Communication Lab
3	Communication Systems Lab	12	Optical fiber Communication Lab
4	Computational Lab	13	VLSI Lab
5	Microprocessors Lab	14	Thin Film Transistor Lab
6	Microwave Engineering Lab	15	Advanced Characterization Lab
7	Machine Learning Lab	16	Embedded Sensing & Communication Lab
8	Biometrics Lab	17	Communication, Control and Learning Lab
9	Image Processing and Telemedicine Lab		

3.6 Department Of Chemical Engineering

The Department of Chemical Engineering was established in the year 1963 for five year undergraduate program with total student intake of 25. The duration of degree was changed later in the year 1981 to four years. Currently Department offers B.Tech. and M.Tech. degree programmes with total intake of 92 and 18 students respectively. Students are also pursuing their Ph.D. research under the guidance of faculty members of the Department. As we know Chemical engineering requires basic knowledge of chemistry, biology, physics, and mathematics, the course syllabus has been accordingly devised. The course schemes at B.Tech. and M.Tech. level include the fundamental subjects like; reaction engineering, thermodynamics, transport phenomena and mass transfer etc. A range of complementary elective courses also exists in the schemes. The students are rigorously trained and evaluated on a continuous basis in order to transform them into world class Chemical Engineers. The academic program schemes have also been designed in tune with the requirements of the industry. The Department has well equipped

laboratories to compliment the theoretical courses taught at graduate and post graduate level and to handle research in thrust areas like energy, environment, biotechnology and separation processes etc.

Department has produced more than 1500 Chemical Engineering graduates, majority of them belonging to different parts of the Country & some belonging foreign countries like, Iran, Libya, Jordan, Palestine, Saudi Arabia & Sudan. The Department has been maintaining a high standard of teaching & professional training to enable the students to compete in the national & international job markets. Department has been maintaining close liaison with various Institutes & industries.

“Nothing in this world is to be feared ... only understood.”

— Marie Curie



Vision

To be one of the leading Chemical Engineering Departments in the Country engaged with teaching, research and training of students with high moral values to solve the problems of Chemical and Allied industries for meeting the aspirations of society.

Mission

- To create and sustain the strong foundations of Chemical Engineering education, research and innovation.
- To produce well qualified, innovative Chemical Engineers with entrepreneurial skills & leadership qualities to face and solve the problems of industries and the society at large.
- To make professional leaders, academicians and engineers with high moral values and ethics.

Faculty

Head of Department	Prof. M. Noor-ul-Salaam
Associate Professor	Dr. Fasil Qayoom Mir
Associate Professor	Dr. Mushtaq Ahmad Rather
Assistant Professor	Dr. Tanveer Rasool Dar
Assistant Professor	Dr. Malik Parvez
Assistant Professor	Dr. B. Krishna Srihari
Assistant Professor	Dr. Kurella Swami
Assistant Professor	Dr. Shashikant Kumar
Trainee Teacher	Miss Fatima Jalid
Lecturer (on contract)	Mr. Saptak Rarotra
Lecturer (on contract)	Dr. Sameena Naaz Malik
Lecturer (on contract)	Mr. Rupak Kumar Singh
Lecturer (on contract)	Miss Iqra
Lecturer (on contract)	Miss Iqra Akbar
Lecturer (on contract)	Mrs Afkham Mir

HoD

Chemical

Engineering

Professor

M. Noor-ul-Salaam

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1.	Dr. Mohamad N.S. Khan	Kinetic and Thermodynamic Analysis of Thermal Decomposition of Deodar (Cedrus Deodara) Saw Dust and Rice Husk as Potential Feedstock for Pyrolysis.	International Journal of Chemical Reactor Engineering	2018
2.	Dr. Mohamad N.S. Khan	Utilization of waste biomass, walnut shells, to produce bioproducts via pyrolysis: investigation using ISO-conventional and neural network methods	Biomass Conversion and Bio refinery	2018
3.	Dr. Mohamad N.S. Khan	Biomass Residues Characterization and their Potential Application for Biofuels	Journal of Thermal Analysis and Chalorimetry	2018
4.	Dr. Mohamad N.S. Khan	Bioenergy Potential of Salix alba Assessed Through Kinetic and Thermodynamic Analysis		2018
5.	Dr. F. Q. Mir	Preparation and characterization of a novel nano-size titanium oxide-PVA (TiO ₂ -PVA) composite ion exchange membrane.	Journal of Physics: Conference Series	2019
6.	Dr. F. Q. Mir	Preparation and Characterization of Nano-size Gamma Alumina (γAl ₂ O ₃) and PVA Composite Membranes	Journal of Material Science and Mechanical Engineering (JMSME)	2018
7.	Dr. F. Q. Mir	Polyvinyl Alcohol (PVA) Supported Tin Phosphate (SnP/PVA) Ion Exchange Membrane	Journal of Basic and Applied Engineering Research	2018
8.	Dr. F. Q. Mir	A Short Review of Fouling & its Control Through Hydrophilic Modifications in Ultra-filtration Membranes	Journal of Basic and Applied Engineering Research	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
9.	Dr. Tanveer Rasool	A Review on the Energy Audit of the Building Sector	Journal of Energy Research and Environmental Technology (JERET)	2018
10.	Dr. Tanveer Rasool	Hydrothermal carbonization: A promising transformation process of biomass into various product materials	Emerging Trends in Engineering, Science and Technology for Society, Energy and Environment - Proceedings of the International Conference in Emerging Trends in Engineering, Science and Technology, ICETEST	2018
11.	Dr. Tanveer Rasool	Synthesis and surfactant size regulation of nanoparticles of magnetite ($\gamma\text{-Fe}_2\text{O}_3$)	Emerging Trends in Engineering, Science and Technology for Society, Energy and Environment - Proceedings of the International Conference in Emerging Trends in Engineering, Science and Technology, ICETEST	2018
12.	Dr. Tanveer Rasool	Thermo-kinetics and gaseous product analysis of banana peel pyrolysis for its bioenergy potential	Biomass and Bioenergy	2019
13.	Dr. M.P. Ahmad	Kinetic and Thermodynamic Analysis of Thermal Decomposition of Deodar (<i>Cedrus Deodara</i>) Saw Dust and Rice Husk as Potential Feedstock for Pyrolysis.	International Journal of Chemical Reactor Engineering	2018
14.	Dr. M.P. Ahmad	Utilization of waste biomass, walnut shells, to produce bioproducts via pyrolysis: investigation using ISO-conventional and neural network methods	Biomass Conversion and Bio refinery	2018
15.	Dr. B. Krishna Srihari	Bioenergy Potential of <i>Salix alba</i> Assessed Through Kinetic and Thermodynamic Analysis	Process Integration and Optimization for Sustainability	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
16.	Fatima Jalid	Influence of height ratio on flow and heat transfer around trapezoidal geometry (a generic sharp-edged body) covering transition to periodic flow	International Journal of Heat and Mass Transfer	2018
17.	Fatima Jalid	Aiding buoyancy driven flow and heat transfer features of converging and diverging trapezoidal cylinders	Sadhana, Academy proceeding in Engineering Science.	2018
18.	Fatima Jalid	In-silico screening of Pt-based bimetallic alloy catalysts using ab initio microkinetic modeling for non-oxidative dehydrogenation of ethanol to produce acetaldehyde	MRS Communications	2019

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Staff Member	Program Attended	Institute Where Attended	Date
1.	Dr. F. Q. Mir Dr. Tanveer Rasool	Faculty Development Programme	TEQIP-III; I.I.T Madras	July 02-06, 2018
2.	Dr. M. A. Rather	ICW-2018	Mahatma Gandhi University Kottayam Kerala India.	December 7-10, 2018
3.	Dr. M. A. Rather	ETAHBS-2018	Department of Metallurgical and Materials Engineering NIT Srinagar	October 20-21, 2018
4.	Dr. Tanveer Rasool & Dr. M. P. Ahmed	ICRTAET-2018	S.M.V.D University, Jammu.	October 25-26, 2018
5.	Dr. M. P. Ahmed	CHEMCON 2018	NIT Jalandhar	December 27-30, 2018
6.	Dr. B. Krishna Srihari	Faculty Industry Immersion Program Training	SRMIST/SynkroMax Pvt. Limited	July 9-13, 2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
7	Dr. Tanveer Rasool	International Conference on Advances & Challenges for Sustainable Ecosystem (ICACSE 2018)	N.I.T Tiruchirappalli.	2018
8	Dr. M. P. Ahmed	International Conference on Recent trends in Engineering Technology , Agriculture, Applied science , Humanities and Business Management for sustainable development.	Department of Metallurgical and Materials Engineering NIT Srinagar	October 20-21, 2018
9	Dr. M. P. Ahmed	International Research Conference on trends and Innovations in Technology, Science, Engineering and Management	JNU Delhi	February 9, 2019

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Mr. Tanveer Rasool Dar	Dr. M. N. S. Khan,	Awarded in 2018
2	Mudasir Akbar Shah	Dr. Mohammad N S Khan	Ongoing
3	Nasir Ahmad	Dr. Faisal Qayoom Mir	Ongoing
4	Shakir Ahmad Mir	Mushtaq Ahmad Rather	Ongoing
5	Aarif Hussain Shah	Mushtaq Ahmad Rather	Ongoing
6	Umer Ali	Dr. M N S Khan	Ongoing
7	Waris Baba	Mushtaq Ahmad Rather	Ongoing

Purchase(s) Made

Purchases made by the department during the period.

S. No.	Name of Equipment
1.	DC Power Supply
2.	Hydraulic Press
3.	Laboratory Stirrer REMI
4.	Test sieves set Material brass
5.	1kva UPS with battery and Trolley
6.	Magnetic stirrer
7.	Programmable U.V. Spectrophotometer
8.	Shaking incubator
9.	Hot Oven
10.	Portable fridge (Refrigerator)
11.	Bench Top Orbital Shaker
12.	Sieve Shaker
13.	Chittick Apparatus
14.	Pyrolysis setup (Fixed bed batch reactor) Temp. not less than 1000°C
15.	Vacuum Pump (MERCK)
16.	Luminous UPS 10kVA
17.	Nitrogen Gas Cylinder

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab	S. No.	Name of the Lab
1.	Fluid Mechanics and Mechanical operations Laboratory	5.	Heat Transfer Laboratory
2.	Thermodynamics and Chemical Kinetics Lab	6.	Process Control Lab
3.	Energy Engineering Lab	7.	Biochemical Engineering Lab
4.	Catalysis Laboratory		

Achievements

Ms Fatima Jailed was conferred with the awarded BIRAC GYTI Award.

3.7 Department Of Metallurgy & Materials Engineering

The department of “Metallurgical & Materials Engineering” formerly known as the “Department of Metallurgical Engineering” was established in our Institute in the year 1963. The department conducts a four (04) years under-graduate academic program leading to the award of B.Tech. Degree in engineering.

A two semester “Project Work” is provided to the students to synthesize their knowledge in several areas of metallurgical & materials engineering.

The department through interactions with academia & industries at national levels intends to excel in metallurgical & materials engineering & in the allied areas by up-dating its academic curriculum & R&D activities so as to meet the requirements of the academia, industries & R&D centres.

The Objectives of the department are:

To train personnel in the area of metallurgical & materials engineering who can be leaders in designing, building and running of metallurgical plants required for the country as well as in R & D activities.

To motivate graduates to take up entrepreneurship in areas related to metallurgical and materials engineering.

To encourage graduates to become good human beings, responsible to the overall welfare of the society.

To motivate graduates to take up higher studies in the area of metallurgical & materials engineering.



*“The finest
steel has to go
through the hottest
fire.”— Richard M.*

Nixon

Mission

- To provide facilities & infrastructure for academic excellence in the field of Mechanical Engineering.
- To inculcate in the students a passion for understanding professionalism, ethics, safety, & sustainability, & enable them to contribute to the society.
- To nurture creativity of the students & encourage them to come up with innovative solutions to real life problems.
- To prepare the student for lifelong learning with global perspective.

Vision

To establish a unique global identity of the department in the frontier areas of Metallurgical and Materials Engineering by developing a high quality technical manpower and technological resources that aim at economic and social development of the nation as a whole and the region in particular.

Faculty

HoD

Metallurgy &

Materials

Engineering

Dr. Atikur Rehman

Head of Department	Dr. Atikur Rehman
Professor	Dr Rajinder Amberdar
Associate Professor	Dr. Yashwant Mehta
Associate Professor	Dr. Atikur Rehman
Associate Professor	Dr Gitanjali Goel
Assistant Professor	Dr. Kalicharan Sabat
Assistant Professor	Dr. Irfan Samad Wani
Assistant Professor	Dr. Srinibash Mishra
Trainee Teacher	Ms Aravi Muzaffar

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Dr. Atikur Rahman	Degradation Behaviour of Nanostructured CeO ₂ Films on Superalloy	Transactions of the Indian Institute of Metals	2018
2	Dr. Atikur Rahman	Photocatalytic Studies of Composite Ferrite Nanoparticles”,	Russian Journal of Inorganic Chemistry	2019
3	Dr. Atikur Rahman	Eletroless nanoceria Films on Nickel-based superalloy “	Surface Engineering	2019
4	Dr. Atikur Rahman	The degradation behaviour of nickel-based superalloys in the medical waste incineration plant	Sadhana, Springer journal	2019
5	Y Mehta et. al.	Modeling of hot deformation behavior of high phosphorus steel using Johnson-Cook model	IOP Conf. Series: Materials Science and Engineering 404 (2018) 012015	2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Staff Member	Program Attended	Institute Where Attended	Date
1	Y Mehta	Best Manufacturing practices	SMVDU Katra	December 17-21, 2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
3	Y Mehta	Project management	NPC Port Blair	2019
4	Dr. Irfan Samad Wani	FDP	NIT Srinagar	2019
5	Dr. Irfan Samad Wani	FDP	NIT Srinagar	2019
6	Aravi Muzaffar	4-day course on "Atomic Simulations of Materials"	IIT Delhi	2018
7	Aravi Muzaffar	International conference on Recent trends in Technology, Agriculture, Applied Sciences, Humanities and Business Management for Sustainable Development (ETAHBS-2018)	NIT Srinagar	2018
8	Aravi Muzaffar	TEQIP-III sponsored Faculty Development Programme on Outcome Based Education	NIT Srinagar	2019
9	Aravi Muzaffar	Short-term course under TEQIP-III on "Crystallography for Materials Science"	IIT Delhi	2019
10	Aravi Muzaffar	IIM-NMD ATM 2019 organised by IIM Trivandrum Chapter	Thiruvananthapuram	2019

Program(s) Conducted

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
1	International conference on Recent Trends in Engineering, Technology, Agriculture Applied Sciences, Humanities and Business management for Sustainable Development(ETAHBS-2018) jointly organized by Metallurgical and Materials Engineering Department NIT Srinagar and Krishi Sanskriti New delhi JNU	October 20-21 2018	Dr. Atikur Rahman and Dr. Y. Mehta	Krishi Sanskriti New delhi JNU

Sponsored Project(s)

S. No.	Name of the Program	Investigator (s)	Sponsoring Agency (if any)
1	Fatigue analysis of High Entropy Alloys	Mr. Umar Dass Mr. Riyaz Qasab Dr. G. Harmain Dr. Irfan Samad Wani Dr. Azhar Wani	MHRD

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Topic	Scholar	Supervisor (s)	Status of Degree
1	High temp oxidation behaviour of Nanostructured coatings (CeO ₂) on superalloy	Mrs. Shafaqat Asraf lone	Dr. Atikur Rahman	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Topic	Scholar	Supervisor (s)	Status of Degree
2	Nanostructured photocatalyst	Mrs. Irtika	Dr. Atikur Rahman	Ongoing
3	Chlorine –Fluorine doped HPA Bio-materials	Mrs. Abreeq Rashid	Dr. Atikur Rahman	Ongoing
4	Synthesis and Characterization of Ferrite Nano Particles	Mr.K.K. Thakur	Dr. Atikur Rahman	Ongoing
5	Carbon composites	Virendra Patle	Y Mehta and co-supervisor	Ongoing
6	Al-Mg Composites	Mayur Rajak	Y Mehta	Ongoing
7	Mufflers	V Kasture	Y Mehta	Ongoing
8	Friction stir welding	Tanvir Majeed	Y Mehta	Ongoing

Testing & Consultancy Services

Testing & Consultancy services rendered by the department.

S. No.	Title of the Project	Consultancy rendered to (name of the agency)	Amount Earned
1	Atomizer for non-ferrous metal powders	M/S Soltek, Faridabad,	15,000.00



Purchase(s) Made

Purchases made by the department during the period.

S. No. Name of Equipment

-
- | | |
|---|--|
| 1 | Digital Rockwell Machine
Make-FMI, Miraj
Model – TRSN-D-SPL
S.No. – 2018/335 |
| 2 | Digital Vickers Hardness Tester
Make-FMI, Miraj
Model – TV-50(S) Digital
S.No. – 2018/260 |
| 3 | UV-VIS Spectroscopy |
-

Laboratories Available

Laboratory facilities available at the department

S. No. Name of the Lab

-
- | | |
|---|---------------------------|
| 1 | Physical Metallurgy Lab |
| 2 | Corrosion Engineering Lab |
| 3 | Mechanical Metallurgy Lab |
| 4 | Powder Metallurgy Lab |
-

3.8 Department Of Computer Science & Engineering

The Department of Computer Science & Engineering was started in the year 2007, offering four year undergraduate courses, wherein undergraduate students are imparted knowledge in multitude of specialties, including: computer Architecture, Network, Operating System, Data Structure & Algorithm, Theory of Computation, Numerical Analysis, Compiler Design, Graphics, Artificial Intelligence, Database Management System, Data Mining, Software Engineering, Human Computer Interaction, etc.

The Department of Computer Science & Engineering embodies the Institute's tradition of excellence as a world-class leader in computer science & engineering education & research. CSE is in a period of exciting growth & opportunity. In the current ever evolving industrial scenario contents delivered to the students are regularly updated by the faculty members who

have themselves been at the helm of path breaking researches & innovations.

In addition to academic work, the CSE department also has computer science research Programmes supported through government & industry funding. Faculty research helps define & expand the current & future use of technology.

Over the year the students passed out from the department got placed in various National & Multinational companies with 100% placement.

“Design is not just

what it looks like

and feels like.

Design is how it

works.”

—Steve Jobs

Vision

To inculcate the requisite acumen in the budding engineers, researches and innovators making them thorough and competent professionals, enabling them to take up and face any challenge in the industry or any research organization they serve.

Mission

- To impart state of the art education necessary for a strong foundation needed to excel in all areas of computer science and prepare its students for real world challenges.
- To provide facilities and infrastructure for academic excellence in the field of computer science and engineering with extra emphasis on projects and latest research trends in the field.
- To inculcate in the student the passion for understanding professionalism, ethics, safety, sustainability and responsibility towards the society.
- To nurture creativity, independent thinking and encourage innovative solutions to real life challenging problems in computer science and engineering.
- To prepare student for future ahead by imparting valuable skills and problem solving repertoire.



Faculty

Head of Department	Prof. Roohie Naaz Mir
Department Office	Mr. Fayaz Ahmad
Assistant Professor	Dr. M. Ahsan Chesti
Assistant Professor	Dr. Shaima Qureshi
Assistant Professor	Dr. Ranjeet Kumar Rout
Lecturer (on contract)	Ms. Ambreen Bashir
Lecturer (on contract)	Ms. Tahoor Hussain
Lecturer (on contract)	Ms. Ifrah Sanober
Lecturer (on contract)	Ms. Azra Nazir
Lecturer (on contract)	Ms. Snowber Mushtaq
Lecturer (on contract)	Ms. Rumaisa Firdous
Lecturer (on contract)	Mr. Asim Rafiq
Lecturer (on contract)	Mr. Nadeem Khanday

HoD

Computer Science

Engineering

Professor Roohie

Naaz Mir

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Roohie Naaz Mir	Adaptice Deep Neural Networks for Internet of Things	International Journal of Sensors, Wireless Communications and Control	2019
2	Roohie Naaz Mir	An enhanced time efficient technique for image watermarking using ant colony optimization and light gradient boosting algorithm	Journal of King Saud University Computer and Information Science (Elsevier)	2019
3	Roohie Naaz Mir	Saliency guided faster-RCNN (SGFr-RCNN) model for object detection and recognition	Journal of King Saud University Computer and Information Science (Elsevier)	2019
4	Roohie Naaz Mir	A Survey on the Internet of Things Security: State-of-art, Architecture, Issues and Countermeasures	International Journal of Information and Computer Networks	2019
5	Roohie Naaz Mir	Adaptive data Transmission and Optimization in Internet of Things	International Journal of Innovative Technology and Exploring Engineering	2019
6	Roohie Naaz Mir	IoT Fog Cloud Model for Digital Reach in Rural India	Lecture Notes on Data Engineering and Communications Technologies Book Series, Springer	2019
7	Roohie Naaz Mir	Forensic Chain: Blockchain Based Digital Forensics Chain of Custody with PoC in Hyperledger Composer	Digital Investigation	2019
8	Roohie Naaz Mir	Consensus Protocols as a Model of Trust in Blockchains	International Journal of Blockchains and Cryptocurrencies	2019

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
9	Roohie Naaz Mir	Comparative Analysis of Vertex-Centric Graph Processing Systems	International journal of Database Theory and Application	2019
10	Roohie Naaz Mir	Scrutinizing Internet Banking Solutions	International journal of Information and Computer Security	2019
11	Roohie Naaz Mir	Internet of Things Security Vulnerabilities and Recommended Solutions	International Journal of Engineering and Technology	2018
12	Roohie Naaz Mir	Textual Data Hiding in Digital Images Using Chaotic Maps.	International Journal of Computer Networks and Applications	2018
13	Roohie Naaz Mir	A Critical Insight into the effectiveness of Research Methods Evolved to Secure IoT Ecosystem	International Journal of Information and Computer Security	2018
14	Roohie Naaz Mir	Current Big Data Issues and Their Solutions via Deep Learning: An Overview	Iraqi journal of Electrical and Electronic Engineering	2018
15	Roohie Naaz Mir	Rethinking Audience Clustering in Sports Market Using Gossip Protocol	International Journal of Computer Networks and Applications	2018
16	Roohie Naaz Mir	Virtualization and IoT Resource Management: A survey	International Journal of Computer Networks and Applications	2018
17	Roohie Naaz Mir	Investigating and Analysing Bitcoin Blockchain Protocol Using Wireshark	International Journal of Computer Network and Information Security	2018
18	Roohie Naaz Mir	Impact of Various Performance Parameters on Distributed Protocols in Wireless Sensor Networks	International Journal of Computer Sciences and Engineering	2018
19	Roohie Naaz Mir	Docile Smart City Architecture: Moving Toward an Ethical Smart City	International Journal of Computing and Digital Systems	2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
1.	Dr. Ranjeet Kumar Rout	International Conference of Soft Computing: Theories and Applications (SoCTA-2018)	Department of Instrumentation & Control Engineering, National Institute of Technology, Jalandhar.	December 21-23, 2018.

Program(s) Conducted

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
1	Workshop & Coding Festival "Exordium"	2019	Dr. Mohammad Ahsan Chishti	

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	AFIC design of arbiter unit for network on chief	Prof. Roohie Naaz Mir		MHRD

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Topic	Scholar	Supervisor (s)	Status of Degree
1	Ethics Aware Internet of Things: An approach to Computational Design of Ethics for Smart Things, conceptual framework and Implementation	Sahil Sholla	Roohie Naaz Mohammad Ahsan Chishti	Ongoing
2	Efficient Block and Microarchitectural Level Optimization for Network-on-Chip Systems on FPGAs	Liyaqat Nazir	Roohie Naaz	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
3	Shabir Ahmad Sofi	Roohie Naaz	Awarded in 2018
4	Sukhkirandeep Kaur	Roohie Naaz	Awarded in 2018
5	Zahoor Ahmad Najar	Dr. Roohie Naaz Mir	Ongoing
6	Afshan Amin Khan	Dr. Roohie Naaz Mir	Ongoing
7	Mohammad Irfan Bala	Dr. Mohammad Ahsan Chishti	Ongoing
8	Ab Rouf Khan	Dr. Mohammad Ahsan Chishti	Ongoing
9	Omerah Yousuf	Dr. Roohie Naaz Mir	Ongoing
10	Saniya Zahoor	Dr. Roohie Naaz Mir	Ongoing
11	Tausifa Jan Saleem	Dr. Mohammad Ahsan Chishti	Ongoing
12	Syed Rameem Zahra	Dr. Mohammad Ahsan Chishti	Ongoing
13	Auqib Hamid Lone	Dr. Roohie Naaz Mir	Ongoing
14	Mohammad Khalid Pandit	Dr. Roohie Naaz Mir	Ongoing
15	Mohd Asifuddola	Dr. Mohammad Ahsan Chishti	Ongoing
16	Vipul Kumar Sharma	Dr. Roohie Naaz Mir	Ongoing
17	Neelam Saleem Khan	Dr. Ahsan Chisti	Ongoing
18	Jameel Ahamed	Dr. Ahsan Chisti	Ongoing
19	Sadia Showkat	Shaima Qureshi	Ongoing
20	Azra Nazir	Dr. Roohie Naaz Mir	Ongoing
21	Asim Rafiq Bhat	Shaima Qureshi	Ongoing
22	Touseef Iqbal	Shaima Qureshi	Ongoing
23	Sania Iqbal	Shaima Qureshi	Ongoing

Purchase(s) Made

Purchases made by the department during the period.

S. No.	Name of Equipment
1	Mobile Workstation
2	Deep Learning Workstation
3	Tower Workstation
4	10 KVA On-Line UPS

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab
1	Computer Programming Lab
2	Computer Networks Lab
3	Database Lab
4	Compiler Lab
5	Internet & Web Designing Lab
6	Computer Graphics Lab
7	Artificial Intelligence Lab

Patents

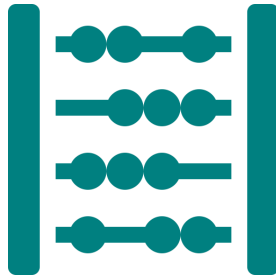
S. No.	Patent Title	Inventors	Status	Details
1	Toward Friendly Machines: A Boolean Algebra Based Method Implementing Ethics Based on Context	Sahil Sholla, Roohie Naaz Mir, Mohammad Ahsan Chishti	Published	IN201811025275 6/7/2018
2	Toward Friendly Machines: A Boolean Algebra Based Method Implementing Ethics Based on Context	Sahil Sholla, Roohie Naaz Mir, Mohammad Ahsan Chishti	Published	IN201811025275 6/7/2018
3	Method And Design For A Comprehensive Apparatus To Collect, Process, Aggregate, Route, Save, Analyze And Filter Data In The Internet Of Things	Ab Rouf Khan, Mohammad Ahsan Chishti	Published	IN201911046286 14/11/2019

3.9. Department Of Mathematics

The Department of Mathematics, National Institute of Technology Srinagar started its functioning in the year 1960. During past 52 years, many mathematicians of International repute like Prof. Q. I. Rehman, Prof. M. A. Ansari (Bretlee Ansari's test), Prof. S. I. Hussain, Prof. A. H. Siddiqui, Prof. A. G. Lone & many worked in the Department. The faculty members of this department are actively engaged in research & published more than 100 research papers in journals of national & international

repute. The Department has produced 8 PhD's in last five years. The faculty of the Department is actively engaged in organizing workshops, national & international conferences.

The department is teaching around 50 courses to B.Tech. students & 8 courses to M.Tech. & M.Phil/Ph.D. students.



*“Because the ideas I had
about supernatural
beings came to me the
same way that my
mathematical ideas did.
So I took them
seriously.”
— John Nash*

Vision

To excel in teaching and research through creativity and to conduct collaborative academic and research Programmes.

Mission

- To inculcate in students the ability to apply Mathematical and Computational skills to formulate and solve their real life problems
- To create an atmosphere conducive for research and to produce researchers with clear thinking and determination, who are capable of discharging professional, social and economic responsibilities ethically

HoD

Mathematics

Dr. Zamrooda

Jabeen

Head of Department	Dr. Zamrooda Jabeen
Professor	Prof. Abdul Liman
Professor	Prof. Neyaz A Sheikh
Associate Professor	Dr. Hakim Tanveer Jalal
Assistant Professor	Dr. Mehraj Ah Lone
Assistant Professor	Dr. Ujwal Suresh R Warbhe
Lecturer (on contract)	Dr. Sraya Jabeen
Lecturer (on contract)	Dr. Mohamad Saleem Lone
Lecturer (on contract)	Dr. Saleem Yousuf
Lecturer (on contract)	Mr. Tufail Mohammad Shah

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Prof Neyaz Ahmad	Multigenerator Gabor Frames on local fields	Facta Universtatis, Ser., Math. And informat 33 (2) 307-324	2018
2	Prof Neyaz Ahmad	Non-uniform wavelet frames on local fields	Jordan Journal of Math. And Stat	2018
3	Prof Neyaz Ahmad	Gabor Frames on Non-Archimedean field	International Journal of Geometrical Methods in Modern Physics	2018
4	Prof Neyaz Ahmad	On Characterization of Non-uniform tight wavelet frames on local fields	Analysis in theory and Applications 34(2) 135-146	2018
5	Prof Neyaz Ahmad	Rate Of Convergence Of Wavelet Series By Cesaro Means	Acta Universitatis Applensis 57 109-120	2019
6	Prof Abdul Liman	On an integral estimate concerning the polar derivative of polynomials with restricted zeros	Filomat	2019
7	Prof Abdul Liman	Integral estimates for a class B_n of operators	Stud. Univ. Babeş-Bolyai Math	2018
8	Prof Abdul Liman	Location of Zeros of Lacunary-type Polynomials	Journal of Mathematics and Applications 41 171-180	2018
9	Dr. Tanweer Jalal	Boundary value problems for an Infinite system of second order differential equations in L_p spaces	Mathematica Bohemica	2019
10	Dr. Tanweer Jalal	Measures of Non-Compactness in N Summable Difference Sequence Spaces	Journal of Mathematical Extension	2018
11	Dr. Tanweer Jalal	Measures of Non-compactness in N_q Delta summable difference sequence spaces	Filomat	2018
12	Dr. Tanweer Jalal	Some new triple sequence spaces over n -normed space	Proyecciones Journal of Mathematics	2018
13	Dr. Mehraj Lone	On nonexistence of warped product submanifolds of locally conformal Kaehler manifolds,	Gulf J. Math	2018

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Topic	Scholar	Supervisor (s)	Status of Degree
1	Measures of Non-Compactness in Banach Spaces	Prof. Mohammed Mursaleen	Dr. Tanweer Jalal	Ongoing

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab
1	Computer Lab with genuine mathematical software.

3.10. Department Of Physics

The Department of Physics was established in 1960 & since then it remained actively engaged in imparting the instructions at U.G. level in addition of achieving higher standards in the field of research by guiding M.Phil/Ph.D. Programmes & other sponsored research projects.

It offers two semester compulsory course of basic physics so necessary for engineering students. Besides, the Department offers Electromagnetic Fields & waves, Electronic Devices to the 5th semester (Electronics & Communication) students & Electromagnetic Field & Waves to the 3rd semester (Electrical) students. Besides, the Department has the expertise for giving elective courses, for students of the Civil, Electrical, and Mechanical & Metallurgical Engineering Departments.

The Institute acquired the status of National Institute of Technology in August 2003. Since then, the Department of Physics remained very active in research & other academic activities.

Till date more than 45 scholars have been awarded the degree of M. Phil/Ph. D. More than 500 research publications in the national & International Journals of repute have been published. Many research projects have been successfully completed & many are running in the Department. The Department is presently very active in research in different fields like Studies of Ionospheric & Magnetospheric Plasma, Material Science, Nuclear Physics, Solid State Physics, Photonics, Renewable sources of energy & Nano-science & Technology. At present 8 research scholars are working in various fields for their M. Phil & Ph. D Degree.

“Gravity explains the motions of the planets, but it cannot explain

Vision

To integrate the components of Basic Sciences and Engineering for grooming the students to be globally recognized professionals by striving hard to apply knowledge of Basic Sciences beyond the curriculum and demonstrate thinking across all disciplines.



Mission

- To awaken the young minds and discover their talents both in theory and in practical physics, through dedication to teaching, commitment towards students and innovative instructional.
- To craft the students, understand the importance of basic science and in particular Physics in the field of Engineering and Technology.
- To support the evolving activities of the institute and make the department vibrant.
- To make the vital contributions in areas such as faculty, modern labs and demonstrate a high level of competence in the study of Engineering Physics.
- To organize and sustain efficient functional systems in the department for the realization of our objectives as an institution of eminence and international standards.

who sets the planets in motion.”—Sir Isaac Newton

Head of Department	Dr. Seemin Rubab & Dr. Prince Ahmad Ganai
Professor	Prof. Mohammad Ikram
Associate Professor	Dr. Seemin Rubab
Associate Professor	Dr. Prince Ahmad Ganai
Associate Professor	Dr. Mohd. Ashraf Shah
Associate Professor	Dr. Ghulam Rasool Khan
Assistant Professor	Dr. Vijay Kumar
Assistant Professor	Dr. M Zubair Ansari
Assistant Professor	Dr. Harkirat Singh

HoD

Physics

Dr. Seemin Rubab

&

Dr. Prince Ahmad

Ganai

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1.	Prof. M. Ikram	Structural stability improvement, Williamson Hall analysis and band-gap tailoring through A-site Sr doping in rare earth based double perovskite La ₂ NiMnO ₆	Rare Metals	2019
2.	Prof. M. Ikram	Dielectric and Raman spectroscopy study of structural phase transformation of Sr-doped La ₂ CoMnO ₆ double perovskite	Journal of Materials Science: Materials in Electronics	2019
3.	Prof. M. Ikram	Effect of oxygen concentration on the ferromagnetic transition of La _{1.9} Sr _{0.1} CoMnO ₆ thin films	Applied Physics A	2019
4.	Prof. M. Ikram	Synthesis and Luminescent characteristics of Eu ³⁺ doped LiZnPO ₄ phosphors for white LEDs	Optik	2019
5.	Seemin Rubab	Magnetic and thermal properties of ferromagnetic insulator: Yttrium Iron Garnet	Ceramics International	2019
6.	Seemin Rubab	Electronic structure, optical and thermoelectric properties of CaMgSi _{1-x} C _x (x = 0, 0.5): an ab-initio study	Materials Research Express	2018
7.	Seemin Rubab	DFT understandings of structural properties, mechanical stability and thermodynamic properties of BaCoO ₃ perovskite	Materials Research Express	2018
8.	Seemin Rubab	A case study of Fe ₂ TaZ (Z = Al, Ga, In) Heusler alloys: hunt for half-metallic behavior and thermoelectricity	RSC Advances	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
9.	Dr. Prince A. Ganai	Lorentz violating gaugeon formalism of Yang–Mills theory	International Journal of Modern Physics A	2019
10.	Dr. Prince A. Ganai	Super-Yang–Mills theory on a Lorentz breaking background	International Journal of Geometric Methods in Modern Physics	2018
11.	Dr. M. A. Shah	CVD Diamond	Transactions of the Indian Institute of Metals	2019
12.	Dr. M. A. Shah	Green synthesis of iron oxide nanoparticles using Platanus orientalis leaf extract for antifungal activity	Green Processing and Synthesis	2019
13.	Dr. M. A. Shah	Structural and electrical properties of copper doped In ₂ O ₃ nanostructures prepared by citrate gel processes	Materials Research Express	2019
14.	Dr. M. A. Shah	Enhancing the wear resistance of WC-Co cutting inserts using synthetic diamond coatings	Industrial Lubrication and Tribology	2018
15.	Dr. M. A. Shah	Structural, morphological and dielectric properties of Li-doped Al ₂ O ₃	Applied Physics A	2018
16.	Dr. M. A. Shah	Enhancement in photo- electrochemical efficiency by reducing recombination rate in branched TiO ₂ nanotube array on functionalizing with ZnO micro crystals	Materials Research Express	2018
17.	Dr. M. A. Shah	Effect on the properties of ITO thin films in Gamma environment	AIP Conference Proceedings	2018
18.	Dr. M. Z. Ansari	Visible light active CZTS sensitized CdS/TiO ₂ tandem photoanode for highly efficient photoelectrochemical hydrogen generation	Solar Energy	2019
19.	Dr. Harkirat Singh	Robust pseudogap across the magnetic field driven superconductor to insulator-like transition in strongly disordered NbN films	European Physical Journal B	2019

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Faculty Member	Program Attended	Institute Where Attended	Date
1	Dr. Seemin Rubab	One week FDP	IIT Madras	July 2-6, 2018

Program(s) Conducted

Conferences, Courses, Trainings conducted by the faculty during the period:

S. No.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
1	National Conference on "Role of Saha in Growth of Physics"	October 6, 2018	Dr. Seemin Rubab	Vigyan Prasar and JKCST

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
3	Structural, Magnetic, Optical & Dielectric Properties of Double Layer Perovskite Oxides	M Ikram	13.30 Lakhs	CSIR, New Delhi

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Shah Aarif UI Islam	Prof. M. Ikram	Ongoing
2	Mushtaq Bashir Shah	Dr. Prince A Ganai	Ongoing
3	Deepak Kumar	Prof. Rajesh Sharma (Chandigarh University)	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
4	Ahhaq Hussain	Dr. M. A. Shah	Awarded in 2018
5	Farooq Ahmad Dar	Dr. M. A. Shah	Awarded in 2018
6	Muzaffar Ahmad Boda	Dr. M. A. Shah	Awarded in 2018
7	Sheikh Jehangir Ahmad	Dr. Prince A Ganai	Ongoing
8	Shabir Ahmad Akhooon	Dr S Rubab	Awarded in 2018
9	Shah Arif Ul Islam	Dr. Mohammad Ikram	Ongoing
10	Mushtaq Bashir Shah	Dr. P. A Ganai	Ongoing
11	Sebiha Rehman	Dr. S Rubab	Ongoing
12	Mushtaq Ahmad Magrey	Dr. Mohammad Ikram	Ongoing
13	Gowher Hameed Rather	Dr. Mohammad Ikram	Ongoing
14	Nadeem Ul Islam	Dr. P.A . Ganai	Ongoing
15	Mudasir Ahmad Mir	Dr. M.A Shah	Ongoing
16	Nazima Nazir	Dr. Mohammad Ikram	Ongoing
17	Yawar Hussain Khan	Dr. P.A . Ganai	Ongoing
18	Rais Ahmad Dar	Dr. G R Khan	Ongoing
19	Syed Ishtiyahq Ahmad	Dr. S Rubab	Ongoing
20-	Suhail Iqbal Malik	Dr G R Khan	Ongoing
21	Yasmeen Gul	Dr M Ikram	Ongoing
22	Jaffar Farooq Mir	Dr. M.A Shah	Ongoing
23	Ab Mateen Tantary	Dr. M.A Shah	Ongoing
24	Abdul Wakeel	DR. P.A . GANAI	Ongoing
25	Hilal Ahmad Bagat	Dr. P.A . Ganai	Ongoing
26	Ummer Altaf	Dr. S. Rubab	Ongoing
27	Gulzar Ahmad Lone	Dr. Mohammad Ikram	Ongoing
28	Latief Mohi-Ud-Din	DR. G.R. Khan	Ongoing
29	Imran Hussain	Dr. G.R. Khan	Ongoing
30	Showkat Ahmad Mir	Dr M A Shah	Ongoing

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab	S. No.	Name of the Lab
1	General Physics Lab-First Semester	7	Characterization Lab
2	General Physics Lab -Second Semester	8	Computational Physics Lab
3	Advanced optics Lab	9	Renewable Energy Research Lab
4	Electronics & Instrumentation Lab	10	Synthesis Lab
5	Solid State Physics Lab	11	XRD Lab
6	Materials Science Lab	12	Spectroscopy Lab

3.11 Department Of Chemistry

The Department of Chemistry was established in 1960 & has been headed by the renowned personalities like Prof. R. P. Jeerath, Dr. Ram Murthi, Dr. Shakti Rais Ahmad, & Dr. A. K. Choudhry. About fifteen Ph.D.s & 30 M. Phils have been produced by the Department till date. The faculty members of the Department have published many scientific papers & reviews in National & International journals of repute. Research, in the areas of Physical, Organic, Inorganic & Environmental Chemistry, are being carried out in the Department.



Vision

To become a unique centre of excellence for teaching, research and development that makes significant contribution for producing academic professionals/technocrats in frontier area of Chemical Sciences.

Mission

- To impart quality education and fundamental concepts of Chemical Sciences to students and research scholars through our state of art laboratory, teaching and research facilities.
- To build a scientific environment and motivation towards innovation with quality research in the field of Chemical Sciences and interdisciplinary areas.
- To provide a broad foundation in Chemistry that stresses scientific reasoning and analytical problem solving with a molecular perspective.

Faculty

Head of Department	Dr. Javid A Banday
Professor	Prof. Tabasum Ara
Professor	Prof. Kowsar Majid
Associate Professor	Dr. Shakeel Ah Shah
Associate Professor	Dr. Javid A Banday
Associate Professor	Dr. Hamida Tu Nisa
Assistant Professor	Dr. Mohammad Aslam
Assistant Professor	Dr. Maktedar Shrikant Shivaji
Assistant Professor	Dr. Ravi Kumar
Assistant Professor	Dr. Rohit Jignesh Kumar Vasant Bhai
DST-Inspire Faculty	Dr. Dr. Malik Abdul Wahid
Ramanujan Fellow	Dr. Saifullah Lone

“Chemistry begins in the stars. The stars are the source of the chemical elements, which are the building blocks of matter and the core of our subject.” —Peter Atkins

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Prof. Kowsar Majid	In situ growth of orthorhombic Sb ₂ WO ₆ hierarchical structures on reduced graphene oxide (RGO) sheets via solvothermal approach for superior and substantially improved visible-light driven photocatalytic activity	Journal of Materials Science: Materials in Electronics	2019
2	Prof. Kowsar Majid	Plasmon induced interfacial charge transfer across Zr-based metal-organic framework coupled Ag ₂ WO ₄ heterojunction functionalized by Ag NPs: Efficient visible light photocatalyst	Chemical Physics Letters	2019
3	Prof. Kowsar Majid	Cu ²⁺ -BTC based metal-organic framework: a redox accessible and redox stable MOF for selective and sensitive electrochemical sensing of acetaminophen and dopamine	New Journal of Chemistry	2019
4	Prof. Kowsar Majid	Controlled synthesis of p-type NiO/n-type GO nanocomposite with enhanced photocatalytic activity and study of temperature effect on the photocatalytic activity of the nanocomposites	Applied Surface Science	2018
5	Prof. Kowsar Majid	Fabrication of highly photocatalytic active anatase TiO ₂ -graphene oxide heterostructures via solid phase ball milling for environmental remediation	Surfaces and Interfaces	2018
6	Prof. Tabassum Ara	Copper catalyzed tandem Chan-Lam type C—N and Staudinger-phosphite N—P coupling for the synthesis of N-arylphosphoramidates	Catalysis Communications	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
7	Prof. Tabas-sum Ara	A New Prenylated-Coumarin from <i>Daphne oleoides</i> and its Cytotoxic Activity	Chemistry of Natural Compounds	2019
8	Dr. Shakeel A Shah	Quantum chemical approach towards the secondary amino derivatives of C(3) substituted 1,4 naphthoquinone: Combined molecular and dft calculations	Journal of Molecular Structure	2019
9	Dr. Javid A. Bandy	Synthesis and Biological Evaluation of Novel Osthol Derivatives as Potent Cytotoxic Agents	Medicinal Chemistry	2019
10	Dr. Javid A. Bandy	Synthesis, 17 α -hydroxylase-C17,20-lyase Inhibitory and 5 α R Reductase Activity of Novel Pregnenolone Derivatives	Anti-Cancer Agents in Medicinal Chemistry	2018
11	Dr. Javid A. Bandy	Antioxidant activity of chloroform extract of <i>Inula Racemosa</i> from Kashmir Himalayas	To Chemistry Journal	2018
12	Dr. Ravi Kumar	β -Heptasubstituted Porphyrins: Synthesis, Structural, Spectral, and Electrochemical Properties	European Journal of Inorganic Chemistry	2018
13	Dr. Jignesh V Rohit	Ligand exchange reactions on citrate-gold nanoparticles for a parallel colorimetric assay of six pesticides	New Journal of Chemistry	2018
14	Dr. Malik A. Wahid	High capacity, power density and cycling stability of silicon Li-ion battery anodes with a few layer black phosphorus additive	Sustainable Energy & Fuels	2018
15	Dr. Malik A. Wahid	Conversion-type Anode materials for alkaline-ion batteries: state of the art and possible research directions	ACS Omega	2018

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
16	Dr. Saifullah Lone	Adsorptive remediation of cobalt oxide nanoparticles by magnetized α -cellulose fibers from waste paper biomass	Bioresource Technology	November 12, 2018
17	Dr. Saifullah Lone	Gelatin-chitosan hydrogel particles for efficient removal of Hg (II) from wastewater	Environmental Science: Water Research & Technology	November 5, 2018
18	Dr. Saifullah Lone	Versatile nanodot-patterned Gore-Tex fabric for multiple energy harvesting in wearable and aerodynamic nanogenerators	Nano Energy	October 9, 2018
19	Dr. Saifullah Lone	One-Step Laser Patterned Highly Uniform Reduced Graphene Oxide Thin Films for Circuit-Enabled Tattoo and Flexible Humidity Sensor Application	Sensors	June 6, 2018

Program(s) Attended

Conferences, Courses, Trainings attended by the faculty members during the period:

S. No.	Staff Member	Program Attended	Institute Where Attended	Date
01.	Dr. Hamida-Tun-Nisa	One week faculty development program	Teaching Learning Centre IIT, Madras	July 2-6, 2018.
02.	Dr. Hamida-Tun-Nisa	Five days faculty development program	Department of Mechanical Engineering, NIT Srinagar	May 18-22, 2019

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
1	Hafiz ullah Dar	Tabassum Ara & Dr. Khalid Yousaf	Ongoing
2	Sohail Amin Malik	Dr. J.A Banday	Ongoing
3	Saba Masood Chesti	Dr. S A Shah	Ongoing
4	Shahnawaz Shaheen	Dr. J A Banday	Ongoing
5	Bilal Ahmad Ganie	Dr. Tabassum Ara	Ongoing
6	Mehraj Ud Din Bhat	Dr. S A Shah	Ongoing
7	Zubaid Ul Khazir Rather	Dr. Javid Ahmad Banday	Ongoing
8	Gazunfor Ali	Dr. Tabassum Ara	Ongoing
9	Umer Rafiq	Dr. Kowsar Majid	Ongoing
10	Jahangir Ahmad War	Dr. Hamida Chishti	Ongoing
11	Gulam Nabi Yattoo	Dr. Javid Ahmad Banday	Ongoing
12	Asif Ahmad Malik	Dr. Tabassum Ara	Ongoing
13	Rafiq Ahmad	Dr. Tabassum Ara	Ongoing
14	Ishrat Gowsia	Dr. Javid Ahmad Banday	Ongoing
15	Haamid Haroon	Dr Kowsar Majid	Ongoing
16	Nisar Ahmad Chopan	Dr. Hamida Chishti	Ongoing
17	Umar Ali Dar	Dr. S.A Shah	Ongoing
18	Mudasir Ahmad Dar	Dr. Malik Abdul Wahid	Ongoing
19	Ghulam Mohd	Dr. Kowsar Majid	Ongoing
20	Sajad Ahmad Bhat	Dr. Javid Ahmad Banday	Ongoing
21	Aabid Hussain Bhat	Dr. Hamida Chishti	Ongoing
22	Firdos Ahmad Wani	Dr. Kowsar Majid	Ongoing
23	Sajad ur Rehman Beig	Dr. S.A Shah	Ongoing
24	Rabia Amin	Dr. Tabassum Ara	Ongoing

Laboratories Available

Laboratory facilities available at the department

S. No.	Name of the Lab
1.	Natural Products Research Lab
2	Physical Chemistry Research Lab
3	Inorganic Chemistry Research Lab
4	Organic Chemistry Research Lab

3.12 Department Of Humanities & Social Sciences

The Department of Humanities & Social Sciences, which is one of the oldest departments of the institute, is contributing to the academics by offering various courses in English, Management, Economics & Entrepreneurship at B.Tech. level & Research Methodology & Communication Skills at M.Tech. level. The students of B.Tech. & M.Tech. are introduced to the basic concepts & advanced studies in the above mentioned subjects. As these courses equip the engineering students with the professional skills, the department makes every effort to keep these courses updated. It tries to amalgamate the field of engineering & the field of management by equipping students with the technical expertise & leadership skills as are required to advance their career in the fast-paced world of competition.

The subjects like Management & Economics play an excellent role in developing the mana-

gerial & professional capabilities of the students who have a potential market both in public & private companies of India & foreign countries. The courses are intended to enhance their employment opportunities in the growing corporate sector & bring together the technological problem-solving savvy of engineering & the organizational, administrative, & planning abilities of management in order to oversee complex enterprises from conception to completion. Apart from it, the Department has many Programmes of higher learning in mind but the non availability of staff is the main impediment. For some professional courses like MBA & Diploma in Entrepreneurship, the department is making efforts both in terms of staff & infrastructure.

*“It is more important
to do what is
strategically right
than what is
immediately
profitable”- Philip
Kotler*



Vision

To lead in innovative teaching, knowledge building, and value based educational experiences by providing quality education.

Mission

- To develop strong critical thinking, analytical reasoning, problem solving, management and communication skills in students with creative talent that will foster their development as knowledgeable, engaged and confident citizens and leaders.



Faculty

Head of Department	Prof. M.F Lala & Mr. Mir Mukhtar Ahmad
Associate Professor	Mr. Mir Mukhtar Ahmad
Assistant Professor	Dr. Tahir Ahmad Wani
Assistant Professor	Dr. Jaya Shrivastava
Lecturer (on contract)	Dr. Rasak Annayat
Lecturer (on contract)	Dr. Fouzia Jan
Lecturer (on contract)	Dr. Shakeel Ah.Sofi

*HoD
Humanities &
Social Sciences
Professor M.F Lala
&
Mir Mukhtar
Ahmad*

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
01	Prof. M.F.Lala	Impact of Subliminal Advertising on Consumer Buying Behaviour: An Empirical Study on Young Indian Consumers	Global Business Review	2018

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	Subsistence Consumer Marketing Systems in Conflict Zones, Antecedents Implications and Recommendations “	Dr Tahir Ahmad Wani	5,40,000.00	ICSSR

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Topic	Scholar	Supervisor (s)	Status of Degree
1	Impact of Select Entrepreneurial Competencies and Environmental Factors on Entrepreneurial Success: An Empirical Study of Entrepreneurs in Kashmir	Muhammad Shoib Shah	Prof M.F. Lala	Ongoing
2	Impact of Service Quality on Patient Satisfaction: A study of Kashmir Hospitals	Ather Sidiq Zarger	Prof M.F. Lala	Ongoing

4.0 Centres

The Various Centres functional at NIT Srinagar are:

Centres at NIT	
WRMC	1
CSC	2
CRFC	3
IIEDC	4
LIRC	5



4.1 Water Resources Management Centre

WRMC was established by the Ministry of Education, Government of India in 1983 under new plan scheme for creation of infrastructure in the areas of emerging technology. The objectives of the Center are:

To undertake work on specific technological problems of relevance & importance in Water Resources Management & to make fundamental contribution to the advancement of technology.

To undertake Research & Development work of a high order by mobilizing inter- disciplinary & inter- institutional collaboration.

To act as a resource center for the creation of knowledge & for the collection & dissemination of Information on the subject.

To undertake research works in the field of Water Resources Engineering to meet the requirements of industry, Research & Development establishments, Irrigation & other Water Resources Management Agencies.

Staff

Head of Centre	Professor M. A. Lone
(Chair Professor (Part-time) for Sheikhul Alam Sheikh Nurrudin Chair	Prof. Rohitashw
(Co-Ordinator, Environmental Sustainability Study Centre) / Associate Professor	Er Danish Ahmad
Consultant, Professor Chair for Sheikhul Alam Shiekh Nurrudin Chair	Dr. Mir Bintul Huda
Office cum Technical Asstt. for Sheikhul Alam Shiekh Nurrudin Chair	Mr. Fayaz Ahamd Tantray

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
1	Prof. M A Lone	'Significance of Shape factor of Obstacle on Local Scour'	Iranian Journal of Science and Technology'	2018
2	Prof. M A Lone	Laboratory Investigations for Development of Design Criteria for varying shapes of Protective filters.	International Journal of Geotechnical Engineering	2018
3	Prof. M A Lone	Design Criteria of blade shape filter material for graded cohesion less bases	International Journal of Geotechnical Engineering	2019
4	Prof. M A Lone	Laboratory investigation for development of local scour depth model for varying shapes of obstruction	International Journal of Hydrology Science and Technology	2019
5	Prof. M A Lone	Waste free Srinagar City'	International Journal of Engineering, Technology, Science and Research	2018
6	Prof. M A Lone	Solid Waste Management of Kashmir Valley	International Journal of Engineering, Technology, Science and Research	2018
7	Prof. M A Lone	Experimental Determination Of Permeability Of Filter Material Based On Controlling Constriction Size	7th World Conference on Applied Science ,Engineering and Management, 26-27 Oct.2018, ABS Paris France	2018

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
1	Assessment of Effect of Climate Change on Water Resources, particularly in Indus Basin- A Professorial Chair	Prof. M A Lone	100,00,000.00 (Endowment)	Ministry of Water Resources, Gol
2	Maximization of Irrigation Potential and Water use Efficiency	1. Prof. M A Lone 2. Prof. Rohitashw (Chair Professor WRMC)	90,000.00	J&K State Water Resources Regulatory Authority (JKSWRRA)

Research & Development Activities

A Chair Professor in Water Resources, entitled, Sheikhul Alam Sheikh Nuruddin Chair for Water Resources, has been established by the Ministry of Water Resources (MoWR) in the Centre under an agreement between the MoWR & the Institute, in 2008.

The main objective of the Chair is to carry out studies on water resources with special empha-

sis on assessment of effect of climate change on it & adaptation strategies in respect of planning, design & management of water resources systems of particularly Indus Basin. An important activity related to the Chair is the transfer of technology to CWC & other organizations of MOWR/GOI

Facilities Available:

- **Environmental Sustainability Study Centre (ESSC):** Establishment of the Environmental Sustainability Study Centre, (ESSC) is being carried out under TEQIP-III for an initial amount of 100.00 lacs. The ESSC shall have a facility for Testing and Assessment of various parameters pertaining to Water, Waste water, Air and Noise Pollution. Purchase of Major Equipment for the facility has been completed.
- **Library Facilities:** Fair amount of literature on topics related to Water Resources Engineering & other related topics is available in the main library of the Institute. Besides that a good collection of books, journals and reports are available in the library of Water Resources Management Centre.
- **Computational facilities:** The Centre has also a Mini-computer Centre with necessary computational facilities.

Laboratories

- **Hydraulics/Fluid Mechanics Lab.** Hydraulics /Fluid Mechanics laboratory which has been brought up to the higher standards of research & development is not only catering the requirements of the Centre but also meets the requirements of departments of Civil Engineering & Mechanical Engineering. It has got almost all necessary equipment & is being modernized with the latest equipment/instruments.
- **Hydrobiology lab:** This Lab was set up under the approval of the MHRD. The lab is equipped with the latest water & sewage testing equipment.
- **Hydrometeorological Observatory:** This observatory has also been set up under one more scheme of MHRD & has a facility of recording all the important Hydro-meteorological parameters.

Future Plans

The Centre has been nominated to act as Nodal Centre for Basin-wise studies with respect to impact of climate change on Water Resources by the MoWR, & is planning to actively participate in the study with other leading Institutes.

The Centre is planning to upgrade its Hydro-meteorological Observatory with the latest available equipment & instrumentation so that the data collection is more authentic & accurate.

4.2 Computer Services Centre

The institution has long back absorbed itself into the Computer culture & its effects can be well perceived in all over the campus. The Computer Services Centre developed under the scheme of Centre of Excellence aims to provide centralized computer/Inter-net work facilities to the teaching community, students including scholars, administrative staff & others. It has been providing latest & sophisticated computer service to all the departments & the sections.

All the Institute departments, sections & hostels are connected vide a campus wide network which covers almost all the Institute. At

present Institute has two links one is 512 Kbps provided by Ernet India & other by BSNL (1Gbps internet connectivity).

The Centre has extended the facilities of internet to hostels including girl's hostels through WiFi systems.



Staff

Chairperson	Dr. Shaima Qureshi
Maintenance Engineer	Er. Kaleem Dar
Computer Operator	Mr. Umar Majid
Web Programmer	Er. Shabir Mustafa

5.2 Programmes Conducted

Conducted Spoken Tutorials Exams for CSE to promote IT literacy through Open Source and IT Departments. Spoken Tutorials is an initiative of National Mission on Education through ICT, MHRD, and Government of India Software. (Since July 2017 – till date)





Purchase(s) Made

Purchases made by the department during the period.

S. No. Name of Equipment

1	Windows Blade Servers
2	Smart Rack
3	Core Switch + Upgrades
4	Wifi Access Points
5	Switches for New Labs , Hostels and various locations
6	UPS for CSC old
7	Campus Wifi
8	Thin Clients
9	Thin Client Server
10	UPS for sites (42)
11	UPS for sites (10)
12	IP Cameras/NVR - for both Labs
13	Distribution Switches
14	All in One PC
15	Online UPS for new Labs
16	Fiber Splicer and OTDR
17	Projector
18	Photocopier
19	Manageable Switch

Laboratories Available

Laboratory facilities available at the department

S. No. Name of the Lab

1	CSC Lab I – Central Lab facility with 60 systems.
2	CSC Lab II – Central Lab facility with 92 systems.
3	CSC Lab III – Central Lab facility with 92 systems.

4.3 Central Research Facilities Centre

Central Research Facility Centre (CRFC) has started functioning since 2012. Various Research facilities have been created for the research & consultancy work. These include SEM/EDS, Nanoindenter Hysitron TI Premier, X-Ray Diffractometer (XRD), Litesizer™ 500 Particle Analyzer, MCR 102 Rheometer, Planetary – Mill pulverisette 5, Raman Spectroscopy and other related facilities. Recently the centre has established state of art Coating Laboratory and has also procured Field Emission Scanning Electron Microscope.

CRFC houses a variety of major analytical instruments which are operated and maintained by a dedicated and qualified group of Scientists and Engineers. CRFC has a vision “To be one of the Leading Analytical Instrument Facility Centers at National Level”.

The main objectives of CRFC are:

- To provide facility of analysis in R&D using Sophisticated Instruments.
- To organize workshops on the use and application of various Sophisticated Instruments for researchers belonging to Universities, Industries and Private sector.
- To develop new measurement/analytical techniques by research in various areas of Science, Technology and Engineering.



Staff

Chairman	Prof. M. Farooq Wani
Member	Prof. Ab Qayoom Dar
Member	Prof. Najeeb Ud-Din
Member	Dr. Shakeel Ah Shah
Member	Dr. Atikur Rehman
Member	Dr. Mohammad Ashraf Shah
Member	Dr. Mushtaq Ahmad Rather

Purchase(s) Made

S. No.	Name of Equipment
1	Earthquake Shake Table (Under PMDP)
2	Field Emission Scanning Electron Microscope & EDXA (Under PMDP)
3	Multi Target Sputtering System. (Under TEQIP III)
4	Nanoindenter Hysitron TI Premier (Under PMDP)
5	Smartlab X-Ray Diffractometer (XRD)
6	Raman Confocal Spectrometer
7	Thermal Analyser (TGA/DSC)
8	Carbon, Hydrogen, Nitrogen And Sulphur/Oxygen (CHNS/O analyzer)
9	OPAL-RT and 3 phase Programmable AC Power Supply.
10	Planetary Ball Mill– “Mill pulverisette 5”
11	SEM/EDS
12	Anton Pars MCR 102 Rheometer

4.4 Innovation, Incubation & Entrepreneurship Development Centre



The Institute had since long established an Industry Institute Interaction Cell & Entrepreneurship Cell. The main object of these Cells was to share its experience with the Industry & to utilize the human resources & all other resources available at the Institute effectively with the assistance of participating Industries.

IIED centre is headed by Prof. Saad Parvez. The Centre aims to nurture and inspire the young entrepreneurial brains of the Institute as well as the region to peruse innovations, start-ups and entrepreneurship by creating a vibrant and conducive ecosystem in the region. We aim to empower Start-ups to grow through innovations & design in order to provide fulcrum to the economic augmentation and employment opportunities.

The incubation centre is facilitating and nurturing the growth and development of innovators and start-ups through hand-holding, providing right mentorship, developing and testing prototypes and offering other technical, financial and managerial services.

The centre provides a strong institutional framework in place for effective implementation, monitoring and evaluation of our objectives. It is continuously in a process of creation

of start-up endeavors with disruptive value addition in various thrust areas like technology developing, agriculture including horticulture, renewable energy, handicraft, electronic system design, manufacturing, IT enabled and other services etc.

In view of the prevailing scenario for encouraging innovation & enterprise, it was decided to establish a centre where activities related to innovation, incubation & entrepreneurship could be undertaken in a coordinated manner on modern approaches. Accordingly these two cells were merged & renamed centre under the title “Innovation, Incubation & Entrepreneurship Development Centre” was established due approval of the Competent Authority. The Centre has already started extending its technical support to young Innovators & has held number of interactions with the local industrialists. The Centre is in the process of preparation of a DPR for establishing a major innovation centre for the benefit of the region.

An advisory committee has been constituted having an Interdisciplinary representation to guide the activities of the Centre.

Vision

The IIED Centre of NIT Srinagar aims to coordinate and leverage, through Innovation, Incubation and Entrepreneurship, an ecosystem fostering a culture of cutting edge technology making NIT Srinagar the harbinger of innovation in the state of Jammu and Kashmir in sectors of Science & Technology by offering industrial solutions with emphasis on national growth and social upliftment.

Mission

- To promote a vibrant, innovative, and entrepreneurial environment for conducting quality research with an aim to develop knowledge economy.
- Creation and development of sustainable, globally competitive facility that contribute towards the accelerated economic growth of the region by identifying, exploring and developing regional competitiveness
- To strengthen institute-industry linkages to formulate collaborative ventures with the business community of the region in particular and nation in general
- To assist and develop new business ventures, start ups, job creation and employment generation in specific sectors that are aligned with a region’s unique areas of opportunity

Objectives of the Centre

- Entrepreneurship Development through incubation and training
- Strive for development and deployment of scientific/ technological solutions to solve confronting challenges in the areas like energy conservation, water management, waste management, sanitation control, development of local technologies, ergonomic design, and so forth
- Identify engineering problems of diversified nature where research and innovation can help to find smart solutions
- Operate to provide institutional support in scouting, spawning, sustaining and scaling up Grass root innovative ideas
- Provide incubation support as and when required to develop innovations
- Mutual interaction with industry (local & national)
- Skill development and service sector support
- Provide IRP platform to obtain patents

"If we tried to think of a good idea, we wouldn't have been able to think of a good idea. You just have to find the solution for a problem in your own life." -Brian Chesky, Co-founder of Airbnb

Staff

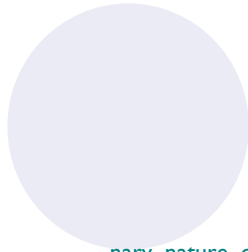
Coordinator	Dr. Saad Parvez
Member	Prof. Babar Ahmad
Member	Prof. A.Q. Dar

Activities

IIED Centre NIT Srinagar is a community comprising bunch of students working in partnership with academic researchers, Innovators, Idea generators and industry entrepreneurs to instigate breakthroughs.

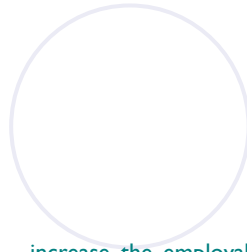
(Fusing the uncommon, taking risks, thinking big)

- **Entrepreneurship Development Cell:** EDC enhances an existing potential or asset through the process of learning and application of entrepreneurship dynamics. The cell polishes the entrepreneurial skills into a student needed to establish his/her ideas and vision into reality.
- **Innovation Cell :** IC initiates program and participates in activities creative in nature to transform ideas into solutions. It bridges the gap between research and education with industry. During each engagement companies, educators, experts and students collaborate on real world problems in order to deliver real world solutions.
- **Grass Root Innovation Design Studio (GRIDS):** At GRIDS, the grassroots innovations from non-technical innovators are taken into the incubation phase for leveraging into holistic and interdisciplinary.



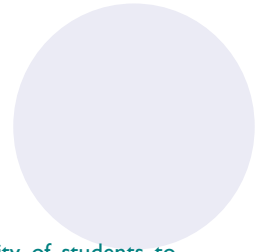
nary nature of design to cut across research and move projects from research to development.

- **Institute Industry Interaction Cell:** IICC brings industry thought leaders with college experts to seed innovative thinking and to enable collaboration in technology, products, services, and business models.
- **Skill Development Club:** SDC is trying hard to develop the dynamic skill requirements of students by organizing skill development Programmes and workshops to



increase the employability of students to bridge the gap between education and industry. The main motive of club is to recognize the team's potential and to adapt to the changing circumstances.

- **TOD FOD JOD Club** TFJ Club is a initiative program which is aimed at improving (IQ) innovation quotient of students. Our esteemed alumnus Mr. Vikas Chawda, founder and CEO of Quantum Leap, conducted the workshop session of TFJ's and initiated the process of TFJ to enhance creativity among young minds.



Benefits for the students

- Become a leader- manage a student organization, illustrate abilities in planning, logistics, marketing, and advertising, create visibility for future employers.
- Build a network- make contacts with entrepreneurs, professionals and academics who can help with recommendations, network and start a venture with peers.
- Initiate innovative activities- invite business leaders to campus, plan new and exciting events for students to kick-start learning about new industries and different aspects of business planning.

Functions

- To inculcate a culture of innovation driven entrepreneurship through student projects.
- To organize Entrepreneurship Awareness Camps, Entrepreneurship Development Programmes, Faculty Development Programmes and Skill Development Programmes in the Institute/ institution.
- To arrange interaction with entrepreneurs and create a mentorship scheme for student entrepreneurs.
- To facilitate creation of entrepreneur's club in each department to foster culture of entrepreneurship among students
- To disseminate knowledge and insights in entrepreneurial theory and practice through lectures activities and workshops.
- Build knowledge and skills to translate ideas into opportunities while they are on campus.
- Be motivated to start their own companies after graduation or after a few years of gaining industry experience.

Achievements

Smart India Hackathon (SIH) 2019:

NIT Srinagar students participated in SIH 2019 organised by MHRD's Innovation Cell. Students of NIT Srinagar received Second Runner up prize worth Rs. 50,000 at VelTech Chennai.

Since last three years Centre is participating in the Meeting of National Innovation clubs at Rashtrapati Bhavan and presenting innovative projects.

To unleash the young creative minds the centre conducted a number of workshops on TOD-FOD-JOD for school children

MSME Ministry approves BI at NIT Srinagar

The proposal submitted by the institute for its recognition as Host Institute for implementation of the scheme "Support for Entrepreneurial and Managerial Development of MSMEs through Incubator" has been considered & approved during Meeting of PMAC held on 20/12/2019 at New Delhi.

Idea Challenge 2018

Yuwa Innovators: Food Grain Washer and Water Purifier Machine

More

- Apart from the above the IIED center is working for establishment of state of the art Incubation center for which DPR is being prepared with help of consultants.
- Successfully handed over an innovative project titled as "Value addition in a room warmer, Bukhari" to NIF which was commercialized and handed over to a local firm for production.
- The center recently received the approval of Rs. 1 Crore from MSME, J&K, for setting the Incubation Centre at NIT Srinagar.

4.5 Library & Information Resources Centre

The Institute has a Central Library named Library & Information Resources Centre. The NIT Srinagar library supports the Teaching, Research & and other related Programmes of the institute. The Library has a good collection of documents that comprises of Books, Journals, Theses, Video cassettes, Learning Resources (LRs) & Compact discs in the field of Engineering, Science, Management, and Literature & Humanities.

The Central library has a separate section for SC/ST students with a stock of about 9898 books issued to them for study in a full semester.

The library has computerized data of whole of its collection using KOHA software and is in the process of computerizing all its activities. At present the readers have access to library OPAC & circular section is computerized. Following e-resources through INDEST consortium are available online through the Library for the benefit of community in the campus;

The library which had suffered huge losses due to September 2014 floods took number of steps for making up the losses & books worth around 30 lacs were purchased & a massive renovation is going on.

Library Organization

- Acquisition Section
- Processing Section
- Periodical Section
- Circulation section
- Stacks I
- Text book & Reference Section
- Stacks II
- Back Volume Section
- SC/ST Section

Mission

- To promote the technical knowledge
- Generation and application of knowledge & resources
- Effective dissemination of knowledge.
- Library automation and networking for remote access of online electronic resources.
- Improve the library resources.
- Enhance the student experience.
- Build the digital research environment.
- Provide convenient and customized access to information Library Resources



Library Services

Membership

All the students, faculty members, research scholars & administrative staff can register themselves for the membership of the library. The membership form is available at the circulation counter and the same is required to be attested by the Head of the Department/ Section.

Text Book & Reference Section

The textbook and reference section remain open from 8.45 a.m. to 9.30 p.m. on all working days and from 10 a.m. to 4.00 p.m. on weekdays & holidays. The books available in this section can be consulted in the library only.

Stacks section

The books available here are meant to be issued to the faculty, students, research scholars and other readers as per the criteria given in the library rules.

Search

OPAC (Online public access catalogue)
Science Direct
E-Resources



LIRC

Established in	1960
Members	3217
Books	57088
Data Usage	80%
Annual Budget	4 Cr
Timings (Weekdays)	08:45 -
Timings (Holidays)	10:00 - 17:00

Titles Added

Year	Number of New Titles Added
2016-2017	1193
2017-2018	164
2018-2019	956

Staff

Chairman Library Committee	Prof. Najeeb Udin Shah
I/C Library	Dr. M. Hanief
Member of the Library Committee	Prof. Zubair Ansari
Member of the Library Committee	Prof. S A Shah
Member of the Library Committee	Dr. Ranjit Kumar Rout
Member of the Library Committee	Dr. Irfan Samad Wani
Member of the Library Committee	Dr. M S Charoo
Member of the Library Committee	Dr. Malik Perveez
Member of the Library Committee	Dr M Adil Bazaz
Member of the Library Committee	Prof Nayaz Ahmad
Member of the Library Committee	Dr. Prince Ahmad
Member of the Library Committee	Mr.Janibul Bashir
Member of the Library Committee	Prof Mir Mukhtar
Mrs Saymee	Technical Asstt. (SG)
Mrs Tahira	Technical Asstt
Mr. M Y Rather	TechnicalAsstt
Mrs.Dilshada	Assistant(SG)
Mrs.Neelofar	Assistant(SG)
MrShabir Ahmad Sheikh	Jr. Lib assistant
Mr.Noor Mohammad	Orderly
Mr. Gh Mohammad Sheikh	Orderly

Library Resources

The library has a wide range of resources on engineering, sciences, humanities & Social Sciences

E-Library (Electronic/On-line resources/e-resource 2018)

E-library provides collaborative search of all type of e-resources/on-line resources such as e- journals and books.

E-Books

Central library procured different type of e-books, online books for students and faculty via IP range in the campus. The different departments can also be access various type of e-books such as text books and reference books in the electronic form.

*“I have always imagined
that Paradise will be a
kind of library.”*
— Jorge Luis Borges

Subjects Covered	URL	Total cost
Wiley		
Civil Engineering & Construction, Electronics & Electrical Engineering, Computer Science & IT, Chemistry & Chemical Engineering, Physics, Maths & Statistics & Mechanical Engineering.	onlinelibrary.wiley.com Year 2016 & 2017 No Of Titles 829	\$88,694
Springer Nature		
Chemistry & Materials Science, Computer Science, Engineering, Mathematics & Statistics, Physics & Astronomy	link.springer.com/ Year 2016 No. Of Titles 3298	€52,759.20
Elsevier		
Chemical Engineering, Chemistry, Engineering, Materials Science, Mathematics, Physics & Astronomy, Computer Science	sciencedirect.com Year 2016 No. of Titles- 493	\$102136
Pearson		
Chemistry, Civil Engineering, Computer Science & IT, Electronic Telecommunication, Mathematics, Mechanical Engineering, Physics	lib.myilibrary.com Year 2014-2017 No. Of Titles 312	INR 15,64,059.00

E-Journals

E-Resources are accessible to our Institute through eShodhSindhu (eSS)

E-Resources	E-resources Subscription Period
ACM Digital Library	January 2019 to December 2019
ASCE Journals	January 2019 to December 2019
ASME Journals Online	January 2019 to December 2019
Economic & Political Weekly	April 2018 to March 2019
Institute for Studies in Industrial Development	April 2018 to March 2019
J Gate Plus (JCCC)	January 2019 to December 2019
Oxford University Press	April 2019 to March 2020
Springer Link 1700 Collection + Nature Journals	April 2019 to March 2020
Web of Science Lease Access	January 2019 to December 2019



NDL eResources

E-Resources are accessible to our Institute through eShodhSindhu (eSS)

E-Resources	E-resources Subscription Period
World E-Book Library	September 2017 to August 2018
South Asia Archives (SAA)	National Licensing

URL www.inflibnet.ac.in/ess/eres.php?memID=357

Back Files of Science Direct Journals from M/S Elsevier on the following subjects are now available from Vol. I, Issue I up to the year 1994

Subjects Covered	Year	URL
Engineering & Technology	Pre 1995	sciencedirect.com
Materials Science	Pre 1995	sciencedirect.com
Chemical Engineering	Pre 1995	sciencedirect.com
Computer Science	Pre 1995	sciencedirect.com
Inorganic Chemistry	Pre 1995	sciencedirect.com
Organic Chemistry	Pre 1995	sciencedirect.com
Mathematics	Pre 1995	sciencedirect.com
Business Management Accounting	Pre 1995	sciencedirect.com

Subjects Covered	URL
Science Direct (one Year Subscription) (8 subject collection)	www.sciencedirect.com/
IEEE/IET Electronic Library (IEL) online (Two Year Subscription) Year	http://ieeexplore.ieee.org/

BIS & ASTM Standards on our IP range.

Subjects Covered	URL
BIS (for 3 Years)	http://standards.bsb.co.in/
ASTM	http://compass.astm.org

5.0 Centralized Services

The Institute has a number of Centralised Services which facilitate the carrying out of various activities of the students & the staff effectively. A brief description of these facilities is given below:

5.1 Trainings, Placements & Career Guidance

The Industrial Training & placement are the two important issues of the students which are being taken care of by a well established "Training & Placement "(T&P) Department of this Institute. The T&P Department is usually headed by a senior faculty member & assisted by administrative staff & the student's representatives from the different departments.

The students have to essentially undergo a practical training period of six to eight weeks at 5th/7th semester level in projects & industry within or outside the state in Jan-Feb each year, when the institute observes winter vacations. This training plays a vital role in exposing the students to actual industrial environment & in broadening their professional outlook. Thus, this training increases the employability opportunities of the students.

The T &P Department is making every effort to introduce the institute to more & more companies & organizations concerned for bet-

ter placement of the students. The institute has been able to attract a good number of relevant reputed companies & organizations for on campus selection of the students. Mock test, counseling & seminars are carried out for the students to train them for better performance in their interviews for placements. In this context a good number of reputed companies have recorded their appreciations for co-ordination of departments & students representative's efforts in conducting on campus placements. The Endeavour of the T & P Department is to attain cent percent placement. The students from different departments are also involved in various relevant activities of the training & Placement like quizzes, mock tests, mock group discussion etc.

The objective of the placement cell is to mould the students to cope with the changing demands of the corporate world and place them in reputed companies based on the expected

Placement Activities

The Placement and Training department monitors the employment opportunities, cater to enhance employability of students and arrange on and off campus interviews. Our Campus recruitment program starts right from the penultimate semester. It's a policy of the Placement department not to patronize companies bend on doing Education & Training activities to attract the students in the name of recruitment against payment.

The placement department does not encourage the students, those who are placed through campus selection in a company to attend the further campus interviews so as to provide a chance for other students to get placed. The students aspiring for higher studies are encouraged to undergo GATE/CAT exams.

Members of Placement Cell:

- Full-time Officers: 1 TPO
- Full-time Trainers: 2 (Soft skills & Personality Development)
- Student Volunteers attached to placement cell: 32



"The best way to predict the future is to create it." — Abraham Lincoln

Functioning of Placement Cell

National Institute of Technology Srinagar (NIT Srinagar) lays emphasis on the placement of the students by training and preparing the students to face the real life situation after graduation. An exclusive Placement & Training department under the guidance of an eminent professor collects the data of the graduating students and maintains a comprehensive database for ready reference.

The Institute provides an environment for comprehensive and harmonious development of the personality. We have regular communicative English Program incorporated in the curriculum. Further, resource persons and

professionals from the field of communication and interpersonal skills are invited to equip our students with necessary soft skills required to face the interviews in today's competitive world. Such training exposure enhances the students' employability. Goal setting Time Management and Prioritization are the Key points that are implanted in the Young minds.

Institute also provides need-based Programmes on software relevant to industry such as VLSI, Embedded Technology, Auto/Electrical CAD, Pro/E, JAVA, J2 EE, just to mention a few.

Placement Details (AY 2018-19)

Branch	Batch Size	Placement	Higher Studies	Placement Percentage
ECE	72	36	-	50.00
MECH	72	59	04	87.50
CIVIL	109	34	28	56.88
CHEM	60	24	9	55.00
ELE	72	32	05	51.39

Student Welfare Cell

Career Guidance and Counseling is a comprehensive, developmental program designed to assist students in making & implementing informed educational and occupational choices. Career guidance & counseling program develops an individual's competencies in self-knowledge, educational & occupational exploration, and career planning. It aims to:

- To create awareness among the students for their future profession.
- To provide guidance to the students on various options available in the courses of their study
- To provide information to the students on the scope and relevance of any area irrespective of their field of interest.
- To provide guidance to develop positive attitude and behavior in order to meet challenges of life to make it healthier.

Resource persons from different fields deliver talks about career options to students & teach-

ers & staff of the Institute through guidance & career counselling seminars & workshops.

Activities of student Welfare Cell include Career Guidance and Counselling. The faculty also participates in personal counselling:

- To help students to chalk out academic roadmaps for themselves.
- To enable students to integrate themselves with the milieu.
- To acquaint them with various career options through seminars.
- To address problems related to stress, anxiety, examination phobia, peer pressure and adjustment to changed environment.

To help students, Periodic reports are shared with parents whenever necessary. Aptitude tests have been carried out to see the inclination of the students. Students were made to undergo this test and they had much to avail themselves of it

Companies that Visited the Campus

2018-19

S.no.	Name of the company	S.no.	Name of the company
01	Fourkites India Pvt Ltd.	23	Cummins
02	Medlife	24	Greaves Cotton
03	Nutanix	25	SKF
04	Teksystem	26	Escorts
05	Grey B	27	Gail India
06	Resonance	28	BYJUS
07	Wipro Turbo	29	ESSAR STEEL INDIA
08	L & T Construction	30	Infosys
09	Amdocs	31	IKARUS (Intern)
10	Nextscm Solution Pvt. Ltd	32	Cogoport
11	Zs Associates	33	NHIDCL
12	Avanti Learning	34	Gammon Pvt Ltd
13	Infosys (Power Programmer)	35	JSW
14	JIO Financial Services	36	JCB
15	Persistent System	37	HLC Asia
16	Saggezza	38	Anglo Eastren
17	Mahindra Comviva	39	JIO Infocom Pvt Ltd
18	Vedanta	40	Wheelseye Technologies Pvt Ltd
19	Sagacious Research	41	Stellarix
20	Kpit Technologies	42	Blogvault (Intern)
21	Tata Power	43	BYJU's
22	Virtussa Polaris	44	Mind Tree

Industrial Visits

All the departments of the institution provide facilities for industrial visit. The students identify reputed industries from their discipline and are approved by the Director through the head of the department. The prior permission is obtained from the industry to visit it. The students are accompanied by minimum of two faculty members. During the curriculum two one day visits and a 3 to 5 days visit are organized.



5.2 Central Workshop

The field of engineering continues to grow rapidly, transcending disciplines & driving economic growth. Workshop practice has become more significant in the industrial environment to manufacture products for the service of the mankind. Workshop Practice is a core subject & is highly essential for all engineers & technocrats for formalizing themselves with the latest techniques & concepts of manufacturing. The basic requirement is to impart instructions & practical knowledge of workshop technology to all the engineering students. In addition to introduction to various tools, processes & materials, live practical demonstration has been prepared for various trades in the workshop.

A well equipped workshop forms the most important centre in all the Engineering institutions for training of students of all the branches & trades. The students are trained to acquire basic knowledge & skills about engineering materials, manufacturing practices, equipment, tools & safety precautions to be observed during manufacturing of different products. The students carry out manual operations using mostly h& tools & elementary machines in the carpentry, pattern making, bench work & fitting, welding, sheet metal, black smithy & forging, machining, foundry & casting trades etc..

These trades are relevant & common to most of the industries manufacturing & repairing mechanical, electrical, computers, & electronics, instrument & control products.

The student has to acquire practical knowledge & skills of using machines & equipment, various cutting, measuring & marking tools, performing main operations through simple exercises.

The Central Workshop provides facilities in various trades of fabrication & manufacturing.

The workshop is a Central facility & provides full assistance to the students of all departments to under take the classes of Workshop Practice & provides practical training in all its nine engineering streams & also looks after the transport section with an aim to provide the transport to the students for technical tours & other related functions.

The primary objective of the Central Workshop is to impart the workshop practice to the engineering students & carry out the fabrication of project work of B.Tech. & M.Tech. students besides it plays pivotal role in maintenance & repair work of Institute.

Vision

To nurture Mechanical Engineers with a passion for professional excellence, who are ready to take on global challenges and serve the society with high human values.

Mission

- To provide facilities and infrastructure for academic excellence in the field of Mechanical Engineering.
- To inculcate in the students a passion for understanding professionalism, ethics, safety, and sustainability, and enable them to contribute to the society.
- To nurture creativity of the students and encourage them to come up with innovative solutions to real life problems.
- To prepare the student for lifelong learning with global perspective

STAFF

Er. S. I. A Qadri

Superintendent Workshop

Firdous Ahmad Wani	Technical Higher
Mohammad Ismail Kumar	Technical Higher
Muneer Ahmad	Senior Technician
Ghulam Rasool Teli	Senior Technician
Showkat Ahmad Darzi	Senior Technician
Javaid Ahmad Ahanger	Senior Technician
Mohammad Shabaan Rather	Senior Technician
Mushtaq Ahmad Shah	Senior Technician
Mohammad Ramzan	Senior Technician
Zahoor Ahmad Misghar	Technician
Noor Mohammad Ahanger	Technician
Manzoor Ahmad Najar	Technician
Lateef Ahamd Ganie	Technician
Mohammad Nadeem	Technical Assistant
Sameer Koul	Technical Assistant
Zahid Shafi	Technical Assistant
Afnan Asad	Technical Assistant
Aatif Haqani	Technical Assistant
Mohammad Ashraf	Technical Assistant
Muzafar Shah	Technical Assistant
Irfan Yusuf	Technical Assistant

Workshops & Sections

Machine Section	Sheet Metal Section
Fitting & Bench Work Section	Welding Section
Foundry & Casting Section	Smithy & Forging Section
Carpentry & Pattern making Section	

Publications

Papers published and presented by the Staff:

S. No.	Staff Member	Title of the paper	Conference/Journal where published	Date of Publication
01	Er. Syed Irshad Ahmad Qadri	The effect of cutting speed and work piece hardness on turning performance of nickel based super alloy-718 using ceramic cutting inserts	Journal of Engineering Research Express, 2019 IOP publishing Ltd	2019
02	Er. Syed Irshad Ahmad Qadri	An experimental study on investigation of machining of nickel based superalloy 718	Journal of Materials Today: Proceedings	2019
03	Er. Syed Irshad Ahmad Qadri	A study on effect of tool tip temperature on wear of ceramic cutting tools	Journal of Physics: IOP series conf.1240	2019
04	Er. Syed Irshad Ahmad Qadri	Assessment of machinability of super alloy Inconel 718 using aluminum oxide and mixed oxide ceramic cutting tools	Journal of Materials Science and Engineering :IOP series conf.1240	2019
05	Er. Syed Irshad Ahmad Qadri	A study on wear analysis of mixed ceramic cutting tool	Journal of Material Science and Mechanical Engineering (JMSME)	2018
06	Er. Syed Irshad Ahmad Qadri	Machinability of Inconel -718 at different levels of hardness using ceramic inserts	Journal of Materials & Manufacturing Processes	2019
07	Er. Syed Irshad Ahmad Qadri	Rapid prototyping-a holistic review	Journal of emerging technologies and innovative research	2018
08	Er. Syed Irshad Ahmad Qadri	MEMS technologies/an overview on scaling advantages and issues	International journal of scientific and technical advancements	2019

Activities Undertaken

S. No.	College/University	Year of Conduct	Classes/ Examination
1	Kashmir University North Campus	2018	Classes & Examination
2	Govt. College of Engineering & Technology	2018	Classes & Examination
3	Kashmir University North Campus	2019	Examination

Students Project work

S.No.	Department	B.Tech./M.Tech./PhD	No. of projects
1.	Mechanical Engineering Department	B.Tech.	29
2.	Mechanical Engineering Department	M.Tech.	4
3.	Mechanical Engineering Department	PhD	6
4.	Civil Engineering Department	B.Tech.	14
5.	Civil Engineering Department	M.Tech.	4
6.	Civil Engineering Department	PhD	8
7.	Metallurgy & Materials engineering	B.Tech.	14
8.	Metallurgy & Materials engineering	PhD	3
9.	ECE & Elec.	B.Tech.	7
10.	Chemical Engineering, I.T & CSE	B.Tech.	6
11.	Physics	PhD	1

Facilities Setup

01	Tungsten Inert Gas Welding Setup
02	Metal Inert Gas Welding Setup
03	Arc Welding Setup
04	Job Profile Projector
05	Lathe Tool Dynamometer

Future Plans

Since its establishment, the central workshop is being upgraded on timely basis in order to cope up with the trending technology and industry needs. The latest up gradation of the workshop is in the welding section with the introduction of the State-of-The-Art professional TIG, MIG and Metal Arc welding set-up from "FRONIUS". Several other up gradations like CNC Machining centre, CNC Router, Electro Discharge Machining and Plastic Injection Moulding are on the future prospects of the institute as well.

5.3 Planning & Development

P&D Sections:

Planning & Development Wing

Undertakes face-lifting, repair & renovation works of existing buildings, roads & paths at the Institute

Electrical Division

Undertakes repair & renovation of electrical works at the Institute

Estates Section

Involves the following:

- Maintaining of Assets Registers.
- Purchasing of goods.
- Keeping record of unserviceable items.
- In charge for rentals of shops inside the Campus
- In charge of the Residential Quarters & look after quarter status.

Staff Placed at P&D		
S. No.	Name of the Staff	Designation
1	Dr. Prof. Abdul Qayoom Dar	Dean P&D
2	Prof. Aijaz Ahmad Masoodi	Associate Dean (Civil)
3	Prof. Dr. Abid Bazaz	Associate Dean (Electrical)
4	Er. Gowhar Ahmad Trambo	Executive Engineer <i>on deputation</i>
5	Dr. Fayaz Ahmad Sofi	Estates Officer
6	Parvez Ahmad Bhat	Ex. Engineer (Electrical)
7	Prince Mahmood Khan	Senior Technical Assistant SG-I
8	Mrs. Ishrat Jan	Sr. Superintendent
9	Mrs. Rohie Ahtar	Technical Assistant
10	Peer Parvez Ahmad	Junior Engineer (Civil) <i>on deputation</i>
11	Abdul Gaffar	Electrician
12	Mohammad Sadiq	Electrician
13	Ali Mohammad Lone	Electrician
14	Showkat Ahmad Malla	Store Keeper
15	Khurshid Ahmad	Telephone Operator
16	Ghulam Nabi	Telephone Operator
17	Mushtaq Ahmad Bhat	Senior Technical Assistant
18	Abdul Majid Bhat	Technician
19	Mushtaq Ahmad Gassi	Technician SG-II
20	Abdul Rehman Baba	Technician SG-II
21	Mohammad Ramzan Dar	Senior Technician
22	Nazir Ahmad Dagga	Technical Assistant
23	Khazir Mohammad	Senior Technician
24	Ghulam Ahmad Bhat	Works Assistant
Contractual Staff		
1	Mohsin Kawa	Junior Engineer (Electrical)
2	Manzoor Shafi Khan	Junior Engineer (Civil)
3	Moomin Khurshid Beigh	Electrician
4	Irshad Ahmad Baba	Electrician
5	Rayees Ahmad Baba	Electrician
6	Mehraj-ud-din Sofi	Electrician
7	Javid Ahmad Shah	Electrician
Daily Based Workers		
1	Sadaam Hussain	Electrician
2	Ovais Ahmad Khan	Electrician
3	Sofi Sameer	Electrician
4	Shahzad Ahmad Dar	Electrician
5	Gulzar Ahmad Bhat	Electrician
6	Rameez Raja Dar	Electrician
7	Ishtiyah Ahmad Bhat	Electrician
8	Mohammad Rafiq Wani	Carpenter
9	Ghulam Hassan Shah	Carpenter
10	Mohammad Rafiq Budoo	Mason
11	Ghulam Mohammad Pandit	Mason

Works Undertaken

The details General Renovation Works as well as new works which were undertaken during the 2018-2019 are as under:

S:No.	General Works (details)	Work done cost (in INR)
1	Renovation of Central Workshop.	8,22,826.00
2	Conversion of available room of Girls Hostel and also in various Departments into Reading room.	11,41,574.00
3	Construction of Foundation for Shaking Table.	16,92,167.00
4	Renovation of Water Quality Engineering Lab and Corridor of Computer Services Centre	8,88,941.00
5	Renovation of Cafeteria.	1,33,495.00
6	Replacement of old CGI sheet roofing of I.C Engine Lab, Steam Lab and Hydraulics lab.	20,36,921.00
7	Extension of Computer Science Engineering and Electronics & Communication Engineering building.	19,61,409.00
8	Providing & laying of 50mm thick bituminous macadam & 25 mm thick semi dense.	41,22,614.00
9	Renovation of Chemistry Organic Lab (Room No. 231) & Inorganic Lab (Room No. 123).	5,09,747.00
10	Renovation of Structural Engineering Lab of Civil Engineering Department.	5,87,130.00
11	Renovation of Heat Transfer lab in Mechanical Engineering Department.	9,39,665.00
12	Renovation of HOD's room and a Faculty room in Mechanical Engineering Department.	7,48,616.00
13	Conversion of I/C Engine lab into Material Testing Lab and its renovation.	15,19,492.00
14	Construction of Shed (20'x40') for Kitchen in Pre-fab hostel.	12,28,340.00
15	Distemping of various departments.	16,87,034.00

The details works under Civil Stage were undertaken during the 2018-2019 are as under:

S:No.	Civil Stage Works (details)	Work done cost (in INR)
1	Dismantling of existing Guesthouse chimney and construction of guesthouse compound wall	9,86,204.00
2	Construction of new Security booths from Main gate to Guesthouse,	7,92,352.00
3	Construction of new vehicle garages in front of Central Workshop	2,79,331.00
4	Construction of glass wall and platform for kitchen for Cafeteria	2,61,000.00
5	Renovation of Digital Image Processing Lab and Machine Learning Lab of Department of E&C Engineering	2,98,311.00
6	Renovation of Catalysis Lab and Process Dynamics and Control Lab of Chemical Engineering Department	7,40,142.00
7	Construction of Roof for corridor between Tin shed and kitchen of Pre-fab Mess	3,12,519.00
8	Providing & fixing of floor tiles etc for IC Engine of Mechanical Engineering Department.	4,11,550.00
9	Renovation of Advanced Soil Lab (Geotechnical Engineering Division), Department of Civil Engineering	2,43,157.00

Planning & Development *(contd)*

S:No.	Civil Stage Works (details)	Work done cost (in INR)
10	Renovation of Solid State Physics Lab, Department of Physics	2,05,327.00
11	Renovation of PG Block of Water Resources, Department of Civil Engg	8,52,741.00
12	Construction of Lavatory block near Pre-fab classrooms	9,70,285.00
13	Face-lifting/Repair works for new faculty rooms of Humanities & Social Sciences Department	4,54,138.00
14	Renovation of office room of Chemical Engineering Department	2,34,633.00
15	Providing & fixing of floor tiles for Dynamics lab of Mechanical Engineering Department	1,28,923.00
16	Renovation of Membrane Lab in Chemical Engineering Department.	4,99,566.00
17	Renovation of Washroom in campus Activity Center	2,22,642.00
18	Development of area on the backside of drawing halls by way of dismantling of depilated chain-link fencing including defunct gas plant.	2,63,467.00
19	Renovation of Rooms No. 120 and 226 in Chemistry Department	2,34,840.00
20	Renovation of faculty room No. 312 in Mathematics Department	50,833.00
21	Creation of Aluminum section cabins in newly constructed two pre-fab computers centers for control and maintenance of power backup systems.	1,75,576.00
22	Creation of storage room in the Main Faculty Block attics for Physics department.	1,09,801.00
23	Construction of temporary frisking passage for pedestrian security checkup at main gate of NIT Srinagar.	70,766.00
24	Proving and fixing polycoated sheet roofing for Inorganic Chemistry Lab (Room No. 123).	1,28,742.00
25	Renovation of Rooms No. 325 and 329 in Physics Department	2,01,163.00

5.4 Other Facilities

SAS Centre:

The primary objective of the department is to provide sporting & recreational facilities to the students keeping in mind the famous quotation "sound mind carries sound body". In this direction the department of physical Education is providing various sporting & recreational facilities to the students in the main ground & in the in-door Common Hall. From last few years the department is excelling in all the sports activities like Cricket, Football, Volleyball, Chess, Carom, Badminton, Athletics etc. The main ground of the Institute was made fully operational & capable to hold almost all sporting events.

Sporting & Recreational Facilities:

Boy students:

- Common Indoor Hall & TV Hall
- Gymnasium
- Basket ball court
- Playground
- Volleyball court
- Badminton Court
- Lawn tennis court
- Football ground
- Cricket ground
- 10- Indoor games:

Girl Students:

- Table tennis
- Carom
- Chess
- Volleyball
- Badminton
- Treadmill

- Mini Gymnasium
- Kho Kho,

Medical Unit

The Medical Unit of the Institute is headed by a qualified & experienced Medical Officer & manned by trained Lab. & other paramedical staff. In addition a lady doctor is available daily on part time basis. The Medical Unit has a two storied separate building spread over an area of 303 sq.mtr. Apart from providing facilities for consultations & investigations, medicines

are issued to the students & staff free of any cost. The Unit has two Ambulances available to cater to emergencies round the clock. In the recent past the hospital has been modernized & has been equipped with the latest diagnostic tools like the Haematological & Biomedical equipment & a fully automatic ECG unit. The Medical Unit also ensures proper hygiene in the students messes & restaurants / tea stalls by advisories & inspections.

Bank & ATMs

A fully computerized branch of J&K bank is functioning within the Institute premises having onsite ATM. The bank has installed internet banking / phone banking/mobile banking in the branch. The bank also extends swift facility of house building loans, consumer loans & many other small loans to the staff & educations loans to the students. Besides this, an ATM of SBI is also operational inside the campus.

Telephone Exchange

Our Institute has a fully automated telephone exchange providing internal & external phone connectivity.

Transport Unit

Prompt attention was given to repair & maintenance of the Institute vehicles. Transport facilities were provided the various experts & other Institute guests invited for placement of students & other academic activities. The transport facilities were also provided to the students for conducting the various technical tours. In addition, Ambulance service has been provided to the Medical Unit of the Institute which facilitates the students in getting the proper medical care during emergency. Besides it, three numbers of light vehicles were purchased during the year 2018.

Post Office

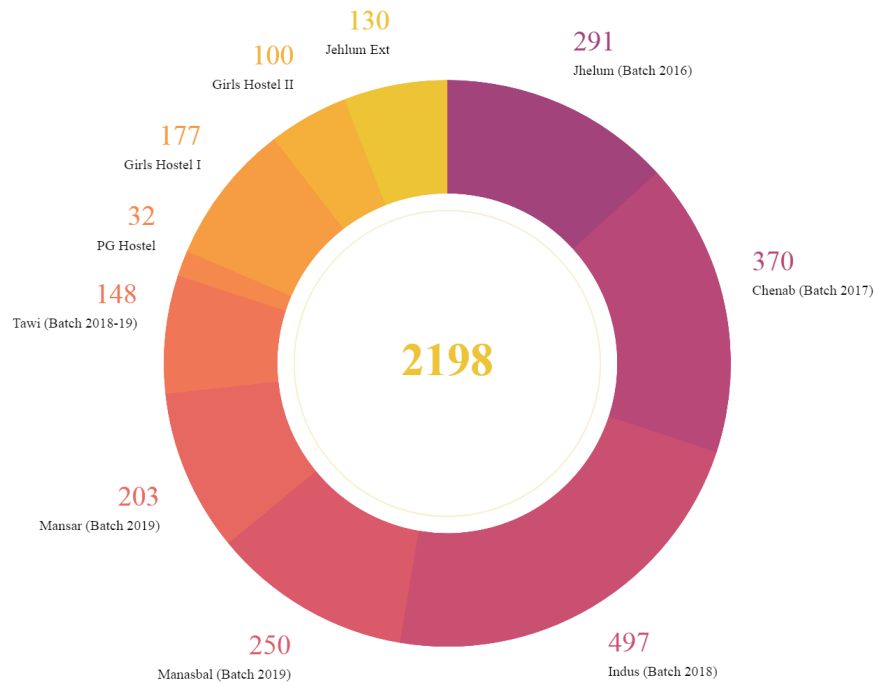
Though a Post & Telegraph office operates near the campus at Hazratbal, at one & a half kilometer distance, the Institute has taken step to get a Post Office established in the Campus itself for benefit of students.



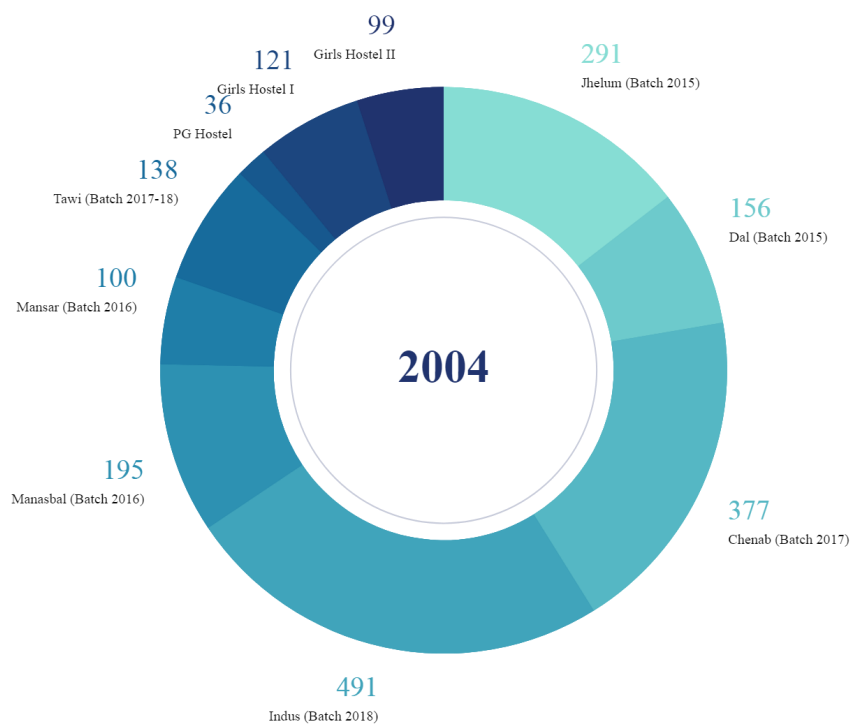
Students' Residential Facilities

The Institute has eight boys hostel named after famous rivers of our state. These are Chenab, Indus, Dal, Jhelum, Manasar, Manasbal, Tawi & PG & Two Girls Hostel which provide accommodation to about 2004 students at present. The residential capacity of each is as under:

Hostel Data 2019



Hostel Data 2018



National Institute of Technology Srinagar has been selected for the third phase of the World Bank assisted Technical Education Quality Improvement Programme (TEQIP-III).

Implementation Agency: National Project Implementation Unit, Ministry of Human Resource Development.

The Project, Third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) is fully integrated with the Twelfth Five-year Plan objectives for Technical Education as a key component for improving the quality of Engineering Education in existing institutions with a special consideration for Low Income States and Special Category States (SCS) and support to strengthen few affiliated technical universities to improve their policy, academic and management practices.

Project Objectives

The goals of TEQIP-III are, better academic standards, through accreditation, training faculty in better teaching methods, qualification up gradation, improved research outputs in institution. Also to incorporate better systems for assessment of student learning, through which to produce high quality engineers with better employability. The focus is to strengthen the UG/PG labs, so that students are ready to cater the needs of industry and increasing enrollment and starting new programmes. In addition, the project also supports to enhance the skills of technical and administrative staff. IIT Kharagpur has been selected as mentor institute to participate in twinning arrangements for knowledge transfer, exchange of experience, optimizing the use of resources and developing long-term strategic partnerships.

The Project will focus on the following objectives:

- Improving quality and equity in engineering institutions in focus states viz. 7 Low Income States (LIS), eight states in the North-East of India, three Hill states viz. Himachal Pradesh, Jammu & Kashmir, Uttarakhand and Andaman and Nicobar Islands (a union territory) (UT)
- System-level initiatives to strengthen sector governance and performance which

include widening the scope of Affiliating Technical Universities (ATUs) to improve their policy, academic and management practices towards affiliated institutions, and

- Twinning Arrangements to Build Capacity and Improve Performance of institutions and ATUs participating in focus states.

Project Strategy

- The project will be implemented in alignment with the 12th Five Year Plan (2012-17), based on faster, sustainable, and inclusive growth. It emphasizes increasing the supply of highly-skilled workers to drive the economy, as well as helping low-income states catch up with their more advanced neighbours.
- The Project will be implemented through the Ministry of Human Resource Development (MHRD) of the Government of India as a Central Sector Scheme (CSS), wherein 100% funds will be provided as grants to the States, Institutions & ATUs.
- The funding pattern details with respect to Government funded, Government aided institutions and ATUs are given in Section 6.
- A set of Government orders for States and UTs is to be issued to achieve a high and sustained impact of the Project. These orders are to give the project institutions adequate decision making powers that will enable and encourage them to deliver quality education and undertake research in an efficient manner. The primary focus is to increase empowerment of institutions for self-governance and create incentives for achieving excellence in engineering education.
- The project institutions will be required to implement academic and non-academic reforms within their self-conceived development programmes that focus on quality and relevance, excellence, resource mobilization, greater institutional autonomy with accountability, research and equity.
- Professional development programmes for engineering-education policy planners, adminis-

TEQIP-3

Technical Education Quality Improvement Programme

TEQIP III (Contd)

trators and implementers at the Central, State and University levels will be organized. The Project will also support development of more efficient governance activities.

- The Project will lay major emphasis on monitoring and evaluation. The prime responsibility of monitoring will lie with the institutions themselves. The management structure at the Institutional level i.e. the Board of Governors (BoG) along with Hevad of the institution will monitor the progress of Institutional projects on a regular basis and provide guidance for improving the performance of institution in project implementation. The information from project institutions will be collected through a scalable web-based Management Information System (MIS). State Governments will also regularly monitor and evaluate the progress of institutions. The Government of India and the World Bank will conduct bi-annual Joint Reviews of the Project with assistance from the National Project Implementation Unit (NPIU). The monitoring will be based on Institutional Development Proposals (IDPs) and Action Plans for ATUs prepared by each project insti-

tion and achievements will be measured through a set of performance indicators. The monitoring will focus on implementation of reforms by institutions, achievements in project activities under different sub-components, procurement of resources and services, utilization of financial allocations and achievements in faculty and staff development and management development activities.

- In the project, the technical assistance to AICTE is planned which will include designing an assessment system to track student learning at different points of the undergraduate program. Surveys of students, faculty, non-teaching staff and administrators will deepen insight into how institutes address specific problems related to student learning. Assessments will be designed to provide feedback to institutes on how and where to improve, without putting undue pressure on students.

- In this project, the fund will be linked to the Disbursement Linked Indicators (DLIs) and will be disbursed only after achieving and verification of some of the indicators.

Project Design

TEQIP seeks to enhance quality and equity in participating engineering education institutions and improve the efficiency of the engineering education system in focus states. The Project will support two components:

Component I: Improving quality and equity in engineering institutions in focus states

Sub-component 1.1: Institutional Development for Participating Institutions

An estimated 90 Engineering Education institutions meeting (progressively) the enabling mechanisms and based on meeting minimum standards in quality of Institutional Development Proposals (IDPs), will be selected.

Institutions are required to define the activities in their IDP that they want to carry out in the project. These activities should be under the scope of the project and are those that fulfil the objectives of the project. However, some of the suggested activities under the scope of

the project are given below:

- Procurement of Goods (equipment, furniture, books LRs, software and minor items) and minor civil works.
- Improvement in Teaching, Learning and Research competence.
- Improve student learning
- Student employability
- Increasing faculty productivity and motivation
- Establishing a twinning system
- Twinning arrangements with high performing institutions under Sub-component 1.3 to build capacity and improved performance
- Recruitment and retention of high quality faculty (through better faculty appraisal systems and the faculty recruitment plan). (Consultant services if required, can also be procured for the above said activities.)

Component 2: System Level initiatives to strengthen sector governance and performance

This component will support MHRD and key apex bodies in engineering education, including AICTE and NBA, to strengthen the overall system of engineering education. The activities are:

- Provide technical assistance to AICTE and NBA
- Professional development of Technical Education and TEQIP administrators in the project States and project institutions
- Initiatives for Effective Governance System of institutions at the level of Board of Governors
- Implementing Direct Benefit Transfer System to ensure fund transfer electronically to SPIUs and institutions, and
- Project monitoring & evaluation
- All institutes and ATUs in the Project, as well as those government and government-aided institutes that participated in TEQIP I and/or II but are not participating in TEQIP III and ATUs not part of the Project, will be linked to the National Knowledge Network. Last mile connectivity will be provided by the Project.
- 24x7 broadband connectivity and Wi-Fi access in all academic and administrative buildings and hostels.
- Developing or establishing technology learning centers at all universities which affiliate engineering colleges

S.no	Description	Funds Allocated (in INR)
1	Procurement of Goods	9.90 Cr
2	Academic Process	4.95 Cr
3	Incremental Operating Costs	1.65 Cr
Total amount (in INR)		16.5 Cr

TEQIP-3

Technical Education Quality Improvement Programme

⇒ **Procurement of Goods:**

⇒ **Academic Processes**

⇒ **Operating Cost**

Procurement of Goods:

TEQIP III has established many labs for UG, PG and Research Scholars of the Institute in all Engineering departments. The purchase of the equipment is made as per the procurement plan of the TEQIP III.

State of the Art Nano Coating Laboratory has been established under the expert guidelines of

- Amount allocated = INR 15.0 Cr.
- Under High performance Institute
- Additional Project Life Allocation of Rs. 1.5 Cr (60:30:10)
- Total Amount: Rs. 16.5 Cr

Prof. Tarun Kanti Bhattacharya, Department of Electronics & Electrical Communication Engineering, IIT Kharagpur under Twinning Activity for an amount of Rs 1.6 Cr

Language lab has been established in the Department of Humanities and Social Science for the first time in NIT Srinagar under TEQIP III.

- Furniture (Table 375 No. and Chairs 500

TEQIP III (Contd)

- No.) for laboratories and research scholars have been procured under TEQIP III.
- 35 No of UPS have been purchased at Institute Level and were installed among the various labs of the Institute.
- ESSC lab has been established under TE-QIP III. An amount of Rs 67.0 lacs lacs have been utilized for the purchase of equipment for setting up the lab.
- Engine Tribotester with Tribocorrosion module and Turbine Tester have been purchased in order to strengthen the Tribology lab and Erosion Testing lab of Mechanical Engineering Department.
- Dynamics lab gas been established in the Civil Engineering Department for an amount of Rs 20.4 lacs.
- HPLC and FTIR for the labs of chemical engineering department have been purchased for an amount of Rs. 54.0 lacs.
- ASTM and BIS have been procured under learning resources of TEQIP III for Library in order to strengthen the library of the Institute.

Minor Civil Works:

- Refurbishment of XRD lab has been undertaken under TEQIP III.
- Lab spaces have been created for the equipment of CRFC under minor civil works.

Academic Process:

- Faculty of the Institute has been benefited to improve their academic and administrative skills through various training Programmes conducted in-house and outside NIT Srinagar. Since the inception of the project. This has enabled NIT Srinagar to go ahead with the accreditation of all departments. E-SARs have been uploaded for 5 engineering departments & the accreditation team is scheduled to visit in the near future.
- Students at UG, PG and PhD level have benefited by improving their performance.

Since it was observed that a large number of students fall in ineligible category during placement drives as they have backlogs from earlier semesters. Remedial classes have been started for these students & this has proven extraordinary beneficial.

- Students had participated in various academic and co-curricular activities through TEQIP funds. Students at UG, PG & PhD levels have participated in various events like Go Kart Event, Hackathon & one of the idea in Smart India Hackathon has been selected in the top
- At Research Level PhD students have been participated in various National Events/ Conferences Like NFEST, CPIE etc
- Internships have been conducted in highly reputed Public Sector units like BSNL etc.
- PG & PhD Students have been provided grants under consumables head to carry out their research activities without any hindrance.
- For the First time NIT Srinagar has started coaching in 2018 for GATE for students under TEQIP-III. Total 436 students were registered in this program and out of these 137 students have qualified in GATE 2019.
- For the First time NIT Srinagar has started Skill Development Program in 2019 for the students. Total 235 students were registered in this program the training includes following skills to the pre-final students under Graduate Employability.
- Entrepreneurial /Innovation Skills
- Managerial skills
- Leadership skills.
- Communication skills
- Team working skills
- Under twinning activities Experts have been invited for the establishment of CRFC Lab, for delivering lectures. Fur-

Technical Education Quality Improvement Program Phase III

ther, an International Conference NBL-2019 was organized under twinning activities.

- Seventeen Short Term Courses were organized through TEQIP funds for the students and faculty members for improving their skills.
- NIT Srinagar Sponsored 2nd International Conference on NFEST with NIT Kurukshetra and CPIE conference with NIT Jalandhar
- Financial support is being provided to the students for their placement drive.
- PhD Students also get Research Assistantship through TEQIP funds.
- Equity action Plan has been implemented in NIT Srinagar.
- ASME Students Chapter has been setup under the TEQIP.

- Management Information System (MIS), PFMS, Accounting Software have been rolled out for better efficiency and governance.

- For TEQIP Statutory audit and Performance audit have been carried out.
- In the recent meeting at NPIU the Institute was among the best performing institute under TEQIP.

Academic Activities under TEQIP-III

- Events
- Go Kart Event
- Smart India Hackathon
- Sea India Club.
- Induction Program

Tests Conducted

- AMCAT Test

Conferences, STCs & Workshops Organized Under TEQIP-III

S. No.	Title of Course	Duration	Type of Program	Department
1.	Two Day's M-CAD Workshop	Oct 13-14, 2018	Workshop	IIEDC
2.	New Frontiers in Engineering Science & Technology (NFEST) in Collaboration with NIT Kurukshetra.	Feb 18-22, 2019	Conference	Mechanical Engineering Department
3.	Two-day Workshop on Artificial Intelligence	March 23-24, 2019	Workshop	T&P Department

6.2 Unnat Bharat Abhiyan

Unnat Bharat Abhiyan is flagship programme of Ministry of Human Resource Development (HRD) that aims to enrich Rural India. The second edition (Unnat Bharat Abhiyan 2.0) was launched in April, 2018. Currently 748 institu-

tions are participating under the scheme. In phase II, 605 institutions were selected. Out of these 313 are technical Institutions and 292 are Non-Technical Institutions. 143 institutions had taken part in Phase I.

Vision

Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an inclusive India.

Mission

- The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and private sectors in responding to the development needs of rural India.

Goals

- To build an understanding of the development agenda within institutes of Higher Education and an institutional capacity and training relevant to national needs ,especially those of rural India.
- To re-emphasize the need for field work, state-holder interactions and design for societal objectives as the basis of higher education.
- To stress on rigorous reporting and useful outputs as central to developing new professions.
- To provide rural India and regional agencies with access to the professional resources of the institutes of higher education, especially those that have acquired academic excellence in the field of science ,engineering and technology ,and management .
- To improve development outcomes as a consequence of this research .To develop new professions and new processes to sustain and absorb the outcomes of research.
- To foster a new dialogue within the larger community and science, society and the

UBA at NIT Srinagar



NIT Srinagar is the Regional Coordinating Institute for Unnat Bharat Abhiyan (UBA), a flagship programme of Ministry of Human Resource Development (MHRD), Govt. of India. The programme is inspired by the vision of transformational change in rural development, realises a key position for education institutions in the country for the same.

NIT Srinagar is participating in UBA since 2015. Initially five following villages were adopted by NIT Srinagar for the transforming these villages in model villages in Jammu and Kashmir. These villages are located in five districts of Kashmir region.

- Nanibough (Kulgam)
- Gutligund (Anantnag)
- Fakir Gujri (Srinagar)
- Puchal (Pulwama)
- Muqam (Budgam)

There are five faculty members of NIT Srinagar, who are working as Coordinators of these adopted villages. These coordinators are in close touch with the village committees. The coordinators make regular visits to these villages. During the interaction with the village committees, the coordinators get educated about the problems faced by these villagers and help them to find solutions to the problems at local level. The coordinators also discuss the problems of the villages with the district collectors and give them technical solutions to minimize the problems existing in these villages. NIT Srinagar is also assisting district administration in providing technical solutions to various problems faced by these villagers in drainage, water sharing, drinking waters, education, health sector, agriculture, marketing etc.

Initially an amount of Rs 1.68 Lacs was given to NIT Srinagar for conducting two surveys: household and village surveys. These surveys were thoroughly conducted by the team of workers hired by NIT Srinagar. The surveys have already been uploaded on the UBA web-

site (unnatbharatabhiyan.gov.in). On the basis of these surveys, problems have been identified which needs to be solved for transforming these villages into modal villages. An amount of 1.68 lacs were spent on these surveys.

Coordinators of these villages hold Gram Sabha meetings with the villagers from time to time. The various Gram Sabha meetings were held in 2017, 2018 and 2019 by the coordinators to monitor the progress of various activities as shown in figure below. An amount of Rs. 20215/-has been spent on the visits and holding Gram Sabha meetings in these villages.

Under UBA program, Middle and Primary schools of these adopted villages are to be transformed as model schools. Students of these schools are to be given computer and scientific education and also to establish tinkering laboratories in these schools. Various visits were made by the coordinators UBA of NIT Srinagar to the villages and to impart computer knowledge to the teachers and students of these primary and middle schools.

NIT Srinagar donated 80 computers to the schools of these villages for establishing computer labs. Minor repairs were required to be made to these desktops for making fully functional.

NIT Srinagar organized One Day Orientation Workshop on 17TH Feb 2020 for PI's of all colleges of the Kashmir Valley and for the teachers working in schools of the adopted villages. In this Workshop, more than 80 PI Coordinators participated. Experts from IIT Delhi (NCI) were invited to deliver lectures on the topics like: vision, objectives and processes linked to the UBA. District Collector Srinagar was the chief guest of the workshop.

NIT Srinagar has also distributed dustbins to one of the adopted villages for collection of solid waste

6.3 Prime Minister's Development Package

Prime Minister Modi announced a ₹ 80,000 crore development package for the erstwhile state of Jammu and Kashmir in 2015. Among other Sectors Government allocated Rs. 2600 crore for Human Resource Development, Skill Development and Development of Sports in now, the UT of J&K. This included establish-

ment of an IIT and IIM in Jammu; stepping up efforts under the HIMAYAT scheme to train one lakh youth over five years, and augmenting sports infrastructure. In addition to upgrading & Modernizing of existing Higher Educational Institutions.

PMDP at NIT Srinagar

PMDP was approved for NIT Srinagar on 09/08/2016 for Up-gradation and Modernization of various facilities at NIT Srinagar. An amount of Rs INR 100.00 Crore was sanctioned for implementation of the project at NIT Srinagar.

The details of various activities initiated at NIT Srinagar for up gradation, Modernization and removal of obsolescence in various departments and laboratories. And for developing state of art facilities and laboratories, for students at U.G, PG and at Research level are given below:

- Modernisation of Hostel/ Mess
- Modernization of Medical Facilities
- Up Gradation of Sports Facilities
- Up Gradation of Wifi Enabled Campus and Computer Services Centre
- Smart Class Rooms
- Up Gradation of Institute Library
- E Education Management
- Developing Innovation Incubation and Entrepreneurship Development Centre

The work against PMDP projects was initiated in December 2016 and an amount of Rs 35,18 Crore has been spent on various activities of the project till date. The amount was spent from plan grants as MHRD did not release any grant against the PMDP till date. Monthly progress report of the scheme has been submitted to MHRD, till ending October 2018. The project was put under halt from March 2018 due to non-availability of finance.

In a Board meeting held on 29/09/2018, it was resolved that a fresh DPR will be submitted to MHRD for revisiting the project and to complete the remaining works of the project successfully. An amount of INR 64.82 Crores is further required to complete the remaining works under the PMDP Project. The details of activities to be completed and the requirement of funds to needed to complete the remaining work of the project are given in the following sections.

Students Centric Developments

Modernization of Hostel Mess, Kitchen, Food outlets etc:

There are nine hostels in the Institute and more than 2500 wards are residing in these hostels. The weather in Srinagar remains cold and harsh from September to March and in absence of Proper heating system, it is difficult to provide heating arrangement in the hostels for the students, for such a long period of 07 months. This problem has been further aggravated as the number of students has increased to a large extent. It is not possible to provide heating arrangement separately to individual students through electric heating due to shortage of electricity during these months. Therefore, NIT Srinagar needs to provide appropriate heating system in the hostels.

In order to provide healthy, hygienic food to the students residing in various hostels it is necessary to follow the guidelines set by Food Safety and Standards Authority of India. It is

PMDP at NIT Srinagar *(contd)*

proposed to refurbish the dining halls of student messes and the food outlets and other services for the students at the campus with appropriate interventions like furniture, equipment, benches, rain/sunshades and lighting etc. In addition, it is also proposed to provide washing and cleaning facility for clothes to the students residing in various hostels. The estimated amount for this activity is 1437.00 Lakhs

Modernization of Medical Facilities:

As the number of students has increased 10 times as compared to the number of students before conversion from REC to NIT. It is proposed to create a modern diagnostic centre with need basis facilities in the institute and to develop a physiotherapy centre for the students and staff. The estimated amount is 375.00 Lakhs.

Up-gradation of Sports facilities:

Good Sports facilities are very essential for a professional Institute so that the students utilize these for their overall development. In this regard it is proposed to develop the Outdoor/indoor facilities with latest technology, the estimated amount for this activity is 1820.00 Lakhs.

Modernization of Infrastructure of Institute.

Up-gradation of WIFI enabled campus and Computer Services Centre:

It is proposed to widen the internet coverage and extend it to all the students in their hostels and develop a Wi-Fi enabled Campus. It is proposed to develop a software development cell, cyber forensic lab and Campus placement lab in the institute. In addition, it is also proposed to make available all licensed software's of general nature to all students and staff through networking under the computer services centre, The estimated amount is 2000.00 Lakhs for this activity.

Modernization of Teaching -Learning Facilities/ Smart classrooms

NIT has 40 classrooms which includes new and old class rooms. These classrooms need to be upgraded with latest teaching aids and other facilities In addition there are ten conference rooms in various departments. The estimated amount is 1418.00 lacs. It is proposed to refurbish the classrooms, seminar rooms, laboratories by appropriate modifications and installation of the state of the art facilities to convert them into Smart class rooms so that the teaching/learning process becomes interactive, more fruitful and interesting, The estimated amount is for this activity is 1418.00 Lakhs.

Upgradation of the Institute Library:

With introduction of a number of PG programs during the last 4 yrs and enrolment of a large number of PhD. Scholars across all departments, it has become very essential to procure the related reference materials including additional e-resources etc, for such students in addition to normal books and other facilities in the library to make it an interesting and a hub of the academic activities. It is also pertinent to maintain that during 2014 floods, a large number of Text books and references were damaged. In order to compensate the same, library needs to purchase Text books and references. The estimated amount for this activity is 1250.00 Lakhs

Campus e-Governance Education Management System:

NIT Srinagar needs Campus e-Governance Education Management System and MIS. It should contain all facilities for automation viz., a fully integrated, secured, rule based-online e-Governance system, with inbuilt smart card and Bio-Matrix support for students and faculty, computerization of complete academic activities of students from admission to his degree printing, online fee payment, UHF based attendance, pre-admission process, ad-

PMDP at NIT Srinagar

mission process counseling, fees collection and reports, course registration, academic calendar, teaching plan, timetable and attendance, pre-examination work, post-examination work, SMS and e-mail alerts for students and faculty etc. The other facilities include fully integrated, multi-user system with full protection against unauthorized access, secured, accurate & timely information to users at all levels for better decision making. This will improve the overall efficiency of various users and hence will improve the performance of the system, The estimated amount is for this activity is 200.00 Lakhs

Up-gradation of Research & Innovation Centres:

Of late, research and teaching activities at PG level are growing at fast pace at NIT Srinagar.

At present more than 400 Research Scholars are pursuing PhD, in various disciplines of science and Engineering in the institute. There are more than 200 students pursuing M. Tech degrees in various Engineering departments. Number of PhD. Students and Post Graduate students will receive a quantum jump in near future. In order to cater to the Research facility needs of PhD. & Post Graduate students and faculty, NIT Srinagar has to augment its Research facilities with state of art equipment in various research areas. Moreover, NIT Srinagar has established 05 Centres in the institute. Further to encourage innovation & entrepreneurship amongst the students, there is a strong need to upgrade the existing Innovation, Incubation & Entrepreneurship Development Centre (IIEDC) also. The estimated amount for this activity is 1500.00 Lakhs.

PMDP Financial Stats (in INR)				
S No.	Work/Project	Sanctioned Expenditure	Expenditure Incurred	Under Tendering
1	Modernisation of Hostel/ Mess	1437 Lakhs	2,24,30,765	11,00,00,000
2	Modernisation of Medical facilities	375 Lakhs	29,24,500	80,70,000
3	Up-gradation of Sports facilities	1820 Lakhs		13,22,18,000 3,00,00,000
4	Advanced Data centre, Wi-Fi enabled campus and Modernization of computer services centre	2000 Lakhs	18,36,71,695	
5	Modernization of Teaching-Learning facilities /Smart classrooms	1418 Lakhs		14,18,00,000
6	Up-gradation of Institute library	1105 Lakhs	8,59,57,056	
7	ERP/ Automation System	107 Lakhs	1,26,26,000	
8	Developing innovation incubation and entrepreneurship development centre and CRFC	1738 Lakhs	13,13,46,505	3,18,12,000

7.0 Annual Accounts

BALANCE SHEET as on 31/03/2019

(Amounts in INR)

SOURCES OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
Unrestricted Funds			
Corpus/Capital Fund	1	47,40,59,812.75	21,66,97,907.77
Designated/Earmarked Funds	2	2,09,84,69,913.04	2,09,91,37,166.00
Current Liabilities & Provisions	3	2,27,46,98,755.90	1,41,62,36,535.65
Total		4,84,72,28,481.69	3,73,20,71,609.42
APPLICATIONS OF FUNDS			
Fixed Assets	4		
Gross Tangible Assets		2,10,32,66,968.28	1,80,84,98,223.13
Intangible Assets		-	-
Capital Work in Progress		75,45,80,252.50	76,21,06,632.50
Investments	5		
Long Term		23,49,39,120.00	22,07,68,421.00
Short Term		1,41,26,20,987.00	1,20,99,01,858.00
Investments Others	6	-	-
Current Assets	7	30,42,90,453.31	(30,85,65,397.00)
Loans, Advances & Deposits	8	3,75,30,700.03	3,93,61,871.79
Rounded off to		0.57	
Total		4,84,72,28,481.69	3,73,20,71,609.42
Significant Accounting Policies	23		
Contingent Liabilities and Notes to Accounts	24		



Deputy Registrar (Accounts)



Registrar



Director

Annual Accounts

INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31/03/2019

(Amounts in INR)

INCOME	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
Academic Receipts	9	13,49,81,363.56	17,35,67,108.31
Grants-in-Aid Subsidies	10	1,17,30,00,000.00	63,20,00,000.00
Income From Investments	11	7,06,59,183.00	9,43,42,389.00
Interest Earned	12	-	-
Other Incomes	13	73,98,011.39	52,15,993.59
Prior Period Income	14	-	-
Total		<u>1,38,60,38,557.95</u>	<u>90,51,25,490.90</u>
EXPENDITURE			
Establishment Expenses	15	77,21,24,202.06	64,25,79,646.00
Academic Expenses	16	11,94,99,962.29	10,42,90,930.00
Administrative Expenses	17	12,57,12,097.70	8,92,20,333.00
Transport Expenses	18	5,93,778.88	9,97,758.00
Repair & Maintenance	19	85,05,728.00	35,71,617.00
Financial Costs	20	-	-
Depreciation	4	10,22,40,884.03	8,27,87,020.47
Other Expenses	21	-	-
Total		<u>1,12,86,76,652.96</u>	<u>92,34,47,304.47</u>
<i>Balance being Surplus of Expenditure over Income (B-A)</i>		25,73,61,904.99	(1,83,21,813.57)
<i>Balance being Surplus (Deficit) carried to General Fund</i>		25,73,61,904.99	(1,83,21,813.57)

Deputy Registrar (Accounts)

Registrar

Director

Annual Accounts

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Opening Balance			Opening Balance		
Bank Accounts	99,57,349.64	16,64,50,487.67	Bank Accounts	32,43,57,434.64	
Cash in Hand	99,055.00	1,96,910.00			
			Earmarked Endowment Funds		
Earmarked Endowment Funds			Loan Scholarship Account	6,38,904.96	16,58,442.00
Building Fund					
Loan Scholarship Account			Current Liabilities & Provisions		
Plan Recurring (Gate Scholarship / Supervisory Charges)			Big Data Analytics (Training Programme)	1,95,200.00	1,80,191.00
Sheikh Ul Alam Chair			College Caution Money	8,100.00	2,700.00
Current Liabilities & Provisions			Cost of AIEEE Forms		7,05,655.00
Big Data Analytics (Training Programme)		1,95,200.00	CSIR Fellowship Chemistry	1,64,326.00	7,64,015.00
Cost of AIEEE Forms		10,85,480.00	Deposits	1,17,93,608.00	1,16,83,313.43
CSIR Fellowship Chemistry			Hostel Caution Money	11,85,000.00	1,24,600.00
Deposits	1,92,23,705.00	1,69,40,786.25	Inspire Programme	15,92,186.00	-
Development Charges	11,20,500.00	15,83,800.00	Institute Caution Money	14,89,900.00	2,77,200.00
Group Insurance (Students)	9,12,700.00	12,61,400.00	Library Caution Money	1,23,500.00	3,80,650.00
Hostel Caution Money	2,31,000.00	8,000.00	Mess Caution Money	12,70,500.00	2,34,400.00
Inspire Programme	11,00,000.00	11,00,000.00	SERB Conference	1,82,903.00	20,95,095.00
Institute Caution Money	4,40,000.00	6,000.00	Benevolent Fund	60,000.00	
Library Caution Money			Vishvesvarya Ph.D. Scheme	12,32,426.00	
Mess Caution Money			Electricity Payable		
Mess Deposit			Salary Payable		1,91,43,855.00

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Mess Establishment charges	1,000.00	3,800.00	Special manpower Development Programme (SMPD)		
Ramamanujan Fellowship (SERB)	15,00,000.00		Flood Relief Donation	1,95,500.00	-
Red Cross Fund	150.00	570.00	Unnat Bharat Abhiyan	92,558.00	1,68,000.00
Special Manpower Development Programme (SMPD)			Vishvesvarya Ph.D. Scheme		17,35,144.00
Two Days Workshop in Metallurgy Department			Messing Allowance Payable	23,00,000.00	36,20,061.00
SERB Fellowship	29,21,962.00	26,89,000.00			
Unnat Bharat Abiyaan	5,00,000.00	7,23,290.00	Research Schemes	43,62,556.00	
Vishvesvarya Ph.D. Scheme	1055755		CSIR Scheme (Physics)		44,154.00
Research Schemes					
CSIR Scheme (Physics)			SERB Fellowship	38,02,858.00	12,766.00
Information Security of Education (ISEA)					
Inspire Fellowship Scheme					
SMDP-II VSLI			Deposits From (Students)		
			DASA-2016		
Deposits from students					
DASA-2016			Statutory Liabilities (GIS, GPF, TDS, WCT)		
Fuel charges for genset			Association Fund (NPS)	224450	2,35,050.00
			Court Attachment	24,000.00	30,000.00
			C.P. Fund		
Statutory Liabilities (GIS, GPF, TDS, WCT)					
C.P. Fund			Deputation GP Fund	5,82,264.00	2,68,000.00

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
G.P. Fund of Employees	630500	1,60,000.00	G.P. Fund of Employees	6,89,06,251.00	6,06,85,237.00
Group Insurance			Group Insurance	31,983.00	13,047.00
Income Tax	7,01,938.00	1,34,65,476.00	Income Tax	3,81,07,488.00	4,82,43,127.00
LIC Premium	3,00,265.00	76,200.00	Institute Research		
New Pension Scheme	13,737.21		Lekuminia Fund		
Students Welfare Fund	11,20,250.00	15,32,605.00	LIC Premium	35,09,787.00	37,46,479.00
Court attachment	6000		New Pension Scheme	12,56,629.00	5,00,401.00
Alumni Association Membership Fee			PLI		
Deutation GP Fund			Sales Tax		31,19,307.00
Sales Tax	3,58,573.00	5,000.00	Staff Welfare Fund		
Association Fund NPS			Student Welfare Fund	2,73,909.00	6,76,176.00
Other Current Liabilities			Teacher Society Fund		
Transfer/Scholarship Grant			Labour Cess		14,435.00
Mess Fee	81,819.00		Indirect Incomes		
-			Maintenance Of Sports Fields		2,32,760.00
Grant In Aid Plan			Other Current Liabilities		
Creation Of Capital Asset	69,70,00,000.00	61,16,00,000.00	Transfer/ Scholarship Grant	13,737.00	
Special Plan Creation Of Capital Asset S/C	3,15,00,000.00	4,41,00,000.00	GP Fund Remittable to Kashmir University	2,60,376.00	
Sub Plan Creation Of Capital Asset	1,44,00,000.00	2,13,00,000.00	Mess Fee	17540432	
Special Plan Creation Of Capital Asset 3			Fixed Assets		
TAS/T Creation Of Capital asset					

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Fixed Assets			Central Research Facility Centre	1,00,09,844.15	1,07,60,236.00
Setting Up Of New Labs			Diesel Water Pump		
Library Books	4,059.00		Face Lifting of Campus	1,24,02,414.00	1,75,00,000.00
Modernization of Hostels and Messes	1,52,55,532.00		Furniture College (Plan)		
Pre Fab. Hostels/ Class Rooms	7,00,00,000.00		Guest House	1,55,64,480.00	10,45,00,000.00
Purchase of Furniture for Institute	49,10,629.00		Hi Tech Auditorium	5,81,920.00	5,03,00,000.00
Setting Up Of New Labs	68,59,117.00	3,73,622.00	Installation/ Commissioning of Fire Fighting System		
Subscription to E-Journals	26,94,721.00		IIED Centre	4,78,500.00	
			Indoor Stadium	1,55,31,220.00	
Investments Earmarked Endowment Funds			Library Books	87,48,700.00	3,29,08,495.00
Long Term			Library Books & Equipment	7,29,780.00	
Fixed Deposit Long Term	70,53,466.00		Mega Hostel	8,75,925.00	3,03,00,000.00
			Office Automation	53,39,449.00	34,41,500.00
Short Term			Power Station		
Fixed Deposit Short term	40,79,65,415.00	35,50,00,000.00	Pre Fab. Class Room		16,61,00,000.00
			Purchases of Furniture (Institute)	69,92,202.00	1,84,57,850.00
Current Assets			Renovation of Elect. Installation System	8,22,890.00	
Grant in Aid Receivable From MHRD			Renovation of gen. Maintenance Hostels/Buildings	20,51,057.00	

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Sundry Debtors (Old Deput. GP Fund)			Renovation of lab. Building & Academic Building	1,59,88,019.00	5,63,71,590.00
Establishment Expenses			Renovation of Office Equipment	1,89,100.00	
Employees Retirement & Terminal Benefits Pension	18,11,946.94	1,04,77,788.61	Construction Of Indoor Sports Facility Centre & Swimming Pool		1,86,66,667.00
Salary Wages Allowance and Bonus	93,672.00	10,952.00	Construction/ Up gradation Of Sports Facility In Campus		4,37,00,000.00
DIEM Allowance			Lab. Building EPD/Physics Lab		-
Messing Allowance			Overhead Water Tank		-
Pay		1,400.00	Electric fitting		
			Setting Up of New Labs	5,91,82,180.00	6,09,61,966.00
Grant in Aid Subsidies			Setting up of New Lab (Mechanical)	1,45,31,855.00	
Grant in Aid Non-Plan Recurring (General)	52,81,00,000.00	18,35,50,000.00	Strengthening of Central Workshop	22,30,200.00	55,000.00
Grant in Aid Non-Plan Recurring (Salaries)			Setting Up of IIID Centre	11,134.00	4,83,000.00
Grant in Aid Non-Plan Recurring Special Component For S/C	5,96,00,000.00	2,05,50,000.00	Strengthening of Library Facility Centre	67,07,739.00	14,07,825.00
Grant in Aid Non-Plan Recurring Tribal Area Sub Plan	2,91,00,000.00	99,00,000.00	Strengthening of Medical Facilities	4,33,105.00	14,85,738.00
Grant In Aid Salary	48,05,00,000.00	36,89,70,000.00	Up gradation of Telephone Exchange	2,14,500.00	23,09,058.00
Grant In Aid Salary Tribal Area	2,38,00,000.00	1,79,80,000.00	Subscription to E-Journals	2,34,37,951.00	1,16,64,244.00
Grant In Aid Salary Sp. Component Salary S/C	5,19,00,000.00	3,10,50,000.00	Telephones	52,775.00	-

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Interest on Savings Bank Account	44,31,661.07	4,50,511.00	Up-gradation of Computer Service Centre	13,03,05,101.00	93,16,353.00
Loans, Advances & Deposits			Up-gradation of power station		
Advance to Employees	19,84,896.76	15,54,814.00	Up-gradation of Sports Facilities	6,57,580.00	5,98,232.00
Computer Advances		200.00	Modernisation of Hostel & Mess		87,42,360.00
Imprest With HOD		5,000.00	PMDP Payments	3,07,96,000.00	
			Purchase Of Vehicles	1,80,480.00	71,48,210.00
Transport Expenses			Lavatory Block	40,365.00	
Vehicle Running Expenses		1,600.00	Work Shop Equipment	1,11,000.00	
			Laboratory Equipment	5,61,970.00	
Academic Receipts			Replacement of Rust Pipes In Water Supply		48,00,000.00
Admission Fees	1,78,03,039.03	1,20,64,315.00	Investments-Earmarked Endowment Funds		
Advance Result	15,750.00	5,795.00	Long Term Fixed Deposit	78,50,000.00	
Application Form Fee	63,500.00	1,590.00	Short Term fixed Deposit	60,01,62,460.00	82,00,00,000.00
Computer Usage	4,46,000.00	7,18,300.00			
Degree Fee	6,47,391.00	1,11,278.00	Establishment Expenses		
Examination Fee	11,31,340.00	21,17,636.31	-		
Fine	12,30,119.68	3,12,950.00	Employees Retirement and Terminal Benefits		
Games and Sports Activities	15,41,000.00	21,22,250.00	Gratuity	1,87,06,368.00	2,00,47,127.00
Hostel Rent	56,41,985.36	54,23,127.00	Leave Encashment	1,16,14,393.00	1,39,67,903.00
Industrial Training	4,46,000.00	6,30,000.00	Pension	31,07,80,954.00	6,82,67,220.00
Lab. Fee Income	4,80,565.00		Salary Wages - Allowances		
Library Fee	4,66,121.00	6,75,179.00	Bonus		

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
Migration Fee	2,29,450.00	2,05,678.00	Children Educational Allowance	30,35,100.00	34,26,063.00
Recreational Charges	1,000.00	5,200.00	Dearness Allowance	2,56,86,306.00	7,89,91,475.00
Registration Fee			Diem Allowance	78,08,729.00	16,50,231.00
Tuition Fee	11,20,39,267.24	14,99,38,269.00	Hill Composite Allowance	28,05,332.00	26,76,869.00
Water & Electricity (Hostel)	2,000.00	55,900.00	House Rent Allowance	1,69,18,645.00	1,56,45,430.00
Fees from Students (Convocation & Other Fees)			Leave Travel Concession	29,56,322.00	12,00,827.00
Games & Other Fee			Medical Facilities	18,56,390.00	58,75,669.00
Income from Investments			Medical Reimbursement Allowance	23,07,741.00	17,59,793.00
Interest on Long Term Deposits	2,22,143.00		Messing Allowance	1,06,85,333.00	89,66,802.00
Interest on Short Term Deposits	4,65,40,791.00	4,75,58,125.00	Pay	21,96,41,444.00	16,62,75,709.00
			Professional Development Allowance	5,02,079.00	31,12,616.00
Other Income			Transport Allowance	1,00,08,460.00	91,71,501.00
Rent from Shops, Accommodation, Post Office, Bank etc.	8,55,088.00	7,30,182.00	Washing Allowance	95,980.00	1,40,210.00
Electricity Income	1,39,320.00	7,500.00	Interest on GP Fund		
Quarter Rent	41,908.00	18,496.00	Loans, Advances & Deposits	5,32,544.00	
Rent from Guest House	36,560.00	20,284.00	Advance to Employees	1,01,38,038.00	1,30,05,526.00
Misc. Income	7,11,619.32	29,33,219.59	Computer Advance		50,450.00
			Festival Advance Recovery		5,85,000.00

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
			Academic Expenses		
CLOSING BALANCE			Alumni Meet	1,52,844.00	6,19,843.00
Bank Accounts	32,43,57,434.64		Co-Curricular Activities	5,46,290.00	4,79,787.00
			Co-Curricular Activities	14,305.00	6,42,838.00
			Computer Service Centre	7,22,007.00	6,61,394.00
			Games & Misc. Contingencies	1,08,140.00	9,882.00
			Games & Sports Activities	2,18,009.00	
			Inter NIT Sports Meet	51,149.00	65,41,624.00
			Laboratory Running Expenses	34,71,002.00	14,923.00
			Library Services & Contingencies	4,53,772.00	8,72,81,155.00
			Scholarship Stipend to Students	10,46,27,446.00	6,38,965.00
			Seminars & Conferences	1,42,373.00	21,62,885.00
			Student Project	21,76,968.00	
			Training & Placement	1,07,678.00	56,258.00
			Wages	1,90,849.00	
			Journals & Publications	38,21,804.29	38,45,393.00
			Convocation	7,78,228.00	
			Administrative Expenses		
			Advertisement and Publicity	33,10,318.00	21,70,131.00
			Campus Interview	18,887.00	3,62,271.00
			Chemical & Reagents	90,860.00	28,611.00
			Legal Expenses	19,59,225.00	5,17,486.00
			Retirement Benefits	26,27,912.00	43,39,843.00
			Sanitation	60,68,552.00	3,13,200.00

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
			Communica- tion	2,12,217.00	
			Internet Fee	42,674.00	32,498.00
			Infrastructure	4,34,67,133.00	83,782.00
			Other Adminis- trative Expenses	6,56,40,523.70	
			Infrastructure		
			Water Expenses		5,79,504.00
			Hot & Cold Weather Charges		5,88,008.00
			Electricity Ex- penses		31,83,096.00
			Insurance of Insti- tute Property		1,57,224.00
			Other Adminis- trative Expens- es		
			NIT Transit House		2,50,000.00
			Printing & Sta- tionery Con- sumption		38,62,736.00
			Travel & Convey- ance		14,23,867.00
			Water Expenses		-
			Misc. Contingen- cies		3,53,26,989.00
			Liveries		1,11,406.00
			Other Adminis- trative Expens- es		
			Printing & Sta- tionery Con- sumption		
			Travel & Convey- ance		
			Misc. Contingen- cies		

RECEIPTS & PAYMENTS ACCOUNT FOR THE YEAR ENDED 31/03/2019 (contd.)

(Amounts in INR)

RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
			Repair/ Maintenance		
			Electrical Maintenance	15,60,295.00	3,01,77,284.00
			Maintenance of College & Hostel	27,71,044.00	11,42,491.00
			Maintenance of Genset	7,66,078.00	-
			Parks & Gardens	23,87,180.00	
			Parks & Gardens		6,69,521.00
			Round off	0.57	
			Closing Balance		
			Bank Accounts	29,77,76,740.31	99,57,349.64
			Cash-in-Hand	2,47,386.00	99,055.00
Grand Total	<u>2,67,25,53,993.25</u>	<u>2,45,89,70,992.07</u>	Grand Total	<u>2,67,25,53,993.25</u>	<u>2,45,89,70,992.07</u>



Deputy Registrar (Accounts)

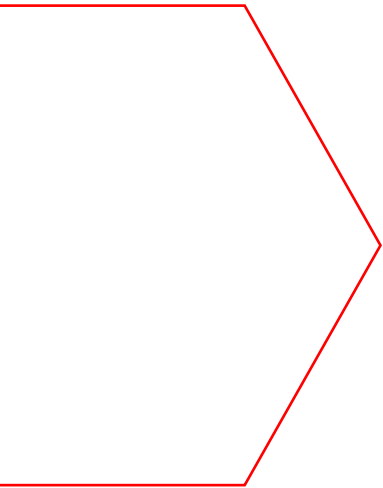
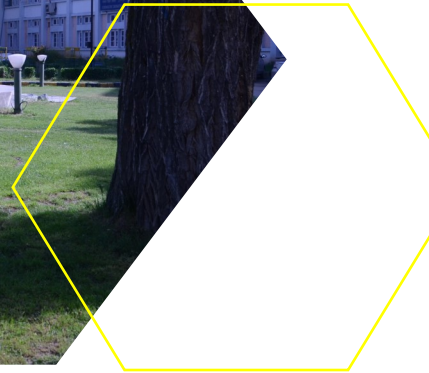


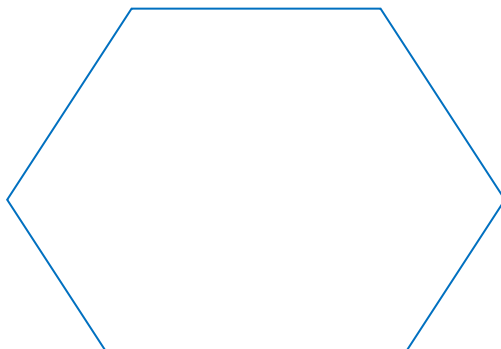
Registrar

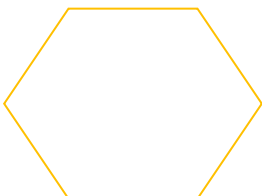
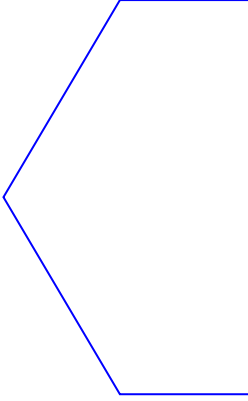
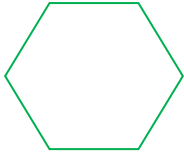


Director

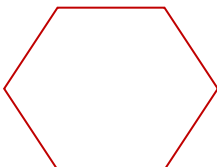
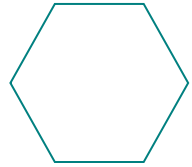














एक कदम स्वच्छता की ओर



National
Institute of
Technology
Srinagar

© 2018-2019

