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59th Issue

ANNUAL REPORT 2018-19





National Institute of Technology Srinagar July, 2020.

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59th ANNUAL REPORT (2018-19)

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Director's Report

59th Issue

t 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.

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

National Institute of Technology Srinagar

Annual Report 2018-2019

59th Issue

TABLE OF CONTENTS



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



INTRODUCTION

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



CENTRES

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



ANNUAL ACCOUNTS

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

ACADEMICS

2

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



CENTRALIZED

SERVICES

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

DEPARTMENTS

3

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



SCHEMES

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

Inside Departments

I
2
3
4
5
6
7

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;

The National Institute of Technology Srinagar adjacent to the campus of the University of (formerly Regional Engineering College), was established in July of 1960, by a joint venture between the Government of India & the erst-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 differ-

ences 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 studentfaculty 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

(formerly Regional Engineering College), was commodation facility in Hostels & Staffbetween the Government of India & the erst- hostel which have a capacity of around 2000 while State Government of J&K during the boys & 300 girl students. 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 lance, Guest House, Students Activity Centre, 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).

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 line repository of A.S.C.E, A.S.M.E.A.E.L, levels has gained a reputation of a premier J.C.C.C etc in addition to journals through technical education Institute of the region.

The National Institute of Technology Srinagar NIT Srinagar is a residential Institute with acestablished in July of 1960, by a joint venture Quarters. There are eight Boys & two Girls

> 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 Ambu-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 participat-The Institute has proved its mettle over the ing industries. The Institute has one of the best technical libraries in I&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 I.N.S.E.S, COMSORTIEM. It also has a collection of I.S.I codes, in the form of soft copy.

Campus

the summer capital of J&K. The campus is 2000 boys & 300 girls with separate mess facilispread over 67 acres on the banks of world- ty for each hostel. famous Dal Lake set against the beautiful Zabarwan Mountain range. The Institute is flanked Almost all necessary facilities & amenities are by the much revered Sufi Shrine oh Hazratbal available in the campus which includes Cafeteon its North.

tion facility for students & staff in hostels & net facility, Bus facility, Centralized Library etc. Residential Quarters. There are eight boys &

The Institute is located at Hazratbal in Srinagar, two girls hostels which accommodate about

ria, Shops, Bank, Medical Unit with ambulances, Guest House, Students Activity Centre, Gym-The Institute is residential with accommoda- nasium, Computer Services Centre with inter-

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 UI 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"

National Institute of Technology Srinagar (J&K) Director is assisted in the day-to-day affairs of control of Ministry of Human Resource Devel- the Departments & Centers along with various The Institute functions under the overall guid- Committees in addition to BOG, responsible Director is the academic & executive head of the Institute, include: 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.

is an autonomous Institute under the direct the Institute by the Registrar, Deans, Heads of opment (MHRD), Government of India (GOI). committees & other officers. The Important ance & control of Board of Governors (BOG). for advising in respect of the various matters of

— Sir M. Visvesvaraya

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

NIT Council

I.	Minister of Human Resource Development,	Chairman
	Government of India.	
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
П	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
	(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 Parliament)	
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* (a)	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 Govern- ment of India to be nominated by the Central Government from amongst persons dealing with tech-	(c)	Joint Secretary (NITs & DL), Ministry of Human Resource Develop- ment, Department of Secondary & Higher Edu- cation, Government of India, New Delhi
nical education and finance	(c)	Joint Secretary & FA, Ministry of Human Resource Develop- ment, Department of Secondary & Higher, Gov ernment 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 opin- ion of that Government, are tech- nologists or industrialists of repute	(d) (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		Dr. Prema Ramchandran, Director, Nutrition Foundation of India, Delhi
One Professor and one Assistant Professor or a Lecturer of the Insti- tute to be nominated by the Senate	(f)	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)	I. 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)

Page 10

*Nominations Under Section 11 of NIT Act, 2007 (29 of 2007)

The Senate

Chairman	I	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 Insti- tute to be nominated by the Chairperson in consultation with the Director, from amongst educationists of repute one each		Prof. Mehraj-ud-Din, Vice-Chancellor, Central University of Kashmir, Srinagar (J&K)
amongst educationists of repute, one each from the field of Science, Engineering and Humanities	2	Prof. S. K. Koul, Professor, Centre for Applied Research in Electron- ics (CARE), Indian Institute of Technology, Hauz Khas, New Delhi.
	3	Prof. Azra Nahid Kamili, Dean, Biological Sciences & HOD, Environmental Sciences, University of Kashmir
One person to be nominated from the ndustry	I	Mr. Deepak Bhasin, B-134, Naraina Vihar, New Delhi.
nstitute alumnus	I	Er. Mufti Musharib Gul General Manager, BSNL Srinagar
The Professors appointed or recog- nized as such by the Institute for the pur- pose of imparting instructions in the Insti- tute.	I	All Professors
Such other members of the staff as may be aid down in the Statutes	I	All Deans, HoDs, Associate Deans, Con- troller of Examination, Co-ordinator 1 st & 2 nd Semester, Chairman Library Commit- tee, Librarian and DPE.
Secretary	I	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)

Building & Works Committee

Chairman	I	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir- 190006
Members: Nominated by MHRD and IFD New Delhi	I	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	I	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	I	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	I	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)

Finance Committee

Chairman	1	Prof. Rakesh Sehgal Director, National Institute of Technology Srinagar, Hazratbal, Kashmir- 190006
Members: Two persons nominated by the Central Government	I	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	I	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)	I	Prof. Rakesh Sehgal Director, NIT Srinagar (J&K)
Secretary	I	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

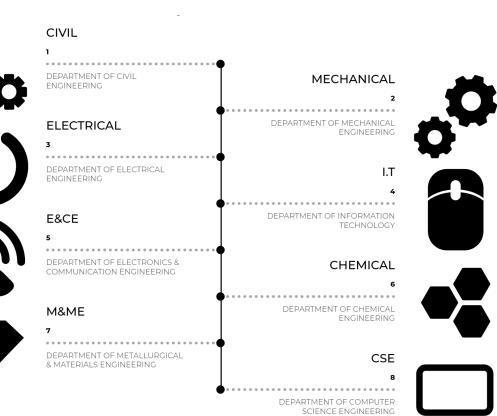
grammes comprising of (08) B.Tech. Pro- departments. grammes in eight disciplines of engineering; (10) M.Tech.. Programmes in 05 Engineering Depart- The Institute has eight Engineering Departments, ments,

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

The Institute offers various academic Pro- grammes in all the engineering, science & HSS

four Allied Departments & Five Centres. These are:

Engineering Departments







Allied Departments



MATHEMATICS

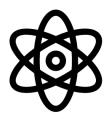
1

3

DEPARTMENT OF MATHEMATICS



2 DEPARTMENT OF PHYSICS



CHEMISTRY

DEPARTMENT OF CHEMISTRY

H&SS

4

DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES



Centres at NIT Srinagar

1

WRMC

WATER RESOURCES MANAGEMENT CENTER



2

CSC COMPUTER SERVICES CENTRE



3

CRFC CENTRAL RESEARCH FACILITIES CENTRE



4

IIED

INNOVATION, INCUBATION & ENTREPRENEURSHIP...



5

LIRC

LIBRARY & INFORMATION RESOURCE CENTRE



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 that 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 The M.Tech. Program is of two years spread Joint Entrance Examination (JEE) Mains, conducted by Central Board of Secondary Education (CBSE) New Delhi.

50% of sanctioned Intake of 672 seats for of the M.Tech. Programmes. B.Tech. is filled from domicile candidates of J&K State & 50% from candidates of other M. Phil / Ph.D. 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

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.

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

(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

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.

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

"All religions, arts and sciences are branches of the same tree"— Albert Einstein

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 Re- port Contents & Quality	60 %
40 % For Presentation & viva voce	

Academic Statistics (for 2018-2019)

B.Tech. COURSES			
Discipline	Sanctioned	Admissions	
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			
"Failure is the	Discipline	Sanctioned Intake	Admissions Undertaken	
opportunity to	Water Resources Engineering (Civil Engineering Department)	15	8	
begin again more	Structural Engineering (Civil Engineering Department)	25	19	
intelligently." –	Communication & Information Technology (Electronics & Communications Engineering)	25	9	
Henry Ford	Micro Electronics	13	8	
	Mechanical System Design (Mechanical Engineering)	25	12	
	Industrial Tribology & Maintenance Management	26	П	
	Electric Power & Energy System	26	21	
	Transportation Engineering	18	13	
	Geo-Tech Engineering	17	13	
	Chemical Engineering	18	2	

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

Page 20

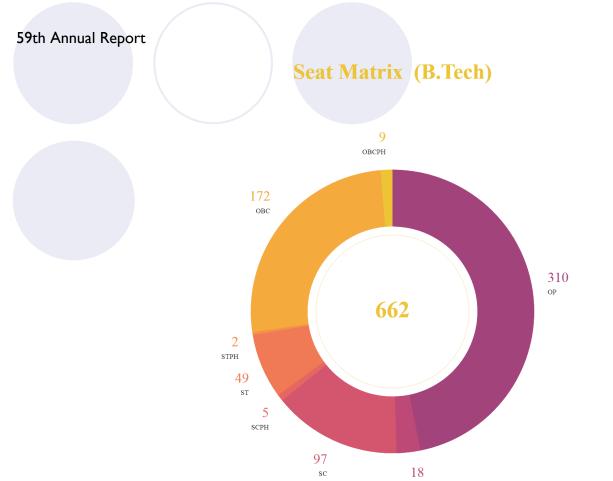
Ph.D. Programmes total Sanctioned Intake capacity per year is 150.

B.Tech. Seat Matrix

Other S	tates St	tudent Q	uota						
Branch	OP	ОРРН	SC	SCPH	ST	STPH	OBC	ОВСРН	TOTAL
CSE	16	I.	5	-	I.	-	8	-	31
т	16	I.	5	-	2	-	9	-	33
Civil	32	2	9	I.	5	-	18	I.	68
Mech.	19	I.	6	I.	3	0	П	I.	42
Elect.	19	I.	6	I.	2	I.	П	I.	42
E&C	20	I.	6	0	3	0	10	I.	41
Chem.	19	I.	6	0	2	I.	10	I.	40
M&MT	19	I.	6	0	3	0	10	0	39
Total	160	9	49	3	21	2	87	5	336

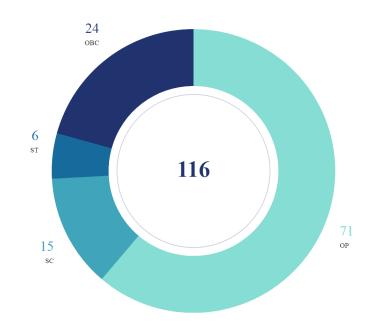
Home S	tate St	udent Qu	ota						
Branch	OP	ОРРН	SC	SCPH	ST	STPH	OBC	ОВСРН	TOTAL
CSE	15	1	4	0	3	0	9	0	32
іт	16	I.	5	0	2	0	8	0	32
Civil	33	2	9	I	5	0	17	I.	68
Mech.	19	I.	6	I	4	0	П	I.	43
Elect.	20	I.	6	0	4	0	10	1	42
E&C	20	I.	6	0	4	0	10	I.	42
Chem.	19	I.	6	0	3	0	10	0	39
M&MT	18	1	6	0	3	0	10	0	38
Total	160	9	48	2	28	0	85	4	336

Other States Student Quota



OPPH

Seat Matrix (M.Tech)



Program	OP	SC	ST	Spon- sored	ОВС	Total
Water Resource Engineering	4	I	0	0	3	8
Mechanical System Design	6	1	I.	0	4	12
Structural Engineering	11	3	0	0	5	19
Industrial Tribology & Maintenance Management	10	0	0	0	1	н
Communication Information Technology	7	I.	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	I.	0	3	13
Micro Electronics	5	2	I.	0	0	8
Chemical Engineering	I.	0	0	0	1	2
TOTAL	71	15	6	0	24	116

M.Tech. Seat Matrix

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. E	nrollment	s (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 . S c.	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	П	0	56
Mech.	25	12	06	28	0	71
M&ME	04	04	03	0	0	11
C . S c.	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. S c.	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)
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	-					
rogram	OP	SC	ST	Spon- sored	ОВС	Total
					Year	2016
/ater Resource Engineering	06	01/	01	02	-	10
echanical System Design	06	04	0	05	03	18
ructural Engineering	13	03	01	03	02	22
dustrial Tribology & aintenance Management	09	02	0	03	01	15
ommunication Information echnology	12	01	01	05	-	19
ectric Power & Energy System	11	02	01	05	01	20
ransportation Engineering	06	02	01	05	03	17
eo-Tech	06	01	01	05	01	14
icro Electronics	05	01	0	02	01	09
hemical Engineering	02	0	0	01	-	03
OTAL	76	17	06	36	12	147
					Year	2017
ater Resource Engineering	08	01	0	01	0	П
chanical System Design	09	01	0	01	02	13
uctural Engineering	16	03	0	01	03	23
lustrial Tribology & intenance Management	09	0	0	-	-	09
ommunication Information	15	0	0	01	-	16
ectric Power & Energy System	П	01	01	01	04	17
ansportation Engineering	10	0	0	01	02	13
o-Tech	08	01	01	01	03	13
cro Electronics	08	0	0	-	01	09
emical Engineering	02	0	0	-	01	03
tal	96	07	07	07	16	127
					Year	2018
ter Resource Engineering	4	1	0	0	3	8
hanical System Design	6	1	1	0	4	12
uctural Engineering	11	3	0	0	5	19
ustrial Tribology & ntenance Management	10	0	0	0	I.	П
mmunication Information Tech.	7	1	I.	0	0	9
ctric Power & Energy System	12	3	I.	0	5	21
nsportation Engineering	8	2	I.	0	2	13
o-Tech	7	2	I.	0	3	13
cro Electronics	5	2	I.	0	0	8
emical Engineering	1	0	0	0	1	2
ennical Engineering						

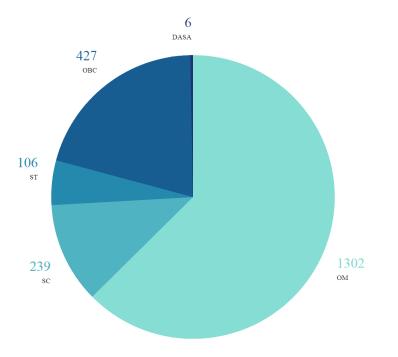
Year on Year Statistics

Batch	CIV	IL	EL	E	ECI		CHE	M.	MEC	:н.	M&N	1E	CSE		IT	
Year	М	F	Μ	F	Μ	F	м	F	м	F	Μ	F	М	F	М	F
2014	109	09	61	12	64	09	54	П	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	П	60	07	56	П	46	П	71	01	12	02	53	07	43	10
2018	112	20	66	12	64	13	60	9	72	П	50	8	52	13	52	10
Total	476	68	297	48	277	55	247	43	346	13	180	34	262	32	223	40

Batch	W	RE	Μ	SD	SE		IT8	MM	CI	Г	EPa	&ES	TE		GT	E	ME		CE		MS	2 P
Year	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	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	П	07	П	0	16	01	13	01	П	03	04	05	04	0	П	25
2018	6	2	12	0	19	0	п	0	6	3	19	2	12	I.	12	I.	7	I.	I.	ī.	3	2

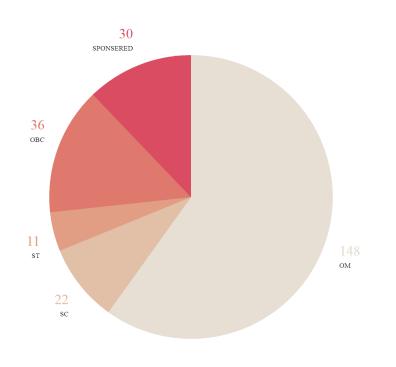
Batch	CIV	/IL	EL	E	EC	E	CHI	EM.	MEG	CH.	M&	ME	CS	E	IT	
Year	м	F	м	F	м	F	Μ	F	Μ	F	М	F	Μ	F	Μ	F
2014	-	01	-	-	01	-	-	-	03	-	-	-	-	-	-	-
2015	06	03	09	03 3	02	-	15	-	-	-	02	01	15	03	-	-
2016	03	04	01	-	02	02	09	01	- I	-	01	01	08	02	-	-
2017	04	14	13	07	06	05	17	03	01	0	02	01	37	09	-	-
2018	4	3	7	3	2	3	10	2	6	0	4	0	10	2	4	I.

Batch	PHYS	ICS	CHEN	IISTRY	MATH	IS	HSS	
Year	м	F	М	F	Μ	F	М	F
2013	13	-	11	4	5	2	-	I.
2014	01	-	-	02	-	-	-	-
2015	05	01	06	01	02	-	02	
2016	01	-	04	-	-	-	-	
2017	09	03	08	02	0	0	0	0
2018	9	0	8	1	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-	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
П	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 Niyaaz 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

tute (then REC Srinagar) in 1960. Over the cializations of Civil Engineering. 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.

leading to the Bachelors Degree in Civil Engi- lems neering & two-year courses leading to Master's degree in four major specializations of civil engineering (viz., Water Resources Engineering, Structural Engineering, Geotechnical

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.

The department of Civil Engineering is the Engineering, & Transportation Engineering & largest & one of the pioneering departments of Planning. The Department, in addition to Un-National Institute of Technology Srinagar. It der-graduate & Post-Graduate Programmes is was established at the inception of the Insti- offering Doctoral Programmes in all the spe-

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 The Department offers a four-year course on the live & challenging civil engineering probto various Governments, semigovernment & the Private organizations.

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	HoD
Associate Professor	Er. Aijaz A Masoodi	
Associate Professor	Dr. S Kaiser Bukhari	Civil Engineering
Associate Professor	Dr. Jan Mohammad Banday	Dur Granner Charry Gr
Associate Professor	Dr. M. Yousuf Shah	Professor Shagufta
Associate Professor	Mrs. Rubina Rashid Mir	Rasool
Assistant Professor	Dr. Shakeel A Waseem	Kasoor
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	

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Prof. M. A. Tantray		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 Trans- lucent Concrete as Energy Efficient Source	Iconic research and engi- neering journals	2019
4	Prof. M. A. Tantray		International Journal of Recent Technology and Engineering (IJRTE)	2019
5	Prof. M. A. Tantray	Life Cycle Cost Analy- sis of Translucent Con- crete	International Journal of Innovative Technology and Exploring Engineer- ing (IJITEE) ISSN: 2278- 3075,	2019
6	Prof. M. A. Tantray	bility Properties of Self-	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878	2019
7	Prof. M. A. Tantray		International Journal of Recent Technology and Engineering (IJRTE)	2019
8	Prof. M. A. Tantray		International Journal of Recent Technology and Engineering (IJRTE)	2019
9	Prof. B. A. Mir		International Journal of Geosynthetics and Ground Engineering 2018, © Springer Inter- national Publishing AG	2018

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 expan- sive soil.	Proceedings of the Insti- tution of Civil Engineers - Ground Improvement, ICE, UK,	2019
11	Prof. B. A. Mir	Applications of Nano- metric Additives in Geotechnical Engineer- ing.	In Procc. of Int'l Conf. on Theoretical and Ex- perimental 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 Ex- perimental 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 compac- tion and strength be- havior of clayey soils	Proceedings of Indian Geotechnical Confer- ence 2018, December 13-15, 2018, IGS Banga- lore, India, © Springer International Publishing AG 2018	2018
14	Prof. B. A. Mir	Load-settlement behav- ior of surface footing on reinforced stiff soil layer overlying soft soil	Geotechnical Confer- ence 2018, December	2018
15	Prof. B. A. Mir	Mechanical behavior of boulder crusher dust stabilized dredged soil	Proceedings of Indian Geotechnical Confer- ence 2018, December 13-15, 2018, IGS Banga- lore, India, © Springer International Publishing AG 2018	2018

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	chanical Behavior of Cement Stabilized	Book Chapter: Contem- porary Issues in Geoen- vironmental Engineering: Civil Engineering Infra- structures	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		International Journal of Geotechnical Engineering	2018
19	Prof. M A Lone		International Journal of Geotechnical Engineering	2019
20	Prof. M A Lone		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		International Journal of Engineering,Technology, Science and Research	2018
23	Prof. M A Lone	nation Of Permeability Of Filter Material Based On Controlling	7th World Conference on Applied Sci- ence ,Engineering and Management, 26-27 Oct.2018, ABS Paris France	2018
24	Dr Kaiser Bukhari		International Journal of Advance Research and Engineering	2018
25	Dr Kaiser Bukhari	Consequences and hazard assessments of natural catastrophes. A case study from Gan- derbal district-NW Himalaya	Disaster Advances	2018

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 con- struction techniques of Srinagar city, Jammu and Kashmir, India	Disaster Advances	2018
24	Dr Kaiser Bukhari		International Journal of Advance Research and Engineering	2018
27	Dr Kaiser Bukhari	Potential alkali silica reactivity of aggregates from different sources of Kashmir and mitiga- tion measures thereof	Asian Journal of Civil Engineering	2019
28	Dr Kaiser Bukhari	Impact of geological and environmental complexities over in- frastructure develop- ment in Kashmir Hima- laya	Disaster Advances	2019
29	Dr Kaiser Bukhari		Journal of Civil Engineer- ing and Environmental Technology	2019
30	Dr. Abdul Qayoom Dar		International Journal of Geotechnical Engineering	2018
31	Dr. Abdul Qayoom Dar		International Journal of Advanced Structures and Geotechnical Engineering	2018
32	Dr. Abdul Qayoom Dar	nation of Permeability	Engineering and Manage-	2018

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	nation of Permeability	Engineering and Manage-	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 neu- ral networks algo- rithms to rainfall-runoff modeling - (case study Jhelum river basin)	ISHMMT 2018	2018
35	Dr. Abdul Qayoom Dar	tershed Management	Internation Journal of Advance Research in Science and Engineering	2018
36	Dr. Abdul Qayoom Dar		International Journal of Geotechnical Engineering	2019
37	Dr. Abdul Qayoom Dar	Spatial variability Analy- sis and Mapping of Infiltration rate in NIT Srinagar campus using GIS	HYDRO-2019 conference	2019
38	Dr. Abdul Qayoom Dar	Regularization and Levenberg Marquadt training algorithms of	International Conference on Cybernetics, Cogni- tion and Machine Learn- ing Applications (ICCCMLA) 2019	2019

S . No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
39	Dr. Abdul Qayoom Dar		Journal of Civil Engineer- ing and Environmental Technology	2019
40	Dr. Abdul Qayoom Dar	Chemical quality of Dal lake	The Institution of Engi- neers India	2019
41	Dr. Abdullah Ahmad		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. Shagoofta Rasool Shah	The Application of metal organic frame- works in capture and storage of CO2 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		Construction and Build- ing Materials	2018
46	Prof. A.R.Dar	Structural performance of cold-formed steel composite beams		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 geo- polymer composite specimens		2019

59th Annual Report

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 Char- acteristics of Green- Concrete Specimens		2019
50	Prof. A.R.Dar		IOP Conference Series Materials Science and Engineering	2019
51	Prof. A.R.Dar		IOP Conference Series Materials Science and Engineering	2019
52	Prof. A.R.Dar	Advanced performance of fly ash co-mixtured self-compacting con- crete		2019
53	Prof. A.R.Dar		IOP Conference Series Materials Science and Engineering	2019
54	Prof. A.R.Dar	Effect of angle stiffen- ers on the flexural strength and stiffness of cold-formed steel beams		2019
55	Prof. A.R.Dar	Seismic Performance Evaluation of a Pro- posed Buckling- Restrained Brace for RC-MRFS	Civil And Environmental Engineering Reports	2019
56	Prof. A.R.Dar	Strengthening of capac- ity 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 imper- fections		2019

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
58	Prof. A.R.Dar	Seismic safety assess- ment of masonry build- ings 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 investiga- tion and numerical validation	Advances in Structural Engineering	2019
60	Prof. Javed		International Journal of Hydrology Science and Technology	2018
61	Prof. Javed	Effect of Gradation of Bed Material on Local Scour Depth	Geotechnical and Geo- logical 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		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. Moham- mad Shafi Mir		International Journal of Road Materials and Pave- ment Design	2018
66	Prof. Moham- mad Shafi Mir		International Journal of Construction and Build- ing Materials	2018

59th Annual Report

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. Moham- mad Shafi Mir		Evaluation and Program Planning	2019
68	Prof. Moham- mad Shafi Mir		Innovative Infrastructure Solutions	2019
69	Prof. Moham- mad Shafi Mir		Canadian Journal of Civil	2019
70		Effect of Freeze-Thaw Cycles on the Proper- ties of Asphalt Pave- ments in Cold Regions: A Review	Transportation Research Procedia	2019
71	Prof. Moham- mad Shafi Mir		Canadian Journal of Civil Engineering	2019
72	Prof. Moham- mad Shafi Mir		Transportation Research Procedia	2019
73	Prof. Moham- mad Shafi Mir		International Journal on Emerging Technologies	2019
74	Prof. Moham- mad Shafi Mir	Transport (NMT) User	International Journal of Innovative Technology and Exploring Engineer- ing	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
I	Prof. B. A. Mir	Recent Advances in Soil-Structure Interac- tion 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 Chap- ter in association with Indian Institute of Science, Banga- lore, India, © Spring- er International	December 13-15, 2018
3	Dr Javed Ahmed Naqash	Fifth International Congress on Engi- neering & 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
П	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)	Sponsering Agency (if any)
I	Briquetting of Dal Lake Weeds	Experimental investigation on transmis- sion of light in green build- ings using translucent concrete	23.90 Lakhs	MHRD

Doctoral Program(s)

S . No.	Scholar	Supervisor(s)	Status of Degree
I	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	lftikhar Gull	Dr. M. A. Tantray	Ongoing
10	Aliya Naseer	Dr. M. A. Tantray	Ongoing
H	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	I.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

59th Annual Report

Doctoral Program(s)

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	lftikhar 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	Ishtiyaq Ahmad Rather	Prof. A. Q. Dar	Ongoing

Doctoral Program(s)

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 Aejaz	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. Banday	Ongoing
58	Ikhlaq Ahmed	Prof. J. M. Banday	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 UI Hassan Chowdhary	Dr. J . M Banday	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	Mohmmad 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)
I	Soil investigation for construction of Three Storey Indoor Sports Facility Compolex at NIT Campus Srinagar		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 RD110.972km along the bank of River Jhelum	Flood Control Sumbal Bandipora	I,08,000.00
4	Soil investigation for preparation of Master Plan for River Jhelum, Srinagar		2,22,500.00
5	Soil investigation construction of foundation for Lift Irrigation System at Shopian		I,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 Pvt. Agen- cy	4,23,000.00

Purchase(s) Made

Purchases made by the department during the period.

S . No.	Name of Equipment	
I	(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 equpment	
5	Triaxial conversion kit for existing triaxial equpment	
6	Hand pellet truck (Cap.2.5 ton	
7	TML earth soil pressure guage type: kdj-200 kPa	
	• 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 Laboratory	16	Geology Laboratory

59th Annual Report

3.2 Department Of Mechanical Engineering

chanical Engineering offers a unique opportuni- MEMS on one end to High-temperature Tribolty in terms providing first-class pedagogy & ogy, Manufacturing Strategies & Quality Conworld class facilities for conducting cutting- trol on the other. The traditional areas of Meedge research. Being one of the oldest depart- chanical Engineering such as Machine Design, ments of NIT Srinagar, the department has Fluid Mechanics & Thermal Sciences are also evolved into one of the finest in terms of well-represented. The department has a very teaching curriculum & methodology supported strong group working in the area of Friction, by a well-organised & adequately funded re- Lubrication & Wear, with state-of-the-art research program. We have a very well- search facilities & equipment. Our academic established B.Tech. program complemented by curriculum has improved considerably with the two M.Tech. Programmes in Mechanical Sys- passage of time. Regular Board of Studies tem Design & Industrial Tribology & Mainte- meetings are conducted to remove any inadnance Management. The masters" students are vertent deficiencies. Periodic feedback is taken admitted on the basis of a valid GATE score, & from the students to improve the quality of the some additional seats are reserved for merito- education imparted. Feedback is also taken rious sponsored candidates. The Research from the visiting companies during the place-Scholars (PhD) are admitted to the department ment season to orient the curriculum towards every year on the basis of a rigorous examina- the needs of the Industry. Specialized courses tion conducted by the department. The curric- are floated to cater to the needs of the PhD ulum is designed to cater to the needs & aspi- scholars, preparing them for subsequent rerations of the industry, & our top class faculty search. We strive to produce engineering gradensures that the students acquire the necessary uates of high quality who are team players, technical & decision making skills to be the accountable, resourceful & above all, technicalleaders in the dynamic world of industry.

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.

Established in 1963, The Department of Me- faculty members who specialize in Haptics & ly competent.



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.

Nye

"There is nothing I

believe more strongly

than getting young

people interested in

science and engineering,

for a better tomorrow,

for all humankind." - Bill

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

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Prof. G.A. Harmain	Azher Jameel, G. A. Har- main, "Fatigue crack growth analysis of cracked speci- mens by the coupled finite element-element free Ga- lerkin method".	Materials and Structures,	2018
2	Prof. G.A. Harmain	G. A. Harmain Aazim Shafi Lone, Azher Jameel, "A cou- pled finite element-element free Galerkin approach for modeling frictional contact in engineering components."		2018
3	Prof. G.A. Harmain	Ghulam Harmain, Azher Jameel, "A coupled FE-IGA technique for modeling fa- tigue crack growth in engi- neering materials",	Materials and Structures,	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".		2018
5	Prof. G.A. Harmain	Aditya Kumar Singh, Azher Jameel, GA Harmain, "Investigations on crack tip plastic zones by the extend- ed iso-geometric analysis".	Materials Today: Pro- ceedings, Elsevier.	2018
6	Prof. G.A. Harmain	Azher Jameel, G. A. Har- main, "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 buoy- ancy driven flow and heat transfer features of converg- ing and diverging trapezoidal cylinders".	Sādhanā, Springer India.	2018

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
8	Prof. G.A. Harmain		International Journal of Heat and Mass Transfer	2018
9	Prof. G.A. Harmain	Saad Parvez, G.A. Har- main "Building Taxono- my for developing strategic partnerships with Original Equip- ment Manufacturers of a firm".	Materials Today: Pro- ceedings.	2018
10	Prof. G.A. Harmain	Shafi Lone, Showkat Ahmad Kanth a, Azher Jameel b, "A state of	tional Conference of Materials Processing and Characterization, IC-	2019
II	Prof. G.A. Harmain	Aazim Shafi Lone, G. A. Harmain b, Azher Jameel c "Elasto Plastic	Materials Today Pro- ceedings, 9th Interna- tional Conference of Materials Processing and Characterization, ICMPC	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 Experi- mental Study on Inves- tigation of Machining of nickel based Super Alloy 718.		2019

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. Har- main, "Influence on tempera- ture profile in an oil film in thrust bearings using an embedded cooling circuitry beneath the pad surface".	Proc Engineering Tribol- ogy, 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 Con- figuration of Dissimilar Sheet Thickness FSSW of Marine Grade Al Alloy",	Mechanical Sciences and	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 nick- el based super alloy – 718 using ceramic cutting insets".	Research Express, IOP	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".	ence and Mechanical	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".	Materials Science and	2019
19	Prof. Babar Ahmad	Omer Hussain, Babar Ah- med, Shahid Saleem, M.F. Wani, M. Jebran, "Effect of counter-face material on the tribological characteristics of UHMW polyethylene under synovial fluid lubrication"		2019

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 Alu- mina and PVA Compo- site Membranes"	Krishi Sanskriti Publica- tions	2018
21	Prof. Babar Ahmad	Fasil Qayoom Mir, Babar Ahmad, Anupam Shukla, "Influence of Concentra- tion 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 re- placement: A review from the tribological perspective"		2019
23	Prof. Babar Ahmad	Diyan UI Imaan, Fasil Qayoom Mir, Babar Ahmad, "Preparation and Characterization of a novel nano-size titani- um oxide-PVA compo- site ion exchange mem- brane"		2019
24	Prof. Babar Ahmad	Hannan Gada, Deepa Mudgal, Saad Parvez, B a b a r A h m a d , "Experimental Evalua- tion of High Tempera- ture Corrosion Perfor- mance of Ni25Cr Coat- ed and Bare 347H SS in Air and Simulated Husk Fired Boiler Environ- ment"	Journal of Physics, IOP	2019
25	Prof. Babar Ahmad	Suhail Ganiny, Majid H Koul, Babar Ahmad, "Stability Analysis of Dual-rate Haptics Con- troller Using Two Con- trol Architectures"		2019

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"	Industrial Engineering	2018
27	Prof M. F. Wani	RG M J Khan, M F Wani, "Tribological properties of glass fiber filled polytetraflu- oroethylene sliding against stainless steel under dry and aqueous environments: en- hanced tribological perfor- mance in sea water"		2018
28	Prof M. F. Wani	P Kumar, MF Wani, "Tribological Characteriza- tion of Hypereutectic Al- 25Si Alloy Under Dry and Lubricated Sliding Condi- tions"	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"		2018
30	Prof M. F. Wani	PK, MF Wani,"Effect of Tem- perature on the Friction and Wear Properties of Gra- phene Nano-Platelets as Lubricant Additive on Al- 25Si Alloy"		2019
31	Prof M. F. Wani	MF Wani,Deepak Kumar,K. B. Deepak,S. M. Muzakkir, "Enhancing tribological per- formance of Ti-6AI-4V by sliding process."		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".		2018

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 influ- ence of cutting fluid condi- tions and machining parame- ters on cutting performance and wear mechanism of coat- ed 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."		2019
35	Prof M. F. Wani	H Singh, M Singh, J Singh, BS Bansod, T Singh, A Thakur, MF Wani, "Composition dependence study of thermal- ly evaporated nanocrystalline ZnTe thin films".	ence: Materials in Elec-	2019
36	Prof M. F. Wani	S B , M F W a n i , "Nanomechanical and na- notribological characteriza- tion of multilayer self- lubricating Ti/MoS2/Si/MoS2 nanocoating on aluminium- silicon substrate."		2019
37	Prof M. F. Wani	S Banday, MF Wani, "Nanoscratch Resistance and Nanotribological Perfor- mance of Ti/MoS2 Coating on Al-Si Alloy Deposited by Pulse Laser Deposition Tech- nique"	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 proper- ties of bronze filled PTFE under dry sliding conditions and aqueous environments (distilled water and sea wa- ter)	Surface Science and Engi-	2018

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 characteriza- tion 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 Banday, S Mushtaq, J Khan, J Singh, SS Saleem, "Comparative assessment of coated CBN and multilayer coated car- bide tools on tool wear in hard turning AISID2 steel"	BOINDIA-2018 An In- ternational Conference	2018
42	Prof M. F. Wani	S Mushtaq, MF Wani, SS Saleem, S Banday, MJ Mir, J Khan, J Singh, "Tribological Characteristics of Fe-Cu-Sn Alloy with Molybdenum Disulfide as a Solid Lubricant under Dry Conditions"	BOINDIA-2018 An In- ternational Conference	2018
43	Prof M. F. Wani	S Banday, MF Wani, MJ Mir, J Singh, S Mushtaq, J Khan, SS Saleem, "Nanoscratch Prop- erty of Self-lubricating Ti/ MoS2 Nanocoating at Nano- scale Level"	BOINDIA-2018 An In- ternational Conference	2018
44	Prof M. F. Wani	J Singh, MF Wani, S Banday, MJ Mir, J Khan, S Mushtaq, SS Saleem, "Nanomechanical Property of Max Phase Ma- terial Ti2AIC"	BOINDIA-2018 An In- ternational Conference	2018
45	Prof M. F. Wani	J Khan, MF Wani, R Gupta, SS Saleem, S Mushtaq, MJ Mir, J Singh, "Tribological performance of polytetraflu- oroethylene (PTFE) in aque- ous environments and dry sliding"	BOINDIA-2018 An In- ternational Conference	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 condi- tions"	Bilim Ve Teknoloji	2018
47	Prof. S.N. Ahmed	S. H. Din, M. A. Shah, and N. A. Sheikh, "Tribological Per- formance of Titanium Alloy Ti-6AI-4V via CVD- diamond Coatings".		2018

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 Dia- mond Coatings"		2018
49	Prof. S.N. Ahmed	Sajad Hussain Din, M. A. Shah, M. Mursaleen Butt, "CVD Diamond".		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 Gen- eration".		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".	Mechanical And Produc- tion Engineering Re- search And Develop-	2019
52	Prof. M.M.Wani	S. Naresh Kumar Reddy and M. Marouf Wani, "Engine performance and emission studies by applica- tion of antioxidant as addi- tive in biodiesel diesel blends".	ceedings 2200, 020015 ,	2019
53	Prof. Adnan Qayoum	O Gulzar, A Qayoum, R Gupta, "Photo-thermal characteristics of hybrid nanofluids based on Ther- minol-55 oil for concentrat- ing solar collectors"	Applied Nanoscience	2018
54	Prof. Adnan Qayoum	A Qayoum, P Panigrahi, "Experimental investigation of heat transfer enhance- ment in a two-pass square duct by permeable ribs"		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

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 Charac- teristics of Synthetic Jet Actuator using Flat Tube and Diamond shape orifice"	Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018.	2018
57	Prof. Adnan Qayoum	A Ahmed, A Qayoum, FQ Mir, "Investigation of the thermal behavior of the natural insulation materials for low temperature re- gions"		2019
58	Prof. Adnan Qayoum	O Gulzar, A Qayoum, R Gupta, "Experimental study on stability and rheological behaviour of hybrid Al2O3- TiO2 Therminol-55 nanoflu- ids for concentrating solar collectors"	Powder Technology	2018
59	Prof. Adnan Qayoum	A Rasool, A Qayoum, "Numerical Investigation of Fluid Flow and Heat Trans- fer 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"	Mechanics and Fluid	2018
61	Prof. Adnan Qayoum	K Sumanth, A Qayoum, R Gupta, "Numerical Investiga- tion of the Effects of the Leading Edge Protuberances on the Aerodynamic Perfor- mance of an Airofoil in Tur- bulent Flow Regime"	Mechanics and Fluid Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018.	2018
62	Prof. Adnan Qayoum	M Bashir, A Qayoum, SS Saleem, "Influence of ligno- cellulosic banana fiber on the thermal stability of brake pad material"		2019
63	Prof. Adnan Qayoum	K Sumanth, A Qayoum, R Gupta, "Computational In- vestigation of Airfoil noise in a turbulent regime"	ASTFE Heat and Mass	2019

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: Con- ference Series	2019
65	Prof. Adnan Qayoum	M Ahmad, A Qayoum, "Investigation of Im- pingement of Double Orifice Synthetic Jet for Heat and Fluid Flow Characteristics in Quiescent Flow"	Pertanika Journal of Science & Technology	2019
66	Dr. Saad Par- vez	Saad Parvez, G.A. Har- main, "Building Taxon- omy for developing strategic partnerships with Original Equip- ment Manufacturers of a firm".	Science Direct, Elsevier, Materials today	2018
67	Dr. Saad Par- vez	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	Wani, Sheikh Shahid Saleem, Muhammad Junaid Mir,	Sustainable Develop- ment, 14,2/3, 119, d o i : 1 0 . 1 5 0 4 / wrstsd.2018.093216	2018
69	Dr. Sheikh Shahid Saleem	oum and Shahid Saleem, "Preparation Characterization and Thermo-Physical Prop-	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	Adnan Qayoum and Shahid Saleem,	Power Conference in IIT Bombay, FMFP 2018, Dec 10-12, 2018.	2018

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"	Mechanics and Fluid Power Conference in IIT	2018
71	Dr. Sheikh Shahid Saleem	Shuhaib Mushtaq, M F Wani, S S Saleem, Summera Banday, M Junaid Mir, Jebran Khan, Jagtar Singh, "Tribological Characteristics of Fe-Cu-Sn Alloy with Mo- lybdenum DiSulfide as a solid Lubricant under Dry Condi- tions".	on Tribology, TRI- BOINDIA 2018, "Tribology for Reliability and Life", 13-15 Decem- ber, 2018, VJTI, Mumbai.	2018
72	Dr. Sheikh Shahid Saleem	Jebran Khan, M F Wani, Rajat Gupta, S Shahid Saleem, Shuhaib Mushtaq, M Junaid Mir, Jagtar Singh, Sum- mera Banday, "Friction and Wear Behaviour of Polytet- rafluoroethylene under Dry and Aqueous Environments".	on Tribology, TRI- BOINDIA 2018, "Tribology for Reliability and Life", 13-15 Decem- ber, 2018, VJTI, Mumbai.	2018
73	Dr. Sheikh Shahid Saleem	Jagtar Singh, M F Wani, Sum- mera Banday, 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 Ti2AIC,. International Con- ference on Tribology"	on Tribology, TRI- BOINDIA 2018, "Tribology for Reliability and Life", 13-15 Decem- ber, 2018, VJTI, Mumbai.	2018
74	Dr. Sheikh Shahid Saleem	Summera Banday, M F Wani, M Junaid Mir, Jagtar Singh, Shuhaib Mushtaq, M Jebran Khan, S Shahid Saleem, "Nanoscratch Prop- erty of Self-lubricating Ti/ MoS2 Nano Coating at Nano-Scale Level, Interna- tional Conference on Tribol- ogy"	BOINDIA 2018, "Tribology for Reliability and Life", 13-15 Decem- ber, 2018, VJTI, Mumbai.	2018

S . No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
75	Dr. Sheikh Shahid Saleem	Wani, Summera Banday, Shuhaib Mush- taq, Jebran Khan, Jagtar Singh, S Shahid Saleem,	"Tribology for Reliability and Life", 13-15 Decem- ber, 2018, VJTI, Mumbai.	2018
76	Dr. Sheikh Shahid Saleem	Gandotra, Shahid Saleem and M F Wani, "Correlating the effect		2019
77	Dr. Sheikh Shahid Saleem	Qayoum and Shahid Saleem, "Analysis of fractional heating and	2 nd Intl Conference on New Frontiers in Engi- neering, Science & Tech- nology in NIT Kur- kushetra, NFEST 2019, Feb 18-22, 2019. CONFERENCE	2019
78	Dr. M. S. Charoo	MSC, Pranav Dev Srivyas, "Role Of Rein- forcements On The Mechanical And Tribo- logical Behavior Of Aluminum Metal Ma- trix Composites – A Review"		2018
79	Dr. M. S. Charoo	MSC, P.D. Srivyas, "A Review on Tribological Characterization of Lubricants with Nano Additives for Automo- tive Applications"	Tribology in Industry	2018

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
80	Dr. M. S. Charoo		Materials Today Pro- ceedings	2018
81	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Effect of load on the tribo- logical behavior of self- lubricating hybrid aluminum composite under dry sliding conditions"		2019
82	Dr. M. S. Charoo	MSC, Pranav Dev Srivyas, " Aluminum metal matrix composites a review of rein- forcement; mechanical and tribological behaviour"	Engineering & Technolo-	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"		2018
84	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Effect of load on the fric- tion and wear properties of aluminum hybrid composite/ chromium plated chrome steel tribopair under bound- ary lubrication conditions"		2019
85	Dr. M. S. Charoo		International Journal of Rapid Manufacturing	2019
86	Dr. M. S. Charoo	PD Srivyas, MS Charoo, "Application of Hybrid Alu- minum Matrix Composite in Automotive Industry"	Materials Today: Pro- ceedings	2019
87	Dr. M. S. Charoo	SA Bhat, MS Charoo, "Bio- Tribological Study of Synovi- al Fluid in the Orthopedic Implants"		2019

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 Proper- ties Of Sesame Oil Mixed With H-Bn Na- noparticles As Industri- al Lubricant"		2019
89	Dr. M. S. Charoo	M.S. Charoo, M. Ha- nief, "Improving the Tribological character- istics of lubricating oil by nano sized addi- tives"		2019
89	Dr. M. Hanief	M.S. Charoo, M. Ha- nief, "Improving the Tribological character- istics of lubricating oil by nano sized addi- tives"		2019
90	Dr. M Mur- saleen	Mohammad Mursaleen & Sheikh Nazir "Finite Element Modelling & Analysis of debonded smart beam in Actua- tion"	IJRTE-Elsevier	2019
91	Dr. M Mur- saleen		IOP Publishing Ltd, IOP Conference Series, Jour- nal of Physics	2019
92	Dr. H.S Pali	N Kumar, A Sonthalia, HS Pali, "Alternative fuels for diesel engines: New frontiers"		2018
93	Dr. H.S Pali	V Saxena, PS Yadav, HS Pali, "Effect of magnetic abrasive machining process parameters on internal surface finish"		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: Pro- ceedings	2019

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 In- gress Problem in Gas Tur- bine of Naval Ship"		2019
96	Dr. H.S Pali	PS Yarav, HS Pali, N Kumar, "EFFECT OF HIGHER IN- JECTION PRESSURE ON BIODIESEL FOR SPRAY FORMATION"	SAE Technical Paper	2019
97	Dr. H.S Pali	HS Pali, "Experimental Inves- tigations 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 Emul- sion"	Mechanical Engineering	2018
99	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandy, "Wire electri- cal discharge machining char- acteristics of AA6061/ cenosphere as-cast alumi- num matrix composites".	turing	2018
100	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandy, "Selection of optimal processing condition during WEDM of compo- casted AA6061/cenosphere AMCs based on grey-based hybrid approach"	turing Processes,	2018
101	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandy, "Wear behav- iour of Mg alloys and their composites–a review"		2018
102	Dr. Abhijit Dey	N Niraj, KM Pandey, A Dey, "Tribological behaviour of Magnesium Metal Matrix Composites reinforced with fly ash cenosphere"		2018

S. No.	Faculty Member	Title of the paper	Conference/ Journal where published	Date of Publication
103	Dr. Abhijit Dey	Abhijit Dey and Krsihna Murari Pandy, "Machinability of ceno- sphere particulate-reinforced AA6061 aluminium alloy prepared by compocasting".	Institution of Mechanical Engi-	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 Compo- site with Rice Husk as Reinforce- ment: A Review".		2018
106	Dr. Abhijit Dey	N Behera, KM Pandey, AB De- oghare, A Dey, "Modeling & Simu- lation of Interface Stability in Metal Matrix Composites Subjected to off-axis loading using Cohesive Zone Model under Elevated Tem- perature: A Review".	Proceedings, Else-	2018
107	Dr. Abhijit Dey	A Dey, VRR Bandi, KM Pandey "Wire electrical discharge machin- ing characteristics of AA6061/ cenosphere aluminium matrix composites using RSM".		2018
108	Dr. Abhijit Dey	A.K. Dey, U. Kumar , A. Dey, "Use of response surface method- ology for the optimization of pro- cess 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

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 HfB2-ZrB2-SiC composites: Effect of B4C and carbon nanotube rein- forcements"	Refractory Metals and	2019
111	Dr. M. Mohsin Khan	MM Khan, G Dixit, "Evaluation of Microstruc- ture, Mechanical, Thermal and Erosive Wear Behavior of Aluminum-Based Compo- sites"	Silicon	2019
112	Dr. M. Mohsin Khan	A Nisar, MM Khan, K Balani, "Enhanced thermo- mechanical damage toler- ance of functionally graded ZrB2-20SiC ceramic rein- forced with carbon nano- tubes"	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"		2018
4	Dr. Majid H Koul	S Ganiny, MH Koul, B Ah- mad, "Stability Analysis of Dual-rate Haptics Controller Using Two Control Archi- tectures"		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"	Optimization of Dynam- ical 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 stain- less steel cladding"	Letters	2018

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 Fric- tion Stir Welded Dissimilar Aero- space Aluminium Alloys"	Materials Science and Engineering	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"	Express	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"	Proceedings	2018
120	Dr. Noor Zaman Khan	P Goel, NZ Khan, ZA Khan, A Ah- mari, N Gangil, MH Abidi, AN Sid- diquee, "Investigation on material mixing in dissimilar Friction stir welding of AA7475 and AISI 304 Stainless steel"	ufacturing Process- es	2018
121	Dr. Noor Zaman Khan	NZ Khan, AN Siddiquee, ZA Khan, "Proposing a new relation for se- lecting tool pin length in friction stir welding Process"		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 com- posites: A review"	forced Plastics and Composites	2019
123	Dr. Noor Zaman Khan	NZ Khan, TSA Ansari, AN Sid- diquee, ZA Khan, "Selection of E learning websites using a novel Proximity Indexed Value (PIV) MCDM method"	ers in Education	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 Con- ference on Hydrogen Energy, ANM, 2019	University of Aveiro, Aveiro-Portugal	2019
2.	Prof. G.A. Harmain	come Based Education	AICTE Auditorium Nel- son Mandela Marg Road Vasant Kunj, New Delhi	
3.	Prof. G.A. Harmain	ence on Contemporary issues in Engineering, Agriculture, Applied	Department of Metallur- gical and Materials Engi- neering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	2019
4.	Prof. G.A. Harmain	ference on Nanotech-	SKUAST Shalimar Srina- gar (jointly organized by NIT Srinagar and IIT Kharagpur)	2019
5.	Prof. G.A. Harmain	International Confer- ence on Materials Sci- ence and Manufactur- ing Technology 2019	Hotel Alfot, Coimbatore, Tamil Nadu	2019
6.	Prof. G.A. Harmain	ence on Recent trends in "Engineering, Tech-	Department of Metallur- gical and Materials Engi- neering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	
7.	Prof. G.A. Harmain	ence on Contemporary issues in Engineering,	Department of Metallur- gical and Materials Engi- neering, NIT Srinagar, J&K and Krishi Sanskrit, New Delhi	
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)
Ι.	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)	February17-18 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 Analy- sis Tool".	2019	Dr. M. Hanief	NIT Srinagar
5.	2nd International Indo- Tunisian Symposium on "Tribology for Sustainabil- ity"	2019	Prof M F Wani Dr. Sheikh Sha- hid Saleem Dr. Mukund Dutt Sharma Dr. Abhijit Dey	
6.	One week Short Term Course on Advanced Mate- rials Processing and Characterization.	2019	Dr. Abhijit Dey	TEQIP III (NIT Srinagar)
7.	Lectures on "The Fascinat- ing 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

59th Annual Report

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	
Π.	One Week Summer Train- ing Programme on Production Planning and Control with Primavera in association with Vaanahaa.	16-07-	Dr. Saad Parvez	IIED Center,
12.	4 Days Workshop on Tod Fod God (TFG) 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)
I	MGNEREGA, A project of national importance, "Time and Motion Study in Jammu, Kashmir & Ladakh Regions".	vez,	25,00,000.00	Ministry for Rural Development and Panchayati Raj, Government of India
2	Development & Tribologi- cal Characterization of Self Lubricating Nano-Silicon Nitride and Nano-Silicon Ceramic Composites	Wani, Dr.	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	I,00,000.00	TEQIP-III
5	Bio-Gas Generation from Kitchen Waste of Hostel Mess		1,00,000.00	TEQIP-III

Doctoral Program(s)

S . No.	Scholar	Supervisor(s)	Status of Degree
I	Jagtar Singh	Prof. M F Wani	Ongoing
2	Qurat UI 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 UI 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. N o.	Title of the Project	Consultancy rendered to (name of the agency)	Amount Earned (in INR)
I	NDT of Steel frame structure of Mul- ti level car Parking (Prof. G.A. Har- main)	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 Qay- oum, 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
T	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
I	Universal Friction Stir Welding/Processing Tool Adopter	Applied (Published)	20191100 2618 22/01/201 9	Intellectual Property India

3.3. Department Of Electrical Engineering

now 53 years old. For many years, the Depart- 10 years. It compromises of analysis yearly ment offered courses in both Electrical Engi- achievements for all previous years. This asneering. In 1984, the Department was bifurcat- achievements/ progress on annual basis. ed into two Departments viz Electrical Engineering & Electronics & Communications Engi- To complete more result-oriented tasks, the neering. The history since then has been one committee carried out thorough discussions in of continuous expansion & modernization. The order to understand the gaps in the present Department has contributed & is contributing scenario ad the desirable future of the departin several ways to the growth of Electrical ment as well as institute. 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-

The Department of Electrical Engineering is gram educational objectives for a span of next neering & Electronics & Communications Engi- sessment is used for interdepartmental

"If you want

to find the

secrets of the

universe, think

— Nikola Tesla

in terms of energy,

frequency and vibration."

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.

Vision

The department of Electrical Engineering aims to be a frontrunner 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.

Faculty

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
Frainee Teacher	Ms. Tabish Nazir Mir
ecturer (on contract)	Mr. A. Ali Abass
ecturer (on contract)	Mr. M. ul Bashir
Lecturer (on contract)	Ms. S. Ashraf

HoD Electrical Engineering Professor

Abdul Hamid Bhat

Publications

Papers published and presented by the Faculty:

S. N o.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publica- tion
I	A. H. Bhat	0 1	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	0 0	2019
3	O. C. Sekhar	Implementation of zero current switch turn-ON based buck- boost-buck type recti- fier for low power applications	International Journal of Electronics	2019
4	O. C. Sekhar	A review of recent advancements in flux reversal perma- nent magnet machine (FRPMM)	International Journal of Recent Technology and Engineering	2019
5	A. H. Bhat		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 model- ing for restructured AGC using a novel fractional order cas- cade controller	Electric Power Systems Research (Elsevier)	2019
7	A. Ali Abass	SimPower-based analy- sis and design of a hybrid wind-diesel- superconducting	Wind Engineering	2019
8	M. A. Bazaz	Modified SVPWM Technique for a Sensor less Controlled Induc- tion Motor Drive using Neural Network Ob- server and Predictive Controller	Int. Journal of Advanced Intelligence Paradigms	2019
9	O. C. Sekhar	namic analysis of single	International Journal of Innovative Technology and Exploring Engineer- ing	2019
10	O. C. Sekhar	-	International Journal of Recent Technology and Engineering	2019
11	O. C. Sekhar	hancement by MPC	Energy Sources, Part A: Recovery, Utilization, and Environmental Ef- fects	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		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		Journal of Electrical Engi- neering	2018
15	N. Gupta	Gauss quadrature based probabilistic load flow method with volt- age dependent loads in -cluding WTGS, PV and EV charging uncer- tainties	Industry Applications,	2018
16	A. H. Bhat	Design and Perfor- mance Evaluation of Self-Supported Dynam- ic Voltage Restorer For Mitigating Various Power Quality Prob- lems	Int. Journal Power Elec- tronics	2018
17	A. H. Bhat	A current source in-	Int. J. Industrial Electron- ics 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		Journal of Intelligent and Fuzzy Systems, IOS Press (SCI)	2018
22	A. H. Bhat	Power quality improve- ment in hybrid filter using fuzzy logic con- troller		2018
23	M. A. Bazaz	Simulation acceleration of high-fidelity nonline- ar power electronic circuits using model order reduction		2018
24	A. H. Bhat	Review and compara- tive analysis of dual active bridge isolated DC to DC converter with different control techniques	Int. J. Industrial Electron- ics and Drives	2018
25	T. N. Mir & A. H. Bhat	Constant Switching Frequency DTC for Matrix Converter Fed Speed Sensorless In- duction Motor Drive	- · · · ·	2018
26	M. Ud- Din Mufti		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 Reso- lutions for Power Elec- tronic Circuits	ICC 2019	2019
29	N. Gupta		IEEE Power Electronics, Drives and Energy Sys- tems Conference, IIT Madras	2018
30	M.A. Bazaz	Model Order Reduc- tion of Two Area Electric Power System	ICCCA 2018	2018
31	M.A. Bazaz	Reduced Order Model- ing of Ring Oscillator System with POD- DEIM	ICCCA 2018	2018
32	T. N. Mir & A. H. Bhat	New Modulation Meth- ods for Single Phase to Three Phase Matrix Converters	PEDES 2018	2018
33	A. Ahmad & A. H. Bhat	Power Quality Im- provement of Utility- Distribution System using Self- Supported DSTATCOM based on Unit Template based Control Algorithm in PFC and ZVR Modes		2018
34	A. H. Bhat	Power Quality Im- provement 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 Anal- ysis and Identification of Optimum Operating Zone of Single Phase Shift and External Phase Shift Control Modes in Dual Active Bridge Converter		2018
36	A. H. Bhat	Adaline-Based Control of Self Supported DVR for Mitigation of Vari- ous Source Side Power Quality Problems	*	2018
37	A. Ahmad	A control strategy for STATCOM in Alleviation of sub syn- chronous Resonance in power systems	ICPEICES-2018	2018
38	A. Ahmad	Grid tied hybrid pho- tovoltaic fuel cell pow- er system for residen- tial load	ICPEICES-2018	2018
39	F.I. Bakhsh		•	2018
40	F.I. Bakhsh	Efficiency Enhancement of a Solar Power Plant Using Maximum Power Point Tracking Tech- niques	CCTES 2018	2018
41	M.A. Bazaz	Neural N e t w o r k Observerfor Sensorless Direct Torque Con- trolled 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
T	Dr. A. Rah- man	National Short Term Course on "Recent Advances in Applied Optimization"	IIT Guwahati	24-28 Dec, 2018
2	Dr. F. I. Bakhsh	Four Week Orienta- tion Program	UGC HRDC, AMU, Aligarh	18 July-14 Aug, 2018
3	Dr. F. I. Bakhsh	Summer Training Pro- gram on Active Learn- ing 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 Con- troller"	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)
I	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)
I	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
I	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. Ikhlaq 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. N o.	Name of Equipment
I.	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
T	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 as a world-class leader in IT education & rewas 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.

search. 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,

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

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 industryacademia relationships for mutual benefit.
- To develop IT professionals imbibed 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

Publications

Papers published and presented by the Faculty:

S. No.	Staff Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Dr. Shabir Ahmad Sofi	Comparative Advantages of System on Chips in Intelligent Traffic System		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 tuna- ble optical power split- ter	The International Society for Optical Engineering	2019
5	Usma Niyaz			2019
6	Usma Niyaz	Advances in Deep Learning Techniques for Medical Image Analysis	IEEE Conference 2018 Fifth International Conference on Parallel, Distributed and Grid Com- puting (PDGC),	2018

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S.No	Scholar	Supervisor(s)	Status of Degree
I.	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
I.	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
I	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

59th Annual Report 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-learningexperience 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

Publications

Papers published and presented by the Faculty:

S . No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Khandelwal, S., Chauhan, Y.S., Fjeldly, T.A., Ghosh, S., Pampori, A., Mahajan, D., Dangi, R, Ahsan, S.A.	Standard Model for	Electron Devices, 66 (1), art. no. 8476221, pp. 80-	2018
2	Singh, A., Khosla, M., Raj, B.	Design and analysis of dynamically configura- ble electrostatic doped carbon nanotube tun- nel FET	Microelectronics Journal	2018
3	Banday, Y., Rather, G.M., Rasool Begh, Gh.	Effect of atmospheric absorption on millime- tre wave frequencies for 5G cellular net- works	IET Communications	2018
4	Qayoom, T., Qazi, G. A	A Comparative Study and Radial Perfor- mance Evaluation for Reflective EDFA Con- figurations with Opti- mized Intrinsic Parame- ter Sets	Optik	2018
5	Mehraj, T., Sheheryar, M.A., Lone, S.A., Mir, A.H	A critical insight into the identity authentica- tion systems on smartphones	-	2018
6	Khan, A.A., Mir, R.N., Najeeb-Ud- Din		International Journal of Computing and Digital Systems,	2019
7	Singh, O., Sunkaria, R.K.		Journal of Medical Engi- neering and Technology,	2018
8	Bashir, A., Mir, A.H.		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 biome- try-a human identifica- tion system using pan- oramic dental radio- graphs based on shape of mandibular bone	International Journal of Biometrics	2018
10	Khan, R.A., Mir, A.H.	0	International Journal of Internet Protocol Tech- nology	2018
П	Yousuf, A., Najeeb-ud- din, H.	Investigation on chirp- ing characteristics of a 1.55-μm directly mod- ulated distributed feed- back laser	Journal of Optics (India)	2019

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
I	Design of an optical trans- mitter using optimized DFB laser and EDFA		60,00,000.00	Science and Engi- neering Research Board (SERB)
2	Development and Aug- mentation of the Industry Standard ASM-GaN- HEMT Model for State-of- the-art Integrated Circuit Design		30,00,00.00	Science and Engi- neering 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
T	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
П	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
T	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 laboratories to compliment the theoretical established in the year 1963 for five year un- courses taught at graduate and post graduate dergraduate program with total student intake level and to handle research in thrust areas like of 25. The duration of degree was changed energy, environment, biotechnology and sepalater in the year 1981 to four years. Currently ration processes etc. 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

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.



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.

world is to be feared ... only understood." - Marie Curie

"Nothing in this

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

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publica- tion
1.	Dr. Moham- mad N.S. Khan		International Journal of Chemical Reactor Engi- neering	2018
2.	Dr. Moham- mad N.S. Khan	Utilization of waste biomass, walnut shells, to produce bioprod- ucts via pyrolysis: in- vestigation using ISO- conventional and neu- ral network methods	Biomass Conversion and Bio refinery	2018
3.	Dr. Moham- mad N.S. Khan	Biomass Residues Characterization and their Potential Applica- tion for Biofuels	Journal of Thermal Anal- ysis and Chalorimetry	2018
4.	Dr. Moham- mad N.S. Khan	Bioenergy Potential of Salix alba Assessed Through Kinetic and Thermodynamic Analy- sis		2018
5.	Dr. F. Q. Mir	Preparation and char- acterization of a novel nano-size titanium oxide-PVA (TiO ₂ -PVA) composite ion ex- change membrane.	Journal of Physics: Con- ference Series	2019
6.	Dr. F. Q. Mir	Preparation and Char- acterization of Nano- size Gamma Alumina (γAl2O3) and PVA Composite Membranes		2018
7.	Dr. F. Q. Mir	Polyvinyl Alcohol (PVA) Supported Tin Phosphate (SnP/PVA) Ion Exchange Mem- brane		2018
8.	Dr. F. Q. Mir	A Short Review of Fouling & its Control Through Hydrophilic Modifications in Ultra- filtration Membranes		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 Ener- gy Audit of the Building Sector	Journal of Energy Re- search and Environmen- tal Technology (JERET)	2018
10.	Dr. Tanveer Rasool	zation: A promising transformation process	Emerging Trends in Engi- neering, 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	tant size regulation of nanoparticles of ma-	Emerging Trends in Engi- neering, 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 analy- sis of banana peel py- rolysis for its bioenergy potential	Biomass and Bioenergy	2019
13.	Dr. M.P. Ahmad		International Journal of Chemical Reactor Engi- neering	2018
14.	Dr. M.P. Ahmad	Utilization of waste biomass, walnut shells, to produce bioprod- ucts via pyrolysis: in- vestigation using ISO- conventional and neu- ral network methods		2018
15.	Dr. B. Krishna Srihari		Process Integration and Optimization for Sustain- ability	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		International Journal of Heat and Mass Transfer	2018
17.	Fatima Jalid		Sadhana, Academy pro- ceeding in Engineering Science.	2018
18.	Fatima Jalid	In-silico screening of Pt -based bimetallic alloy catalysts using ab initio microkinetic modeling for non-oxidative dehy- drogenation of ethanol to produce acetalde- hyde	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 Im- mersion 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 Confer- ence on Advances & Challenges for Sustain- able Ecosystem (ICACSE 2018)	N.I.T Tiruchirappalli.	2018
8	Dr. M. P. Ahmed		Department of Metallur- gical and Materials Engi- neering NIT Srinagar	
9	Dr. M. P. Ahmed	International Research Conference on trends and Innovations in Technology, Science, Engineering and Man- agement	JNU Delhi	February 9, 2019

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Scholar	Supervisor(s)	Status of Degree
I	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 bross		
5.	I kva 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
Ι.	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 Jaild was conferred with the awarded BIRAC GYTI Award.

3.7 Department Of Metallurgy & Materials Engineering

The department of "Metallurgical & Materials The Objectives of the department are: Engineering" formerly known as the "Department of Metallurgical Engineering" was established in our Institute in the year 1963. under-graduate academic program leading to the award of B.Tech. Degree in engineering.

the students to synthesize their knowledge in several areas of metallurgical & materials engineering.

academia & industries at national levels intends of the society. 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.

To train personnel in the area of metallurgical & materials engineering who can be leaders in The department conducts a four (04) years designing, building and running of metallurgical plants required for the country as well as in R & D activities.

A two semester "Project Work" is provided to To motivate graduates to take up entrepreneurship in areas related to metallurgical and materials engineering.

To encourage graduates to become good hu-The department through interactions with man beings, responsible to the overall welfare

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

> > "The finest

Nixon

steel has to go

through the hottest

fire."— Richard M.

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

Head of Department	Dr. Atikur Rehmar
Professor	Dr RajinderAmberdar
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

HoD

Metallurgy &

Materials

Engineering

Dr. Atikur Rehman

Page 106

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Publications

Papers published and presented by the Faculty:

S . No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Dr. Atikur Rahman	Degradation Behaviour of Nanostructured CeO2Films on Superal- loy	Transactions of the Indi- an Institute of Metals	2018
2	Dr. Atikur Rahman	Photocatalytic Studies of Composite Ferrite Nanoparticles",	Russian Journal of Inor- ganic Chemistry	2019
3	Dr. Atikur Rahman	Eletroless nanoceria Films on Nickel-based superalloy "	Surface Engineering	2019
4	Dr. Atikur Rahman	The degradation be- haviour of nickel- based superalloys in the medical waste incineration plant	Sadhana, Springer journal	2019
5	Y Mehta et. al.		IOP Conf. Series: Materi- als Science and Engineer- ing 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
I	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 confer- ence on Recent trends in Technology, Agricul- ture, Applied Sciences, Humanities and Busi- ness Management for Sustainable Develop- ment (ETAHBS-2018)	NIT Srinagar	2018
8	Aravi Muzaffar	TEQIP-III sponsored Faculty Development Programme on Out- come 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 Tri- vandrum Chapter	Thiruvananthapuram	2019

Program(s) Conducted

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

S. N o.	Name of the Program	Date When Conducted	Coordinator (s)	Sponsoring Agency (if any)
1	International conference on Recent Trends in Engineer- ing, Technlogy, Agriculture Applied Sciences, Humani- ties and Business manage- ment for Sustainable Devel- opment(ETAHBS-2018) jointly organized by Metal- lurgical and Materials Engi- neering Department NIT Srinagar and Krishi Sanskriti New delhi JNU		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	Mr. Umar Dass	MHRD
	Entropy Alloys	Mr. Riyaz Qasab	
		Dr. G. Harmain	
		Dr. Irfan Samad Wani	
		Dr. Azhar Wani	

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Торіс	Scholar	Supervisor (s)	Status of Degree
I	High temp oxidation behaviour of Nanostructured coatings (CeO2) coatings on superalloy		Dr. Atikur Rahman	Ongoing

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Торіс	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 Fer- rite Nano Particles	Mr.K.K. Thakur	Dr. Atikur Rahman	Ongoing
5	Carbon composites	Virendra Patle	Y Mehta and co-supervisor	Ongoing
6	AI-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 pow- ders	M/S Soltek, Faridabad,	15,000.00

Purchase(s) Made

Purchases made by the department during the period.

S. No. Name of Equipment

T	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
I	Physical Metallurgy Lab
2	Corrosion Engineering Lab
3	Mechanical Metallurgy Lab
4	Powder Metallurgy Lab

3.8 Department Of Computer Science & Engineering

neering was started in the year 2007, offering breaking researches & innovations. 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 & Engi- ment. neering 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

"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.



The Department of Computer Science & Engi- have themselves been at the helm of path

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 technolo-

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

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

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Roohie Naaz Mir	Adaptice Deep Neural Networks for Internet of Things	International Journal of Sensors, Wireless Com- munications and Control	2019
2	Roohie Naaz Mir	An enhanced time efficient technique for image watermarking using ant colony opti- mization and light gra- dient boosting algo- rithm	Journal of King Saud University Computer and Information Science (Elsevier)	2019
3	Roohie Naaz Mir	Saliency guided faster- RCNN (SGFr-RCNN) model for object de- tection and recognition	Journal of King Saud University Computer and Information Science (Elsevier)	2019
4	Roohie Naaz Mir	A Survey on the Inter- net of Things Security: State-of-art, Architec- ture, Issues and Coun- termeasures	International Journal of Information and Com- puter Networks	2019
5	Roohie Naaz Mir	Adaptive data Trans- mission and Optimiza- tion in Internet of Things	International Journal of Innovative Technology and Exploring Engineer- ing	2019
6	Roohie Naaz Mir	IoT Fog Cloud Model for Digital Reach in Rural India	Lecture Notes on Data Engineering and Commu- nications Technologies Book Series, Springer	2019
7	Roohie Naaz Mir	Forensic Chain: Block- chain Based Digital Forensics Chain of Custody with PoC in Hyperledger Compos- er	Digital Investigation	2019
8	Roohie Naaz Mir	Consensus Protocols as a Model of Trust in Blockchains	International Journal of Blockchains and Crypto- currencies	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		International journal of Database Theory and Application	2019
10	Roohie Naaz Mir	Scrutinizing Internet Banking Solutions	International journal of Information and Com- puter Security	2019
П	Roohie Naaz Mir		International Journal of Engineering and Technol- ogy	2018
12	Roohie Naaz Mir		International Journal of Computer Networks and Applications	2018
13	Roohie Naaz Mir	the effectiveness of	International Journal of Information and Com- puter Security	2018
14	Roohie Naaz Mir		Iraqi journal of Electrical and Electronic Engineer- ing	2018
15	Roohie Naaz Mir		International Journal of Computer Networks and Applications	2018
16	Roohie Naaz Mir		International Journal of Computer Networks and Applications	2018
17	Roohie Naaz Mir	0 0	International Journal of Computer Network and Information Security	2018
18	Roohie Naaz Mir		International Journal of Computer Sciences and Engineering	2018
19	Roohie Naaz Mir	Architecture: Moving	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	ence of Soft Compu- ting: Theories and	Department of Instru- mentation & Control Engineering, National Institute of Technology, Jalandhar.	

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)
I	Workshop & Coding Festi- val "Exordium"	2019	Dr. Mohammad Ahsan Chishti	

Sponsored Project(s)

S. No.	Name of the Program	Investigator	Amount (in INR)	Sponsoring Agency (if any)
I	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.	Торіс	Scholar	Supervisor (s)	Status of Degree
I	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.

Name of Equipment
Mobile Workstation
Deep Learning Workstation
Tower Workstation
10 KVA On-Line UPS

Laboratories Available

Laboratory facilities available at the department

S. N o.	Name of the Lab
T	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

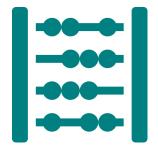
S. No.	Patent Title	Inventors	Status	Details
T	Toward Friendly Machines: A Boolean Algebra Based Method Implementing Ethics Based on Context		Published	IN2018110252 75 6/7/2018
2	Toward Friendly Machines: A Boolean Algebra Based Method Implementing Ethics Based on Context		Published	IN2018110252 75 6/7/2018
3	Method And Design For A Compre- hensive Apparatus To Collect, Pro- cess, Aggregate, Route, Save, Analyze And Filter Data In The Internet Of Things	Mohammad Ah-	Published	IN2019110462 86 14/11/2019

3.9. Department Of Mathematics

Institute of Technology Srinagar started its in last five years. The faculty of the Department functioning in the year 1960. During past 52 is actively engaged in organizing workshops, years, many mathematicians of International national & international conferences. repute like Prof. Q. I. Rehman, Prof. M. A. Ansari (Bretlee Ansari's test), Prof. S. I. Hussain, The department is teaching around 50 courses worked in the Department. The faculty mem- M.Phil/Ph.D. students. bers of this department are actively engaged in research & published more than 100 research papers in journals of national & international

The Department of Mathematics, National repute. The Department has produced 8 PhD's

Prof. A. H. Siddiqui, Prof. A. G. Lone & many to B.Tech. students & 8 courses to M.Tech. &



"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

Faculty

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

HoD

Mathematics

Dr. Zamrooda

Jabeen

Publications

Papers published and presented by the Faculty:

S. No.	Faculty Member	Title of the paper	Conference/Journal where published	Date of Publication
I	Prof Neyaz Ahmad		Facta Universtatis, Ser., Math. And informat 33 (2) 307-324 2018	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		Analysis in theory and Applications 34(2) 135-146 2018	2018
5	Prof Neyaz Ahmad		Acta Universitatis Appi- lensis 57 109-120 2019	2019
6	Prof Abdul Liman	On an integral estimate concerning the polar derivative of polynomi- als with restricted zeros	Filomat	2019
7	Prof Abdul Liman	Integral estimates for a class Bn of operators	Stud. Univ. Babe □s- Bolyai Math	2018
8	Prof Abdul Liman		Journal of Mathematics and Applications 41 171- 180 2018	2018
9	Dr. Tanweer Jalal	Boundary value prob- lems for an Infinite system of second otder differential equa- tions in lp spaces	Mathematica Bohemica	2019
10	Dr. Tanweer Jalal		Journal of Mathematical Extension	2018
П	Dr. Tanweer Jalal	Measures of Non- compactness in Nq Delta summablediffer- ence sequence spaces	Filomat	2018
12	Dr. Tanweer Jalal	Some new triple se- quence spaces over n- normed spac	Proyecciones Journal of Mathematics	2018
13	Dr. Mehraj Lone	On nonexistence of warped product sub- manifolds of locally conformal Kaehler manifolds,	Gulf J. Math	2018

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Торіс	Scholar	Supervisor (s)	Status of Degree
I	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
T	Computer Lab with genuine mathematical software.

Department Of Physics 3.10.

The Department of Physics was established in Till date more than 45 scholars have been

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) stu- fields for their M. Phil & Ph. D Degree. dents. 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.

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.



1960 & since then it remained actively engaged awarded the degree of M. Phil/Ph. D. More in imparting the instructions at U.G. level in than 500 research publications in the national addition of achieving higher standards in the & International Journals of repute have been field of research by guiding M.Phil/Ph.D. Pro- published. Many research projects have been grammes & other sponsored research projects. 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

> "Gravity explains the motions of the planets, but it cannot explain

motion."—Sir

Isaac Newton

who sets the planets in

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.

Mission

- 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.

Faculty

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

Physcics

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
I.	Prof. M. Ikram	Structural stability improvement, William- son Hall analysis and band- gap tailoring through A- site Sr doping in rare earth based double perov- skite La2NiMnO6	Rare Metals	2019
2.	Prof. M. Ikram		Journal of Materials Sci- ence: Materials in Elec- tronics	2019
3.	Prof. M. Ikram	Effect of oxygen con- centration on the fer- romagnetic transition of Lal.9Sr0.ICoMnO6 thin films	Applied Physics A	2019
4.	Prof. M. Ikram	Synthesis and Lumines- cent characteristics of Eu3+ doped LiZnPO4 phosphors for white LEDs	Optik	2019
5.	Seemin Rubab	Magnetic and thermal properties of ferromagnetic insula- tor: Yttrium Iron Gar- net	Ceramics International	2019
6.	Seemin Rubab	Electronic structure, optical and thermoe- lectric properties of CaMgSil- xCx (x = 0, 0.5): an ab-initio study	Materials Research Express	2018
7.	Seemin Rubab	DFT understandings of structural properties, mechanical stability and thermodynamic prop- erties of BaCfO3 perovskite	Materials Research Express	2018
8.	Seemin Rubab	A case study of Fe2TaZ (Z = AI, Ga, In) Heusler alloys: hunt for half- metallic behav- ior and thermoelectric- ity	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 Publica- tion
9.	Dr. Prince A. Ganai	Lorentz violating gaugeon formal- ism 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
Π.	Dr. M. A. Shah	CVD Diamond	Transactions of the Indian Institute of Met- als	2019
12.	Dr. M. A. Shah	Green synthesis of iron oxide nanoparticles using Platanus ori- entalisleaf extract for antifungal activity		2019
13.	Dr. M. A. Shah	Structural and electrical proper- ties of copper doped In2O3 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		2018
15.	Dr. M. A. Shah	Structural, morphological and dielectric properties of Li-doped Al2O3	Applied Physics A	2018
16.	Dr. M. A. Shah	Enhancement in photo- electro- chemical efficiency by reducing recombination rate in branched TiO2 nanotube array on func- tionalizing with ZnO micro crys- tals		2018
17.	Dr. M. A. Shah	Effect on the properties of ITO thin films in Gamma environment		2018
18.	Dr. M. Z. Ansari	Visible light active CZTS sensi- tized CdS/TiO2 tandem pho- toanode for highly efficient pho- toelectrochemical hydrogen gen- eration	Solar Energy	2019
19.	Dr. Harkirat Singh	Robust pseudogap across the magnetic field driven supercon- ductor to insulator-like transition in strongly disordered NbN films	European Physical Jour- nal 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, Opti- cal & Dielectric Properties of Double Layer Perov- skite 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 Akhoon	Dr S Rubab	Awarded in 2018
9	Shah Arif UI 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 UI 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 Ishtiyaq 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
I.	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	П	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.

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



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.

"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
I	Prof. Kowsar Majid		Journal of Materials Science: Materials in Electronics	2019
2	Prof. Kowsar Majid	Plasmon induced inter- facial charge transfer across Zr-based metal- organic framework coupled Ag2WO4 heterojunction func- tionalized by Ag NPs: Efficient visible light photocatalyst	Chemical Physics Letters	2019
3	Prof. Kowsar Majid	Cu2+-BTC based met- al-organic framework: a redox accessible and redox stable MOF for selective and sensitive electrochemical sensing of acetaminophen and dopamine	New Journal of Chemis- try	2019
4	Prof. Kowsar Majid	Controlled synthesis of p-type NiO/n-type GO nanocomposite withen- hanced photocatalytic activity and study of temperature effect on thephotocatalytic activ- ity of the nanocompo- sites	Applied Surface Science	2018
5	Prof. Kowsar Majid	Fabrication of highly photocatalytic active anatase TiO2-graphene oxide heterostructures via solid phase ball milling for environmen- tal remediation	Surfaces and Interfaces	2018
6	Prof. Tabassum Ara	Copper catalyzed tan- dem Chan-Lam type C—N and Staudinger- phosphite N—P coupling for the synthesis of N- arylphosphoramidates		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 Daph- ne oleoides and its Cytotoxic Activity	Chemistry of Natural Compounds	2019
8	Dr. Shakeel A Shah	Quantum chemical approach towards the secondary amino deriv- ativesof C(3) substitut- ed 1,4 naphthoquinone: Combined molecular and dftcalculations	Journal of Molecular Structure	2019
9	Dr. Javid A. Banday	Synthesis and Biological Evaluation of Novel Osthol Derivatives as Potent Cytotoxic Agents	Medicinal Chemistry	2019
10	Dr. Javid A. Banday	Synthesis, 17α- hydroxylase-C17,20- lyase Inhibitory and 5AR Reductase Activi- ty of Novel Pregne- nolone Derivatives	Anti-Cancer Agents in Medicinal Chemistry	2018
H	Dr. Javid A. Banday	Antioxidant activity of chloroform extract of Inula Racemosa from Kashmir Himalayas	To Chemistry Journal	2018
12	Dr. Ravi Ku- mar	β-Heptasubstituted Porphyrins: Synthesis, Structural, Spectral, and Electrochemical Properties		2018
13	Dr. Jignesh V Rohit	Ligand exchange reac- tions on citrate-gold nanoparticles for a parallel colorimetric assay of six pesticides	New Journal of Chemis- try	2018
14	Dr. Malik A. Wahid	High capacity, power density and cycling stability of silicon Li-ion battery anodes with a few layer black phos- phorus additive		2018
15	Dr. Malik A. Wahid	Conversion-type An- ode materials for alkali- 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 remedia- tion of cobalt oxide nanoparticles by mag- netized α-cellulose fibers from waste pa- per biomass	Bioresource Technology	November 12, 2018
17	Dr. Saifullah Lone		Environmental Science: Water Research & Tech- nology	
18	Dr. Saifullah Lone	Versatile nanodot- patterned Gore-Tex fabric for multiple en- ergy harvesting in wearable and aerody- namic nanogenerators	Nano Energy	October 9, 2018
19	Dr. Saifullah Lone	One-Step Laser Pat- terned 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 de- velopment program	Teaching Learning Cen- tre IIT, Madras	July 2-6, 2018.
02.	Dr. Hamida- Tun-Nisa	Five days faculty devel- opment 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
I.	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 UI 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 Yatoo	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	
Ι.	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 Sci-gerial & professional capabilities of the students ences, which is one of the oldest departments who have a potential market both in public & of the institute, is contributing to the academ- private companies of India & foreign countries. ics by offering various courses in English, Man- The courses are intended to enhance their agement, Economics & Entrepreneurship at employment opportunities in the growing cor-B.Tech. level & Research Methodology & Com- porate sector & bring together the technologimunication Skills at M.Tech. level. The students cal problem-solving savvy of engineering & the of B.Tech. & M.Tech. are introduced to the organizational, administrative, & planning abilibasic concepts & advanced studies in the above ties of management in order to oversee commentioned subjects. As these courses equip the plex enterprises from conception to compleengineering students with the professional tion. Apart from it, the Department has many skills, the department makes every effort to Programmes of higher learning in mind but the keep these courses updated. It tries to amal- non availability of staff is the main impediment. gamate the field of engineering & the field For some professional courses like MBA & of management by equipping students with the Diploma in Entrepreneurship, the department technical expertise & leadership skills as are is making efforts both in terms of staff & infrarequired to advance their career in the fast- structure. paced world of competition.

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

- "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

&

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 Con- sumer Buying Behav- iour: 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)
I	Subsistence Consumer Marketing Systems in Conflict Zones, Anteced- ents Implications and Rec- ommendations "	mad Wani	5,40,000.00	ICSSR

Doctoral Program(s)

Details of Doctoral Programmes conducted by the department:

S. No.	Торіс	Scholar	Supervisor (s)	Status of Degree
I	Impact of Select Entrepreneurial Com- petencies and Environmental Factors on Entrepreneurial Sucess: An Empiri- cal Study of Entrepreneurs in Kashmir		Prof M.F. Lala	Ongoing
2	Impact of Service Quality on Patient Stisfaction: A study of Kashmir Hospi- tals		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 To undertake Research & Development work Education, Government of India in 1983 under of a high order by mobilizing inter- disciplinary new plan scheme for creation of infrastructure & inter- institutional collaboration. in the areas of emerging technology. The objectives of the Center are:

To undertake work on specific technological of Information on the subject. problems of relevance & importance in Water Resources Management & to make fundamen- To undertake research works in the field of tal contribution to the advancement of tech- Water Resources Engineering to meet the nology.

To act as a resource center for the creation of knowledge & for the collection & dissemination

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 Shiekhul 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
I	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		International Journal of Geotechnical Engineering	2018
3	Prof. M A Lone	0	International Journal of Geotechnical Engineering	2019
4	Prof. M A Lone		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		International Journal of Engineering, Technology, Science and Research	2018
7	Prof. M A Lone	nation Of Permeability	ence ,Engineering and	2018

Sponsored Project(s)

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

Research & Development Activities

A Chair Professor in Water Resources, entitled, sis on assessment of effect of climate change on the Institute, in 2008.

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

Sheikhul Alam Sheikh Nuruddin Chair for Wa- it & adaptation strategies in respect of planning, ter Resources, has been established by the Min- design & management of water resources sysistry of Water Resources (MoWR) in the Cen- tems of particularly Indus Basin. An important tre under an agreement between the MoWR & 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 thr 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. Hy- draulics /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 MoWR, & is planning to activity participate data collection is more authentic & accurate. in the study with other leading Institutes.

The Centre has been nominated to act as Nodal The Centre is planning to upgrade its Hydro-Centre for Basin-wise studies with respect to meteorological Observatory with the latest availimpact of climate change on Water Resources by able equipment & instrumentation so that the

4.2 Computer Services Centre

The institution has long back absorbed itself present Institute has two links one is 512 Kbps well perceived in all over the campus. The (IGbps internet connectivity). Computer Services Centre developed under the scheme of Centre of Excellence aims to The Centre has extended the facilities of interfacilities to the teaching community, students WiFi systems. 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

into the Computer culture & its effects can be provided by Ernet India & other by BSNL

provide centralized computer/Inter-net work net to hostels including girl's hostels through



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 Software. (Since July 2017 – till date) initiative of National Mission on Education through ICT, MHRD, and Government of India



Purchase(s) Made

Purchases made by the department during the period.

S. No. Name of Equipment

T	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)
П	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
I.	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



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, Plane-

tary – 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".

Central Research Facility Centre (CRFC) has 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
I	Earthquake Shake Table (Under PMDP)
2	Field Emission Scanning Electron Microscope & EDXA (Under PMDP)
3	Multi Target Sputtering System. (Under TEQIP III)
4	NanoindenterHysitron 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



Industry Institute Interaction Cell & Entrepre- addition in various thrust areas like technology was to share its experience with the Industry & renewable energy, handicraft, electronic system to utilize the human resources & all other re- design, manufacturing, IT enabled and other sources available at the Institute effectively services etc. with the assistance of participating Industries.

Centre aims to nurture and inspire the young establish a centre where activities related to entrepreneurial brains of the Institute as well innovation, incubation & entrepreneurship as the region to peruse innovations, start-ups could be undertaken in a coordinated manner and entrepreneurship by creating a vibrant and on modern approaches. Accordingly these two conducive ecosystem in the region. We aim to cells were merged & renamed centre under empower Start-ups to grow through innova- the title "Innovation, Incubation & Entrepretions & design in order to provide fulcrum to neurship the economic augmentation and employment lished due approval of the Competent Authoriopportunities.

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

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.

The Institute had since long established an of start-up endeavors with disruptive value neurship Cell. The main object of these Cells developing, agriculture including horticulture,

In view of the prevailing scenario for encourag-IIED centre is headed by Prof. Saad Parvez. The ing innovation & enterprise, it was decided to Development Centre" was estabty. 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.

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 interdiscipli-

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

- Institute Industry Interaction Cell: IIIC 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

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.

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.

Functions

- To inculcate a culture of innovation driven entrepreneurship through studentprojects.
- 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:

prize worth Rs. 50,000 at VelTech Chennai.

MSME Ministry approves BI at NIT Srinagar

The proposal submitted by the institute for its recognition as Host Institute for implementa- Yuwa Innovators: Food Grain Washer and tion 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.

NIT Srinagar students participated in SIH 2019 Since last three years Centre is participating in organised by MHRD's Innovation Cell. Students the Meeting of National Innovation clubs at of NIT Srinagar received Second Runner up 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

Idea Challenge 2018

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. I Crore from MSME, J&K, for setting the Incubation Centre at NIT Srinagar.

4.5 Library & Information Resources Centre

Library & Information Resources Centre. of its collection using KOHA software and is The NIT Srinagar library supports the in the process of computerizing all its activi-Teaching, Research & and other related ties. At present the readers have access to Programmes of the institute. The Library has library OPAC & circular section is computa good collection of documents that com- erized. Following e-resources through prises of Books, Journals, Theses, Video INDEST consortium are available online cassettes, Learning Resources (LRs) & Com- through the Library for the benefit of compact discs in the field of Engineering, Science, munity in the campus; Management, and Literature & Humanities.

9898 books issued to them for study in a full worth around 30 lacs were purchased & a semester.

The Institute has a Central Library named The library has computerized data of whole

The library which had suffered huge losses The Central library has a separate section due to September 2014 floods took number for SC/ST students with a stock of about of steps for making up the losses & books 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

The membership form is available at the circu- the library rules. lation counter and the same is required to be attested by the Head of the Department/ Search Section.

Text Book & Reference Section

The textbook and reference section remain open from 8.45 a.m.to 9.30p.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

All the students, faculty members, research The books available here are meant to be isscholars & administrative staff can register sued to the faculty, students, research scholars themselves for the membership of the library. and other readers as per the criteria given in

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



LIRC	
Established in	1960
Members	3217
Books	57088
Data Usage	80%
Annual Budg- et	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	TechanicalAsstt
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 $\ensuremath{\mathsf{IP}}$ 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.

	Subjects Covered	URL	Total cost
	Wiley		
	Civil Engineering & Construction, Electronics & Electrical Engineering, Computer Science &IT, Chemistry & Chemical Engineering, Physics, Maths & Statistics & Mechanical Engineering.	Year 2016 & 2017	\$88,694
"I have always imagined	Springer Nature		
	Chemistry & Materials Science, Computer Sci-		
that Paradise will be a	ence, Engineering, Mathematics &Statistics, Phys- ics &Astronomy	Year 2016 No. Of Titles 3298	€52,759.20
kind of library."	Elsevier		
— Jorge Luis Borges	Chemical Engineering, Chemistry ,Engineering, Materials Science, Mathematics, Physics & As- tronomy, Computer Science		\$102136
	Pearson		
	Chemistry, Civil Engineering, Computer Science & IT, Electronic Telecommunication, Mathemat- ics, Mechanical Engineering, Physics		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 December2019
ASCE Journals	January 2019 to December2019
ASME Journals Online	January 2019 to December2019
Economic & Political Weekly	April 2018 to March 2019
Institute for Studies in Industrial Development	April 2018 to March 2019
J Gate Plus (JCCC)	January2019 to December2019
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 December2019

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.1, Issue1up to the year 1994

Year	URL
Pre 1995	sciencedirect.com
	Pre 1995 Pre 1995 Pre 1995 Pre 1995 Pre 1995 Pre 1995 Pre 1995

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:

Trainings, Placements & Career Guidance 5.1

The Industrial Training & placement are the ter placement of the students. The institute two important issues of the students which are has been able to attract a good number of being taken care of by a well established relevant reputed companies & organizations for "Training & Placement "(T&P) Department of on campus selection of the students. Mock this Institute. The T&P Department is usually test, counseling & seminars are carried out for headed by a senior faculty member & assisted the students to train them for better perforby administrative staff & the student's repre- mance in their interviews for placements. In sentatives 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.

to introduce the institute to more & more companies & organizations concerned for bet-

Members of Placement Cell:

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

this context a good number of reputed companies have recorded their appreciations for coordination 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 quizs, mock tests, mock group discussion etc.

The objective of the placement cell is to mould the students to cope with the changing de-The T &P Department is making every effort mands 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.

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

Functioning of Placement Cell

Srinagar) lays emphasis on the placement of and interpersonal skills are invited to equip our the students by training and preparing the students with necessary soft skills required to students to face the real life situation after face the interviews in today's competitive graduation. An exclusive Placement & Training world. Such training exposure enhances the department under the guidance of an eminent students' employability. Goal setting Time professor collects the data of the graduating Management and Prioritization are the Key students and maintains a comprehensive data- points that are implanted in the Young minds. base for ready reference.

The Institute provides an environment for on software relevant to industry such as VLSI, comprehensive and harmonious development Embedded Technology, Auto/Electrical CAD, of the personality. We have regular communi- Pro/E, JAVA, J2 EE, just to mention a few. cative English Program incorporated in the curriculum. Further, resource persons and

National Institute of Technology Srinagar (NIT professionals from the field of communication

Institute also provides need-based Programmes

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

Placement Details (AY 2018-19)

Student Welfare Cell

Career Guidance and Counseling is a compre- ers & staff of the Institute through guidance & hensive, developmental program designed to assist students in making & implementing informed educational and occupational choices. Career guidance & counseling program develops an individual's competencies in selfknowledge, 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-

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



more significant in the industrial environment ics, instrument & control products. to manufacture products for the service of the mankind. Workshop Practice is a core subject & is highly essential for all engineers & technotechniques & 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..

The field of engineering continues to grow These trades are relevant & common to most rapidly, transcending disciplines & driving eco- of the industries manufacturing & repairing nomic growth. Workshop practice has become mechanical, electrical, computers, & electron-

The student has to acquire practical knowledge & skills of using machines & equipment, various crats for formalizing themselves with the latest 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		Journal of Materials To- day: Proceedings	2019
03	Er. Syed Irshad Ahmad Qadri		Journal of Physics: IOP series conf.1240	2019
04	Er. Syed Irshad Ahmad Qadri	Assessment of machin- ability of super alloy Inconel 718 using alu- minum oxide and mixed oxide ceramic cutting tools		2019
05	Er. Syed Irshad Ahmad Qadri	' '	Journal of Material Sci- ence and Mechanical Engineering (JMSME)	2018
06	Er. Syed Irshad Ahmad Qadri		Journal of Materials & Manufacturing Processes	2019
07	Er. Syed Irshad Ahmad Qadri	Rapid prototyping-a holistic review	Journal of emerging tech- nologies and innovative research	2018
08	Er. Syed Irshad Ahmad Qadri	MEMS technologies/an overview on scaling advantages and issues		2019

Activities Undertaken

S. No.	College/University	Year of Conduct	Classes/ Examination
I	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
Ι.	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
П.	Physics	PhD	1

Facilities Setup		
01	Tungusten 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 sional TIG, MIG and Metal Arc welding set-up being upgraded on timely basis in order to from "FRONIUS". Several other up gradations cope up with the trending technology and industry needs. The latest up gradation of the Electro Discharge Machining and Plastic Injecworkshop is in the welding section with the tion 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 I	Placed at P&D
S . No.	Name of the Staff	Designation
	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 Tramboo	Executive Engineer on deputation
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) on deputation
11	Abdul Gaffar	Electrician
12	Mohammad Sadig	Electrician
13	Ali Mohammad Lone	Electrician
14	Showkat Ahmad Malla	Store Keeper
15	Khurshid Ahmad	Telephone Operator
16	Ghulam Nabi	Telephone Operator
17	Mushtag 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
		tractual Staff
	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	Javaid Ahmad Shah	Electrician
		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	Ishtiyaq 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)
	Renovation of Central Workshop.	8,22,826.00
2	Conversion of available room of Girls Hostel and	11,41,574.00
_	also in various Departments into Reading room.	,
3	Construction of Foundation for Shaking Table.	16,92,167.00
4	Renovation of Water Quality Engineering Lab	8,88,941.00
	and Corridor of Computer Services Centre	-,,-
5	Renovation of Cafeteria.	1,33,495.00
6	Replacement of old CGI sheet roofing of I.C Engine Lab,	20,36,921.00
	Steam Lab and Hydraulics lab.	
7	Extension of Computer Science Engineering and Electronics	19,61,409.00
	& Communication Engineering building.	
8	Providing & laying of 50mm thick bituminous macadam &	41,22,614.00
	25 mm thick semi dense.	
9	Renovation of Chemistry Organic Lab (Room No. 231) &	5,09,747.00
	Inorganic Lab (Room No. 123).	
10	Renovation of Structural Engineering Lab of	5,87,130.00
	Civil Engineering Department.	
11	Renovation of Heat Transfer lab in	9,39,665.00
	Mechanical Engineering Department.	
12	Renovation of HOD's room and a Faculty room	7,48,616.00
	in Mechanical Engineering Department.	
13	Conversion of I/C Engine lab into Material Testing Lab and	15,19,492.00
	its renovation.	
14	Construction of Shed (20'x40') for Kitchen in Pre-fab hostel.	12,28,340.00
15	Distempering 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)
-	Dismonthing of existing Guestheuse shimpey and	9,86,204.00
1	Dismantling of existing Guesthouse chimney and construction of guesthouse compound wall	7,00,204.00
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 Mechani- cal 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
П	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	2,63,467.00
	gas plant.	
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

59th Annual Report **5.4 Other Facilities**

SAS Centre:

provide sporting & recreational facilities to the recent past the hospital has been modernized 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, Bank & ATMs 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 The primary objective of the department is to cater to emergencies round the clock. In the & 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.

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

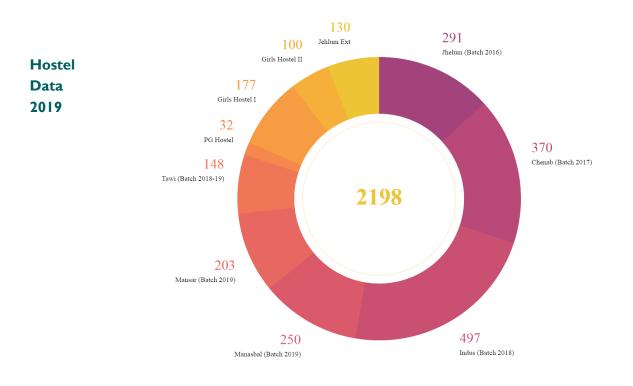
Prompt attention was given to repair & maintenance of the Institute vehicles. Transport facilities were provided the various experts & other Institute guests invited for placement of students & other academic activities. The transport facilities were also provided to the students for conducting the various 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.

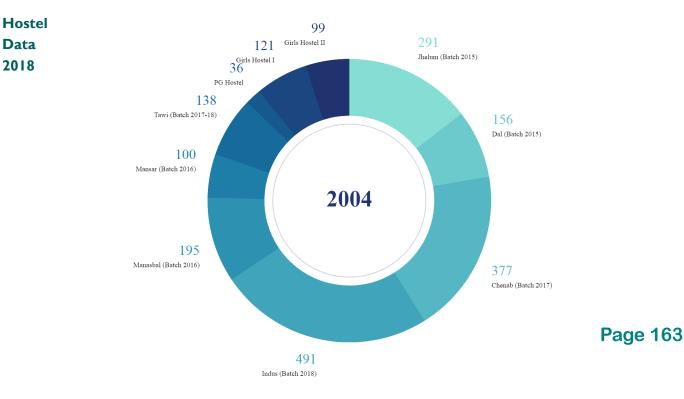
Post Office

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:





59th Annual Report 6.1 Technical Education Quality Improvement Program Phase III

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 Re- • source Development.

The Project, Third phase of Technical Education Quality Improvement Programme Project Strategy (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

Fechnical Education Quality Improvement Programme 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.

- 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 lowincome 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 III (Contd)

trators and implementers at the Central, State tution and achievements will be measured efficient governance activities.

monitoring and evaluation. The prime responsi- tion of financial allocations and achievements in bility of monitoring will lie with the institutions faculty and staff development and management themselves. The management structure at the development activities. Institutional level i.e. the Board of Governors (BoG) along with Hevad of the institution will • institutions. The Government of India and the how and where to improve, without putting World Bank will conduct bi-annual Joint Re- undue pressure on students. views of the Project with assistance from the National Project Implementation Unit (NPIU). Plans for ATUs prepared by each project insti- cation of some of the indicators.

and University levels will be organized. The through a set of performance indicators. The Project will also support development of more monitoring will focus on implementation of reforms by institutions, achievements in project activities under different sub-components, The Project will lay major emphasis on procurement of resources and services, utiliza-

In the project, the technical assistance to monitor the progress of Institutional projects AICTE is planned which will include designing on a regular basis and provide guidance for an assessment system to track student learning improving the performance of institution in at different points of the undergraduate proproject implementation. The information from gram. Surveys of students, faculty, non-teaching project institutions will be collected through a staff and administrators will deepen insight into scalable web-based Management Information how institutes address specific problems relat-System (MIS). State Governments will also ed to student learning. Assessments will be regularly monitor and evaluate the progress of designed to provide feedback to institutes on

In this project, the fund will be linked to The monitoring will be based on Institutional the Disbursement Linked Indicators (DLIs) and Development Proposals (IDPs) and Action will be disbursed only after achieving and verifi-

Project Design

TEQIP seeks to enhance quality and equity in the project are given below: 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

- 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.)

59th Annual Report / TEQIP-III PROJECT DESIGN (contd)

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 electroni-

cally 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 TE-QIP 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)	
I	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	



- **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 Language lab has been established in the Deplan 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

partment 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 Assistanceship 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	Depart- ment
Ι.	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 Depart- ment
3.	Two-day Workshop on Artifi- cial Intelligence	March 23-24, 2019	Workshop	T&P De- partment

6.2 Unnat Bharat Abhiyan

launched in April, 2018. Currently 748 institu- taken part in Phase I.

Unnat Bharat Abhiyan is flagship programme of tions are participating under the scheme. In Ministry of Human Resource Development phase II, 605 institutions were selected. Out of (HRD) that aims to enrich Rural India. The these 313 are technical Institutions and 292 are second edition (Unnat Bharat Abhiyan 2.0) was Non-Technical Institutions. 143 institutions had

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 agen-

cies 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 faster a new dialogue within the larger community and science, society and the

Ν

UBA at NIT Srinagar

NIT Srinagar is the Regional Coordinating Insti- site (unnatbharatabhiyan.gov.in). On the basis tute 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.

Initially five following villages were adopted by tors to monitor the progress of various activi-NIT Srinagar for the transforming these villages in model villages in Jammu and Kashmir. These Rs. 20215/-has been spent on the visits and villages are located in five districts of Kashmir holding Gram Sabha meetings in these villages. 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-



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 NIT Srinagar is participating in UBA since 2015. held in 2017, 2018 and 2019 by the coordinaties as shown in figure below. An amount of

> 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

Development and Development of Sports in Institutions. now, the UT of J&K. This included establish-

Prime Minister Modi announced a ₹ 80,000 ment of an IIT and IIM in Jammu; stepping up crore development package for the erstwhile efforts under the HIMAYAT scheme to train state of Jammu and Kashmir in 2015. Among one lakh youth over five years, and augmenting other Sectors Government allocated Rs. 2600 sports infrastructure. In addition to upgrading crore for Human Resource Development, Skill & Modernizing of existing Higher Educational

PMDP at NIT Srinagar

09/08/2016 for Up-gradation and Moderniza- resolved that a fresh DPR will be tion of various facilities at NIT Srinagar. An submitted to MHRD for revisiting the project amount of Rs INR 100.00 Crore was sanc- and to complete the remaining works of the tioned for implementation of the project at project successfully. An amount of INR 64.82 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.

PMDP was approved for NIT Srinagar on In a Board meeting held on 29/09/2018, it was 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)

dent 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 modem diagnostic centre with need basis facilities in the institute and to develop a physiotherapy centre for the students and staff. The estimated amount is Upgradation of the 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.

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.

proposed to refurbish the dining halls of stu- 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.

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 Up-gradation of WIFI enabled campus and 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

reports, course registration, academic calendar, are pursuing PhD, in various disciplines of sciteaching plan, timetable and attendance, pre- ence and Engineering in the institute. There are examination work, post-examination work, more than 200 students pursuing M. Tech de-SMS and e-mail alerts for students and faculty grees in various Engineering departments. etc. The other facilities include fully integrated, Number of PhD. Students and Post Graduate multi-user system with full protection against students will receive a quantum jump in near unauthorized access, secured, accurate & time- future. In order to cater to the Research facilily information to users at all levels for better ty needs of PhD. & Post Graduate students and decision making. This will improve the overall faculty, NIT Srinagar has to augment its Reefficiency of various users and hence will im- search facilities with state of art equipment in prove the performance of the system, The various research areas. Moreover, NIT Srinagar estimated amount is for this activity is 200.00 has established 05 Centres in the institute. Lakhs

Up-gradation of Research & Innovation Centres:

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

mission process counseling, fees collection and At present more than 400 Research Scholars 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	PMDP Financial Stats (in INR)				
S No.	Work/Project	Sanctioned	Expenditure	Under	
		Expenditure	Incurred	Tendering	
T	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 ena- bled campus and Modernization of computer services centre	2000 Lakhs	18,36,71,695		
5	Modernization of Teaching- Learning facilities /Smart class- rooms	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 develop- ment centre and CRFC	1738 Lakhs	13,13,46,505	3,18,12,000	

7.0 Annual Accounts

BALANCE SHEET as on 31/03/2019

SOURCES OF FUNDS	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
Unrestricted Funds			
Corpus/Capital Fund	I.	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
То	tal	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	
То	tal	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

			(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 Subsides	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	-	-
Τα	tal	1,38,60,38,557.95	90,51,25,490.90
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		
Το	tal _	1,12,86,76,652.96	92,34,47,304.47
Balance being Surplus of Expenditure over Income (B-A)		25,73,61,904.99	(1,83,21,813.57)
Balance being Surplus (Deficit) carried to General Fund		25,73,61,904.99	(1,83,21,813.57)

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

Deputy Registrar (Accounts)

Registrar

Director

Annual Accounts

					(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 UI 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	I,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	I I,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 Mon- ey	2,31,000.00	8,000.00	Mess Caution Money	12,70,500.00	2,34,400.00	
Inspire Programme	I I,00,000.00	I I,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

					(Amounts in INR)	
RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR	
Mess Establishment charges	1,000.00	3,800.00	Special manpow- er Development Programme (SMPD)			
Ramamanujan Fellowship (SERB)	15,00,000.00		Flood Relief Do- nation	1,95,500.00		
Red Cross Fund	150.00	570.00	Unnat Bharat Abhiyan	92,558.00	1,68,000.00	
Special Manpower Development Programe (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	
Statutory Liabilities			C.P. Fund			
(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.)

RECEIPTS & PAYME	NTS 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	I,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					
Creation Of Capital Asset	69,70,00,000.00	61,16,00,000.00	Other Current Liabilities		
Special Plan Creation Of Capital Asset S/C	3,15,00,000.00	4,41,00,000.00	Transfer/ Scholarship Grant	13,737.00	
Sub Plan Creation Of Capital Asset	1,44,00,000.00	2,13,00,000.00	GP Fund Remittable to Kashmir University	2,60,376.00	
Special Plan Creation Of Capital Asset 3			Mess Fee	17540432	
TAS/T Creation Of Capital asset			Fixed Assets		

					(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 Automa- tion	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 Receiva- ble From MHRD			Renovation of gen. Maintenance Hostels/Buildings	20,51,057.00	

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

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 & Aca- demic 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	Strength of Central Work- shop	22,30,200.00	55,000.00
Grant in Aid Non- Plan Recurring (Salaries)			Setting Up of IIID Centre	, 34.00	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	-

					(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 Encash- ment	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.)

59th Annual Report

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 Educa- tional 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	1,20,39,267.24	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 & Oth- er 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	I,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, Advanc- es & 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

Page 182

					(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 Ser- vice 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 Sti- pend 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 Inter- view	18,887.00	3,62,271.00
			Chemical & Rea- gents	90,860.00	28,611.00
			Legal Expenses	19,59,225.00	5,17,486.00
			Retirement Bene- fits	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.)

Page 183

59th Annual Report

					(Amounts in INR
RECEIPTS	CURRENT YEAR	PREVIOUS YEAR	PAYMENTS	CURRENT YEAR	PREVIOUS YEAR
			Communica- tion	2,12,217.00	
			Internet Fee	42,674.00	32,498.0
			Infrastructure	4,34,67,133.00	83,782.0
			Other Adminis- trative Expenses	6,56,40,523.70	
			Infrastructure		
			Water Expenses		5,79,504.0
			Hot & Cold Weather Charges		5,88,008.0
			Electricity Ex- penses		31,83,096.0
			Insurance of Insti- tute Property		1,57,224.0
			Other Adminis- trative Expens- es		
			NIT Transit House		2,50,000.0
			Printing & Sta- tionery Con- sumption		38,62,736.0
			Travel & Convey- ance		14,23,867.0
			Water Expenses		
			Misc. Contingen- cies		3,53,26,989.0
			Liveries		1,11,406.0
			Other Adminis- trative Expens- es		
			Printing & Sta- tionery Con- sumption		
			Travel & Convey- ance		
			Misc. Contingen- cies		

RECEIPTS		CURRENT		PAYMENTS	CURRENT YEAR	(Amounts in INR) 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 Tota	2,6	7,25,53,993.25	2,45,89,70,992.07	Grand Total	2,67,25,53,993.25	2,45,89,70,992.07

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

Deputy Registrar (Accounts)

Registrar

Director















National Institute of Technology Srinagar

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