

W//ES

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## MESSAGE FROM THE DIRECTOR



elcome to our latest issue of Waves, which is an expression of ideas memories and thoughts. Waves has no boundaries, reflecting our goal to push beyond boundaries and accomplish more than even before.

This is a dedicated volume that captures the nostalgic memories of the graduating batch of our institute. The beautiful years spent in the institute are engraved and expressed through photos and writings which are given as a souvenir.

The accomplishments of our faculty and the events since our last issue of Waves are well documented in the current issue.

I hope those of you reading the issue are enjoying the presentations in Waves.

We are proud of our success but we still have a long way to go before we reach our goalpost.

K. Uma Maheshwar Rao

## MESSAGE FROM THE REGISTRAR



am extremely happy to introduce this 5th edition of the "Waves" Institute Newsletter. We have intended to make it a regular publication and to use it to keep you in touch with the recent news and developments. In all the editions, we report decisions and activities which took place at NITK, Surathkal. Looking back, I am impressed by the progress made in the last four years. Presently, there are 243 faculty members, dedicated & active team of administrators, 5600+ students and 28000+ proud Alumni's. The students are now much more confident and are excelling in their fields. I wish the outgoing batch of students heartiest congratulations and all the very best.

I would like to thank all the stakeholders for their contribution & co-operation.

Jai Hind!!

#### K. Ravindranath



#### Dear Readers:

I am delighted to present the latest version of "Waves" Vol 3, Issue 1. The main aim of bringing our latest issues is to make the readers aware of the activities carried out in the Institute on a bi-annual basis. Though memories fade out will be brief but certainly will not get lost.

We are as inspired as ever to continue to shine a well-deserved spotlight on all corners of the world on the shores of Arabian Sea. Now, more than ever, we're driven to give a platform to the students to achieve their dreams in the field of technology.

I would like to extend personal thanks to all the editors who have been the lifeblood of Waves since its start. You will all remain a vital part of our mission going forward...

Thank you all, and here's to our Institutes' continued achievements.

Cheers....

G. Srinikethan (Co-ordinator-Waves)

# **Editorial Team**

#### G. Srinikethan

(Professor, Department of Chemical Engineering)

Co-ordinator

#### Katta Venkataramana

Dean (Academic)

#### Ashok Babu T. P.

Dean (Faculty Welfare)

#### A.U. Ravi Shankar

Dean (Planning & Development)

#### S.M. Hegde

Dean (Students' Welfare)

#### Ananthanarayana V.S.

Dean (Research & Consultancy)

#### Prasad Krishna

Dean (Alumni Affairs & Institutional Relations)

#### Muralidhar Kulkarni

Prof. I/C (Training & Placements)

#### Gaurav Chowdhury

Assistant Registrar (Academic)

Co-coordinator

## **CONTENTS (January-June, 2017):**

•	Auministrative appointments	Ü
•	Awards & Achievements of faculty members	8
•	Awards & Achievements of students	9
•	New Projects Sanctioned	13
•	TEQIP-III	19
•	Workshops/Conferences organized	19
•	Special assignments-faculty members	27
•	Student Activities (Fest/Cultural Events Conducted)	28
•	Alumni Meets Organised	29
•	Summer Internship under Ishan Vikas Programme -2017	30
•	International Summer University	30
•	Meeting with Hon'ble Members on the delegation from Ministry of Commerce and Industry, GOI, New Delhi and IIT Madras Research Park	31
•	Placements 2016-17	33
•	Admission Statistics for the year 2017-18	34
•	Faculty/Staff Retired	35
•	Upcoming buildings/projects	36
•	Upcoming events	36

#### ADMINISTRATIVE APPOINTMENTS

#### Director-NITK, Surathkal



We welcome Prof. K. Uma Maheshawar Rao to the NITK family. He has been appointed as the Director, NITK, Surathkal, w.e.f. July 21, 2017. He started his teaching career as a Lecturer in Mining Engineering at NITK, Surathkal (the then Karnataka Regional Engineering College, Surathkal) during 1987-89. As a Professor he has served IIT Kharagpur in various administrative positions. Some of important portfolios were as the Chairman Estate, and Vice-Chairman Joint Entrance Exam (JEE).

We also thank **Prof. K.N Lokesh** for his sincere efforts as Director i/c from June 2015 to July 20, 2017. During his tenure he has managed the functioning of the Institute with the best of his abilities.





**Director, NIT Goa: Prof. Gopal Mugeraya,** has been appointed as Director at NIT Goa w.e.f. July 15, 2017. He was also appointed as Director of NIT Agartala for 4 years prior to this. We wish him very best of success in his future endeavours as an inspirational leader.



Head of Department (Department of Applied Mechanics & Hydraulics)

We congratulate **Prof. A. Mahesha** on taking the charge of HOD w.e.f 12.03.2017.



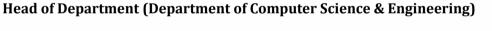
We thank **Prof. G.S Dwarakish** for his sincere efforts as HOD from 12.03.2015 to 11.03.2017. His service as HoD is appreciated & placed on records.

**Head of Department (Department of Civil Engineering)** 

We congratulate **Prof. Varghese George** on taking the charge of HOD w.e.f. 21.04.2017



We thank **Prof. Venkat Reddy** for his sincere efforts as HOD from 12.07.2015 to 20.04.2017. His service as HoD is deeply appreciated & placed on records.



We congratulate **Dr. P. Santhi Thilagam** on taking charge of HOD w.e.f. 06.01.2017.





We thank **Ms. Vani M** for her sincere efforts and discharging duties as HOD from 17.08.2015 to 05.01.2017. Her service as HOD is appreciated & placed on records.

Head of Department (Department of Electrical & Electronics Engineering)

We congratulate Dr. B. Venkatesa Perumal on taking the charge of HOD w.e.f 29.05.2017.





We thank Dr. Vinutha U. for her sincere efforts and discharging duties as HOD from 01.09.2015 to 11.05.2017. Her service as HoD is appreciated & placed on records.

**Co-ordinator: TEQIP-III** 

We congratulate **Prof. Ravikiran Kadoli**, Department of Mechanical Engineering on taking the charge as TEQIP Phase - III Co-ordinator w.e.f 22.07.2017.





We thank Prof. Prasad Krishna, Department of Mechanical Engineering for his sincere efforts as Co-ordinator TEQIP-II from 01.07.2010 to 04.04.2017. His service as Co-ordinator TEQIP-II is appreciated & placed on records.

#### **AWARDS & ACHIEVEMENTS OF FACULTY MEMBERS**

SI. No.	Name of Faculty	Department	Achievements
1.	Dr. Hari Prasad Dasari	Chemical Engineering	DST-SERB Early Career Research Award
2.	Dr. Jayalekshmi B.R.	Civil Engineering	Women Achievers' Award, Institution of Engineers (India), Karnataka
3.	Dr. Jayalekshmi B.R.	Civil Engineering	Member, Special Structures Sectional Committee (CED 38), BIS
4.	Dr. M.C.Narasimhan	Civil Engineering	Member, Special Structures Sectional Committee (CED 38), BIS
5.	Dr. Annappa	Computer Science & Engineering	Invited as a Visiting expert to Universite des Mascareignes, Mauritius during 19 <sup>th</sup> May to 18 <sup>th</sup> June 2017.
6.	Dr. Mohit P. Tahiliani	Computer Science & Engineering	Selected as a Mentor for Google Summer of Code (GSoC) from ns-3 organization (30 <sup>th</sup> May 2017 to 21 <sup>st</sup> Aug 2017).

SI. No.	Name of Faculty	Department	Achievements
7.	Dr. Nagendrappa H.	Electrical & Electronics Engineering	Best Paper Award to Dr. Nagendrappa H., Assistant Professor, in the IEEE- International Conference – ICSPACE 2017 held at Bangalore.
8.	Dr. A. Karthikeyan Dr. B.Venaktesaperumal	Electrical & Electronics Engineering	Indian Patent filled on "A Dynamic voltage restoration system for weak ac grids and a method thereof", application number 201741009197 date 16 <sup>th</sup> March 2017.
9.	Dr. Karthikeyan A Mr. K. K. Prabhakaran Dr. Venkatesaperumal B	Electrical & Electronics Engineering	Indian Patent filled on "Method and Device for Sensorless PMSM drive", application number 44445/ 2016-CHE date 4 <sup>th</sup> January 2017.
10.	Dr. Sowmya Kamath S	Information Technology	DST Early Career Research Award.
11.	Dr. V.R. Sastry	Mining Engineering	"Luminary in Mining Engineering Education in the Country" given by CSIR –CIMFR at New Delhi.
12.	Dr. V.R. Sastry	Mining Engineering	Appointed as Member Governing Body of National Institute of Rock Mechanics, Bangalore by the Ministry of Mines GOI.
13.	Dr. Saumen Mandal	Metallurgical & Materials Engineering	Fabrication of High Conductive Metallic Films at Low Temperature", "Indian patent", Application Number 201741005384 dated 15 <sup>th</sup> February, 2017.

## **AWARDS & ACHIEVEMENTS OF STUDENTS**

Sl. No.	Department	Name of the student	Programme and Semester	Awards and Achievements
1.	Chemical Engineering	Kishor Kumar, M.J.	Ph. D, 5 <sup>th</sup> Semester	Best paper Award in Chemcon-16
2.	Chemical Engineering	Satabdi, H.	B. Tech, 8 <sup>th</sup> Semester	2 <sup>nd</sup> Prize at II T.B CHEMTECH-16

Sl. No.	Department	Name of the student	Programme and Semester	Awards and Achievements
3.	Chemical Engineering	Buruga Kezia	Ph.D., 7 <sup>th</sup> Semester	Best paper award at Chemcon-16 at Anna University Chennai
4.	Civil Engineering	Vikrant Singh	B. Tech, 7 <sup>th</sup> Semester	Best Paper Award
5.	Computer Science & Engineering	Team "code_pheonix", comprising of Ajinkya Parab, Prabhu Dayal Sahoo, Yogesh Gaturle	B. Tech 7 <sup>th</sup> Semester	Reached the world finals of the ACM-ICPC 2017 to be held at Rapid City, South Dakota, USA.
6.	Computer Science & Engineering	Harita Reddy	B. Tech, 5 <sup>th</sup> Semester	Selected for "Science Academics Summer Research Fellowship Program (SRFP-2017)"
7.	Computer Science & Engineering	Team Linux Technology Centre, Bangalore comprising Sourabh Jain(CSE) and Parth Shah(CSE-IS) and Team System Lab, Bangalore comprising of Bhaskar Gautham and Vivek Jain	M. Tech, 3 <sup>rd</sup> Semester	Got selected in "IBM Extreme Blue" internship program from 05 <sup>th</sup> May to 15 <sup>th</sup> July 2017.
8.	Computer Science & Engineering	B K Kushal Gowda and Anshul Agarwal co- founders of "Savemonk" a startup	B. Tech, 7 <sup>th</sup> Semester	Selected for the final round of ELEVATE100 (from 10th March to 29th Aug 2017). Also received Rs. 25 Lakhs worth of services from FBSTART.
9.	Electronics & Communication Engineering	Ankit Shah	B. Tech 8 <sup>th</sup> Semester	Gandhian Young Technological Innovation (GYTI) Awards 2017, Festival of Innovation, Rashtrapathi Bhavan New Delhi,

Sl. No.	Department	Name of the student	Programme and Semester	Awards and Achievements
10.	Electronics & Communication Engineering	Baldeo Sharan Sharma	M. Tech (Research) 4 <sup>th</sup> Semester	Best paper award in ICIESC 2017, April 06 – 07, 2017
11.	Electrical & Electronics Engineering	Hari Sanakar, S, Harshavardhan Reddy, Seethal R Menon and Vaishnavi Chauhan	B. Tech, 8 <sup>th</sup> Semester	Development of Robust Sliding Mode Controller for BLDC motor used in Steer by Wire Automobiles under the Guidance of Prof. KP. Vittal Received best project award at National level, under Engineering Students Innovation Challenge (ESIC - 2017). This was All India level competition conducted by International Society for Scientific Research & Development (ISSRD).
12.	Electrical & Electronics Engineering	E Prasanthi	M. Tech 4 <sup>th</sup> Semester	Best paper award in the IEEE International conference, IPACT-2017 held in VIT Vellore during April, 2017.
13.	Electrical & Electronics Engineering	Santosh Singh	M.Tech 4 <sup>th</sup> Semester	POSOCO Power System Award March-2017
14.	Information Technology	Akshay C D Medhini G N Poorva Ganesh Rane	B.Tech 8 <sup>th</sup> Semester	AMD best student projects award
15.	Information Technology	Sharma Rohit Subhash	M.Tech 4 <sup>th</sup> Semester	AMD best student projects award

Sl. No.	Department	Name of the student	Programme and Semester	Awards and Achievements
16.	Metallurgical & Materials Engineering	Bikesh Gupta,	M.Tech 4 <sup>th</sup> Semester	Fabrication of High Conductive Metallic Films at Low Temperature",
		Pavan Pujar,	Ph.D (Research), 5 <sup>th</sup> Semester	"Indian patent", Application Number 201741005384 dated 15 <sup>th</sup> February, 2017
		Komala Krishna	Ph.D, 4 <sup>th</sup> Semester	
		Hadagalli,	Ph.D	
		Robbi Vivek Vardhan	1 <sup>st</sup> Semester	
17.	Physics	Omkar Gopalkrishna Hegde	M.Sc Physics 4 <sup>th</sup> Semester	Joined for Ph.D in Max- Planck-Institut fur Eisenforschung GmbH, Dusseldorf, Germany
18.	Physics	Lekshmi S	M.Sc Physics 4 <sup>th</sup> Semester	Joined for Ph.D in Max- Planck-Institut fur Eisenforschung GmbH, Dusseldorf, Germany
19.	Physics	Sanjay A	M.Sc Physics 4 <sup>th</sup> Semester	Technische Universitat, Kaiserslautern, Germany
20.	Physics	Abhishek M	M.Sc Physics 4 <sup>th</sup> Semester Pass out	Joined for Ph.D in NCBS (TIFR), Bangalore
21.	Physics	Revathy B S	M.Sc Physics 4 <sup>th</sup> Semester	Joined for PhD in IIT, Palakkad
22.	Physics	Anjana Ashok	M.Sc Physics 4 <sup>th</sup> Semester	Doing Project in IUCAA, Pune

Note: This is not an exhaustive list



Ankit Shah (11EC86), Gandhian Young Technological Innovation (GYTI) Awards 2017, Festival of Innovation, Rashtrapathi Bhavan New Delhi, March 05, 2017

## **NEW PROJECTS SANCTIONED**

Sl.	Name (Principal	Project Title	Grant	Dept.	Funding	Pro	ject
No.	Investigator/ Co-ordinator)		(in Lakhs)		agency	Started (year)	End (year)
1.	Dr. Subba Rao, Dr. G.S.Dwarakish, Dr. H.Ramesh, Dr. Manu & Dr. Pruthviraj U.	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST) Program – 2014	25.00	Applied Mechanics	DST, Govt. of India	2015	2020
2.	Dr. Debabrata Karmakar	Coupled dynamic analysis associated with the response and design loads of offshore floating wind turbine	7884	Applied Mechanics	SERB, DST, Govt. of India	2016	2018
3.	Dr. Manu (PI), Dr. Subba Rao (Co-PI) & Dr. A. Vittal Hegde (Co-PI)	Hydrodynamic performance characteristics of Caisson type breakwater	32.67	Applied Mechanics	Ministry of Earth Sciences	2016	2021

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4.	Dr. T. Nasar	Optimal Damping of porous screen in Tuned Liquid Damper-Structure interaction	65.40	Applied Mechanics	SERB, DST, Govt. of India	2016	2019
5.	Dr. A.Mahesha, Dr. Amba Shetty, Dr. Varija & Dr. H. Ramesh	Climate change - Impact on West coast river basins		Applied Mechanics	Ministry of Water Resources	2016	2019
6.	Dr. Keyur Raval	Impact of maternal diabetes on pre- implantation embryo development: Non- invasive approach to assess embryo quality using oxygen consumption	53.60	Chemical	SERB	2017	2020
7.	Dr. Hari Prasad Dasari	KIST, KOREA Development of Quaternary Ceria - Based Catalysts for soot oxidation Activity	10.00	Chemical	KIST, KOREA	2017	2018
8.	Dr. Hari Prasad Dasari	DST – SERB Development of Novel SOFC Electrolyte Materials with enhanced Ionic Conductivity	51.00	Chemical	DST- SERB	2017	2020
9.	Dr. Sib Sankar Mal	Vanadium based Polyoxotungstates: Synthesis, structural characterization, and study of its electrochemical properties	8.00	Chemistry	CSIR	2017	2020
10.	Dr. Saikat Dutta	Chemo-catalytic Conversion of Cellulosic Biomass into Renewable Fuels and Chemicals	12.50	Chemistry	CSIR	2017	2020

11.	Dr. Jeny Rajan, Dr. Shashidhar G. Koolagudi, Dr. Abhishek Kothari	Retinal cysts identification and quantification from low SNR optical coherence tomo- graphy scans using image processing techniques	35.00	Computer Science & Engineering	DST (SERB, EMR grant)	2017	2019
12.	Dr. D. Jena (PI) & Dr. Nagendrappa H. (Co-PI)	Adaptive MPPT of Grid- tied Photo- voltaic System using Magnetically Coupled Impedance Source Inverters"	24.36	Electrical & Electronics	(DST SERB, EMR project (SERB/EMR/ 2016/) 005851),	2017	2020
13.	Dr. Nagendrappa H.	Grid Interfacing of Solar Power Generation: Design, development, and Investigation on High-frequency Transformer Isolated DC-DC Soft-switching Resonant Power Converters	48.94	Electrical & Electronics	SERB, DST	2017	2020
14.	Dr.B.Venkatesa- perumal & Dr. A. Karthikeyan and Dr. M Arun (mech)	Standalone Evaporative Air Cooler–Pump flow and speed controller using solar energy	38.69	Electrical & Electronics	DST	2017	2019
15.	Dr. B.Venkatesa- perumal & Dr. A.Karthikeyan	Solar water pump system	5.00	Electrical & Electronics		2017	2018
16.	Dr. Nagendrappa H.	Rainwater harvesting off the terrace of a high-raised building in coastal areas for microhydro power generation and utilization of rain water to augment the existing power and	5.00	Electrical & Electronics	NITK-IRG	2017	2018
		water supply facilities of NITK Surathkal.					

17.	Sheron Figarado	A harmonic elimination scheme with reduced switching losses for a 3-phase Open-end winding Induction Machine using only conventional two-level inverters in the entire modulation range.	28.00	Electrical & Electronics	SERB	2017	2020
18.	PI: Hemantha Kumar, Dept of ME, NITK Co-PI: 1) Sujatha C. IITM, Chennai 2) Gangadharan K. V. Dept of ME, NITK 3) Sharnappa Joladarashi Dept of ME, NITK 4) Sandesh S. Ashok Leyland Ltd. 5) Sheron Figarado Dept of EEE, NITK 6) Mohammad Rizwanur Rahman Dept of MME, NITK 7) Raja Sekaran. S. Rambal Ltd	Development of Cost Effective Magneto- Rheological (MR) Fluid Damper in Two wheelers and Four Wheelers Automobile to Improve Ride Comfort and Stability	355	Mechanical	Ministry of Road Transport and Highways	2017	2020
19.	Dr. Sowmya Kamath S	A Framework for Deep Learning based Analytics for Intelli- gent Healthcare Applications	35.00	Information Technology	DST-SERB	2017	2020
20.	Dr. V. Murugan	Application of kneading theory in iterative root problems	5.35	MACS	SERB, DST, India	2017	2019

21.	Dr. Jidesh P	Generalized framework for restoring medical and satellite images corrupted by data-correlated noise distributions	17.43	MACS	DST/SERB	2017	2020
22.	Dr. Satyanarayana, Engu	Solutions for viscous and inviscid Burgers equations'	14.77	MACS	DST (EMR scheme)	2017	2020
23.	Dr. Hemantha Kumar C.Sujatha, (IIT Madras) Dr. K.V.Gangadharan Dr. Sharnappa J., Dr. Mohd.Rizwan Rahman, Dr. Sheron F., Dr. Sandesh S. (Ashok Leyland Ltd. Chennai), and Mr. Rajasekharan (Rambal Ltd. Chennai)	Development of Cost Effective Magneto- Rheological (MR) Fluid Damper in Two wheelers and Four Wheelers Automobile to Improve Ride Comfort and Stability	355	Mechanical	Impacting Research and Technology (IMPRINT), MHRD, Ministry of Road Transport and Highways	2017	2020
24.	Dr. Ajay Kumar Yadav Dr. Anish S	Development of a Solar based Humidifier- Dehumidifier linked with ground water	34.00	Mechanical	DST-SERB	2017	2020
25.	Dr. Venkatesa Perumal Dr. Arun. M Dr. Karthikeyan J	Standalone evaporative cooler - pump and fan speed controller using solar power	60.00	Mechanical	DST-SERB	2017	2020
26.	Dr. Ranjith M	Investigations on the dynamic behaviour of bacterial helical flagellar filaments under axial flow	25.00	Mechanical	DST-SERB	2017	2020

27.	Dr. Sharnappa Joladarash Dr. Hemantha Kumar	Experimental investigation of passive, semi-active and active vibration control of composite sandwich structure	60.00	Mechanical	DST-SERB	2017	2020
28.	Dr. Arumuga Perumal D	Experimental investigation on pulsating synthetic jet micromixers to determine the injection dynamics of insulin in hydro- gels for subcutaneous drug delivery	30.00	Mechanical	DST-SERB	2017	2020
29.	Dr. Saumen Mandal	All solution processed transparent low temperature synthesized Indium Zinc Tin Oxide based high performances thin film transistors for active matrix displays	19.80	Metallurgical & Materials Engineering	"Early Career Research Award" from SCIENCE & ENGINEERING RESEARCH BOARD (SERB)	2016	2019
30.	Dr. Shashi Bhushan Arya	Corrosion and impedance study of Ti -Nb alloy foams developed by Powder Metallurgy technique	18.81	Metallurgical & Materials Engineering	Department of Science & Technology	2016	2019
31.	Dr. Partha Pratim Das	Transition Metal Oxides Based Non- Volatile Resistive Random Access Memory Devices	37.27	Physics	DST-SERB	2017	2020
32.	Dr. Shajahan. T. K	Dynamic of Low- Energy Anti- fibrillation Pacing: Unpinning pinned rotating waves using far field electric pulses	28.50	Physics	DST-SERB	2017	2020

#### **TEQIP-III**

NITK has been consistently identified as one of the top performers in implementing the TEQIP project. Based on the good performance in TEQIP-I and TEQIP-II and on the strength of our Institutional Development Proposal (IDP) for TEQIP-III, our Institute has been selected to participate in TEQIP-III. TEQIP-III commenced with effect from 01-04-2017. Our Institute has also been designated as Mentor Institute for Government Engineering College, Jhalawar, Rajasthan. A Memorandum of Understanding (MoU) with MHRD and agreement between NITK and Mentee Institute GEC [halawar have been signed and sent to National Project Implementation Unit (NPIU).

The Institutional TEQIP-III unit has been constituted. Prof. Ravikiran Kadoli has been appointed as the Coordinator with effect from 22nd July 2017. Prof. U. Shripathi Acharya, Dr. Laxminidhi T, Dr. Ramesh Kini, and Dr. Ashvini Chaturavedi are the Nodal officers for Academics, Finance, Procurement and Mentee Institution respectively.

As on today Procurement proposals have been approved to a tune of Rs. 310/- lakhs.

Twinning activities have been initiated. A team of faculty members from the Department of Electronics & Communication Engineering, Department of Physics and Department of Information Technology are currently on an Academic tour to our Mentee Institute - Government Engineering College, Jhalawar.

#### **WORKSHOPS/CONFERENCES ORGANIZED**

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
1.	Internet of Things (IoT)	Workshop	Mr. Raghavendra Shetty, RDL Technologies, Mangalore	January 01, 2017
2.	Playing With Ordering To Design New High Temperature Alloys	Prof. T. Ramachandran Lecture Series	Shanti Swarup Bhatnagar Awardee for the year 1995, Prof K. Chattopadhyay, Honorary Professor, Department of Materials Engineering, Former Chair, Mechanical Sciences Division Convenor, Interdisciplinary Center for Energy Research, IISc, Bangalore	January 06, 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
			Director (India), Solar Energy Research Institute for India and United States (SERIIUS) Co-ordinator, National Microgravity Programme, Indian Space Research Organisation (ISRO) Past President, Indian Institute of Metals	
3.	Visualization- Foundation to cloud computing,	Workshop (Dr. Pushparaj Shetty & Dr. Jidesh P)	Prof. K.N. Lokesh	January 09, 2017
4.	Workshop on Design and Development of Sustainable Concrete in the Era of Global Warming	Workshop	Prof. Biswajeet Bhattacharjee IIT Delhi	January 9-10, 2017
5.	Computational marine Hydrodynamics	Workshop	Prof. V. Sundar IIT Chennai	January 19– 20, 2017
6.	Linearity - Signals, Systems and Control	Workshop	Prof. Vittal Rao, IISc Bangalore Dr. Ashok Rao, Freelance Consultant	January 20 – 22, 2017
7.	TEQIP II sponsored two days workshop on "Materials for Bio- medical and Specialty Applications"	Workshop	1) Prof. T.S. Sampath Kumar, IIT Madras, 2) Dr. A. Venimadhav, IIT Kharagpur, 3) Dr. Biswanath Kundu, CSIR-CG&CRI, Kolkata 4) Dr. Kaushik Chatterjee, IISc, Bangalore,	January 23 – 24, 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
			5) Dr. N. L. Thakur, CSIR-NIO, Goa. 6) Dr. P. Ramesh, SCTIMST, Kerala.	
8.	"Recent trends in Environment, Health and Safety Management in Mining and other Core industries"	Workshop	Prof. K.V.Shankar Annamalai University	January 27 – 28, 2017
9.	CFD : Tutorials and Demonstration to B.Tech Chem. Engg. students	Workshop at Trichy		February 01, 2017
10.	Vowel-like Regions and Source Information for Speech Processing	Expert Lecture	Dr. S R Mahadeva Prasanna Professor, EEE and Dean (R&D), IIT Guwahati	February 03 – 04, 2017
11.	Prakriti Infocus	Workshop	Mr. Samad Kottur Co-author : Daroji: Ana Ecological Destination	February 4, 2017
12.	Topics in Contemporary Physics	One day Workshop	Prof. M.V. N. Murthy, Instt. Mathematical Sciences, Chennai	February 8, 2017
13.	Gravitational Waves	Special Lecture	Prof. Rajesh Kumble Nayak, IISER Kolkata	February 14, 2017
14.	Past, present and future scenarion in Marine Structures	Workshop	Prof. M.C.Deo IIT Bombay	February 20, 2017
15.	Biofluid Dynamics and Bio Heat Transfer	Workshop	Shanti Swaroop Bhatnagar Awardee, Prof Suman Chakraborty from IIT Kharagpur	February 20 – 21 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
16.	Mineral Beneficiation	Workshop	Dr. S.K Pan, Ranchi	February 20 -21, 2017
17.	TEQIP II sponsored Two days National Workshop on "Minerals Beneficiation"	Workshop	1) Dr S K Pan, RDCIS, Ranchi 2) Dr. Rameshwar Sah, JSW Bellary, 3) Dr T R R Rao, KIOCL, Mangalore, 4) Mr Kumar Abhishek, JSW Bellary, 5) Prof S Subramanian, IISc, Bangalore	February 20–21, 2017
18.	Expert Lecture on Fluid Mechanics	Expert lecture	Dr. Ratlrl Dasgupta, IIT Mumbai; Dr. Anubhab Roy, IIT Madras	February 22, 2017
19.	Simulation of Manufacturing Processes	Workshop	Mr Prsahanth B Kumbar Senior Application Engineer DHIO Researchand Engineering Pvt Ltd., Bangalore,	February 27, 2017
20.	Intel Student Developer Program for Artificial Intelligence	Workshop	Mr. Siddhanth Agarwal & Mr. Ranganath Agarwal, Intel Bangalore	March 02, 2017
21.	Laser Processing Of Materials	Workshop	Shri. Dr. G. Padmanabham Director, ARCI, Hyderabad	March 9 – 11, 2017
22.	Machines And Mechanisms: Kinematics, Dynamics And Computational Tool	Workshop	Dr. Mruthyunjaya T.S., Former Professor, IISc- Bangalore; Dr. G.K Ananthasuresh, Professor, IISc-Bangalore	March 14 – 15, 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
23.	Dynamics of Charge Carriers in Materials	Seminar	Prof. A. Ghosh, Indian Association for Cultivation of Science, Kolkatta	March 16, 2017
24.	Advances in Stress Analysis and Dynamics	Workshop	Prof. Dutta Guru, Former Professor, IISc Bangalore	March 16 – 17, 2017
25.	Apple NOT Falling Down	Expert Lecture	Prof. B. N. Karkera Former Senior Scientist, BARC & Deputy Director, CSIO, Visiting Professor NIAS	March 17, 2017
26.	Spray Drying, Sol gel synthesis and Sintering	Expert Lecture	Dr. Premanshu Jana, Sr. Manager- Technical, Electro Mineral Division, Carborundum Universal Limited, Kerala 683109	March 18, 2017
27.	Recent Advances and Challenges in Solar Thermal Systems	Workshop	Dr. Ranjan Das, IIT Ropar	March 20, 2017
28.	Recent Advances In Sustainability	Workshop	Dr.T.V.Ramachandra, IISc- Bangalore; Dr.Amaresh Chakrabarti, IISc- Bangalore	March 21, 2017
29.	Hotwire Anemometry: Fundamentals with Demonstration	Workshop(Dr. Vishwanath K P)	Prof. K.N. Lokesh	March 22, 2017
30.	Constructions on the computer	Expert Lecture	Prof. Sudipti Mukherjee, IIT-Delhi	March 22, 2017
31.	Workshop on Low Dropout Regulator ( Power electronics) Supported by TI coordinator Dr. B. Venaktesaperumal	Workshop	Mr. Abdul Samad and Miss. Manjit Saini Experts form TI	March 24, 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
32.	Creative Problem Solving – A Systematic Methodology	Expert Lecture	Prof. T S Mruthyunjaya, Former Professor, IISc- Bangalore	March 24, 2017
33.	Modeling and Scale up of Bioreactors	Workshop Coordinators: Prof. G.Srinikethan and Dr. Vidya Shetty K	Chief Guest Prof.K.V.Venkatesh IIT Bombay	March 24 – 25, 2017
34.	Workshop on System Design supported by TI Coordinator Dr. B. Venaktesaperumal	Workshop	Mr. Abdhul Samad and Mr. Akhil	March 25-26, 2017
35.	Integrated Product Design – Role of Design for Manufacture and Assembly	Expert Lecture	Prof. Raghu V Prakash, IIT-Madras, Chennai.	March 27, 2017
36.	Chaos: A New Kind of Motion	Expert Lecture	Prof. Soumitro Banerjee, Department of Physical Sciences, IISER Kolkata	April 28, 2017
37.	LASER for Materials Science	Expert Lecture	Dr. Krishna Chaitanya V., Assistant Professor, Sri Satya Sai Institute of Higher Learning, A.P.	May 12, 2017
38.	Electronegative Plasma Diagnostics	Expert Lecture	Dr. Nishant Sirse, Post- Doctoral Fellow, Dublin City University , UK	May 24, 2017
39.	Optoelectronics of Si Solar Cells & Modules	Expert Lecture	Prof. Brij M. Arora, Retired Professor, TIFR Mumbai & Visiting Professor, IIT Bombay	May 26, 2017
40.	Laser applications in micro fabrication and Postdoc opportunity in Europe	Expert Lecture	Dr. Surya S.K. Guduru, Post Doctoral Researcher Engineer, SATT & LP3, CNRS, Aix-Marseille University, Marseille, France	May 30, 2017

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
41.	"Open-Source Network Experimentation" (ONE-17)	A WINGS's 7 <sup>th</sup> 3 days' Workshop		June 1-3, 2017
42.	Refresher Course on Repair and Maintenance of Buildings	Refresher Course		June 19-23, 2017
43.	IoT and its Applications in Electrical Systems Dr. A. Karthikeyan and Dr. P. Parthiban	Workshop	Pantech ProEd Pvt. Ltd	July 14 - 15, 2017

Note: This is not an exhaustive list

#### FEW GLIMPSES OF WORKSHOPS CONDUCTED



Workshop on Past, present and future scenarion in Marine Structures



**Workshop on Prakriti Infocus** 



**Workshop on Prakriti Infocus** 



**Workshop on Computational marine Hydrodynamics** 



Inauguration ceremony of Workshop on Design and Development of Sustainable Concrete in the Era of Global Warming (Jan 2017)



Dr. Rishi Gupta, Assistant Professor, Department of Civil Engineering, University of Victoria visited Civil Engineering Department, NITK Surathkal and delivered a talk on innovative and low carbon footprint materials and infrastructure monitoring



TEQIP II sponsored two days' workshop on "Materials for Biomedical and Specialty Applications" on 23rd -24th January, 2017



Refresher Course on Repair and Maintenance of Buildings (June 2017) - Course co-ordinator Dr. B. B. Das in the centre along with the participants



Prof. T. Ramachandran Lecture Series was delivered by Prof K. Chattopadhyay on 6th January, 2017



Prof Bikramjit Basu was welcomed Dr Udaya Bhat K, HOD, Metallurgical & Materials Engineering on 14th August, 2017





"Open-Source Network Experimentation" (ONE-17) A WINGS's 7th, 3 days' Workshop

#### SPECIAL ASSIGNMENTS-FACULTY MEMBERS

- Prof. K. Chandrasekaran, Dept. of Computer Science & Engineering has appointed as a Chief Vigilance officer of the Institute for a period of 3 years. w.e.f 17.07.2017
- Prof. U Shripathi Acharya, Dr. Ramesh Kini M., Dr. T. Laxminidhi and Dr. Ashwini Chaturwedi, Dept. of Electronics & Communication nominated as Nodal Officers for the proper planning, co-ordination, implementation, monitoring and evaluation of TEQIP-III activities in NITK.
- Prof. G. Srinikethan, Member, Technical Advisory Committee, KSPCB, Bangalore.

### STUDENT ACTIVITIES (FEST/CULTURAL EVENTS CONDUCTED)

#### **INCIDENT - 2017**









Incident 2017 was held during March 02-05, 2017. Day 0 started in style with the celebrated veteran actor Dr. Shivaraj Kumar raising the curtains for Incident 2017. Everybody welcomed Inci with graceful dances and was followed by the IndoSoul performance by Karthick Iyer which swayed our hearts away as the fusion music took the stage. Day 1 started off on an energetic note with the workshops and the events taking place. The night rocked with Baiju Dharmajan. Indian music continued to showcase its legacy even on day 1, as the audience enjoyed every bit of it. Day 2 was enthusiastic as usual, Lagori and DJ Oceanti ed was one epic show. Haute Couture soared the temperatures high with the ramp getting swayed away with the beautiful themes and the models walking away to glory. Day 3 had the usual on goings and then the evening started with the comedy show of EIC sensa- tion Angad Singh Ranyal making us laugh our hearts out and giving all of us a nice stomach ache. It wasn't over yet for the day. Everyone got a taste of the original amazing beats of the Local Train as the whole crowd became a set of energetic singers. The last day of Incident was an electrifying night which became an EDM night.

Vintage Car Expo show-cased some never before seen stu from the automobiles sphere, to everyone's fascination. Kite Fest gave wings to our kites and dreams of the students. Biz and Art events gave it a whole

new dimension. With Kalakriti and Expose, artists and budding photographers gave a nice treat! Spinshock certainly accelerated the excitement of the adrenaline rush as the inter collegiate throw ball tournament for women took place with high energy! Slam dunk supplemented the sporting mode as the adrenaline rush continued.

Every Incident has been a unique one. Always "better than the best one".







The Ring Presentation Ceremony celebrated in NITK, Surathkal is one of a kind. This celebration is in practise for more than 57 years. Every student of the graduating batch are presented a silver ring with the emblem of Institute & graduating year embossed. The ceremony is unique in that faulty members treat the students as their guests and personally give away the ring to each student and wish them luck in their future life. The Ceremony was held on April 07, 2017. Mr. M. Chandra Shekhar, Police Commissioner, Mangaluru was the Chief Guest.

#### **ALUMNI MEET**



The 13<sup>th</sup> Annual General Meeting of N.I.T.K. Surathkal Alumni Association was held on Sunday, the 6th of August, 2017 at 4:00 PM in the Main Seminar Hall, Main Building, NITK, Surathkal.

Saplings were planted by our Director, Prof. Karanam Uma Maheshwar Rao, Dean (FW) and Dean (AA & IR) on the Foundation day under the aegis of the Alumni Association.

#### **SUMMER INTERNSHIP UNDER ISHAN VIKAS PROGRAMME -2017**

Eight B. Tech students from Jorhat Engineering College, Assam has successfully completed their Summer Internship under the Ishan Vikas Programme-2017 for College Students (Flagship Programme of the MHRD, Govt. of India) coordinated by IIT (Guwahati) at NITK, Surathkal. The programme has been fully funded by the Ministry of HRD.



**INTERNATIONAL SUMMER UNIVERSITY 2017** 





The International Summer University 2017 was inaugurated on Sunday, 19th, February, 2017 at National Institute of Technology Karnataka, Surathkal. The School of Management of the National Institute of Technology Karnataka, Surathkal in collaboration with HEIG-VD, School of Business and Engineering University of Applied Sciences Western Switzerland organizes the International Summer University since 2010 through an MOU. The two universities aim to augment the international exposure and to foster the

academic interests of the students through several industrial visits across India and Switzerland. The highlight of this programme is the industrial projects produced by the select students at the end of the industrial visits. The chief guest, Prof. Laurence Larghi of HEIG-VD, Switzerland remarked on the significance of the programme with regard to the intellectual and cultural exchange of knowledge. The president, Prof. Katta Venkatramana, Dean (Academic), NITK expressed his positive affirmation over the same. The Guests of Honour for this event were Prof. Ashok Babu T.P, Dean (Faculty Welfare) NITK, Prof. Umberti Philippe and Prof. Zysman Eytan from HEIG-VD. Prof. Kiran K.B., Professor and Head of the School of Management welcomed the gathering. The first leg of Summer University programme is conducted in India spread over a span of two weeks in February and the second leg is conducted in Switzerland in July every year. This year 8 students from Switzerland and 12 students from India are participating in the programme. The selected students participate in this programme both in India and Switzerland.

# MEETING WITH HON'BLE MEMBERS ON THE DELEGATION FROM MINISTRY OF COMMERCE AND INDUSTRY, GOI, NEW DELHI AND IIT MADRAS RESEARCH PARK





The Ministry of Commerce and Industry, under the dynamic leadership of Smt. Nirmala Sitharaman, Hon'ble Minister of State (Independent Charge) for Commerce and Industry, is committed to create a sustainable start-up ecosystem in India. The Hon'ble minister plans to setup incubation centres and tinkering labs, targeted at encouraging innovative solutions across sectors amongst students in the coastal belt of Karnataka. Commerce and Industry Ministry has embarked on this move to give thrust for entrepreneurship in the coastal district through the incubation centres with focus on agriculture, education, health, infrastructure, manufacturing and internet of things. In this connection, a delegation from Commerce and Industry Ministry, GOI, New Delhi and IIT Madras Research Park has visited NITK to assess the Start-up Ecosystem on 24th April,2017. The team consisted of Prof. Ashok Jhunjhunwala, Head IIT Madras Research Park and Advisor to Hon'ble Minister Shri. Piyush Goyal, Ministry of Power and Shri Rajiv Aggarwal, IAS, Joint Secretary, Ministry of Commerce and Industry, GOI, New Delhi and others.

Shri Rajiv Aggarwal, IAS, Joint Secretary, Ministry of Commerce and Industry, GOI, spoke about the intention of the government in making Mangalore a hub of start-up eco system. He added that Start-up India is a

flagship initiative of the Government of India, intended to build a strong ecosystem for nurturing innovation and start-ups in the country.

#### Prof. Ashok Jhunjhunwala

Prof. Ashok Jhunjhunwala spoke about the changing trends in the students career preferences over the last few decades and feels that now best students want to go for startups. He expressed that based on his interaction with students, students feel that nearly 70% to 90% learning takes place in the technical clubs and projects and only 10% to 30% in the formal classroom teaching.

**Prof. Jhunjhunwala s**uggested that faculties should do consultancy and should be allowed to own companies in the incubation centres.

The general feeling is that Mangalore do not have an eco-system for start-ups to flourish and this meeting is to deliberate as to how to create such an eco-system.

During the deliberation Prof. Jhunjhunwala advised that three institutes i.e. NITK, NITTE and MIT have to work together in building an eco-system for start-ups.

Prof. Jhunjhunwala suggested summer internship for young faculties in the industry.

To build the eco system in the Mangalore region, alumnus of NITK, NITTE, MIT should take the lead. Each institute will have its own incubation center and a common facility in Mangalore city should be created to organize lectures and other activities for all three institutions.

There should be a coordinated mentorship among the institutes where faculties can mentor students from other institutes as well.

For facilitating seed financing, a system like Mangalore angles can be created in line with Mumbai, Chennai or Bangalore angels.

Every incubator need to have information about the company and proper disclosures in a timely manner. Incubation centers should help students to get finance, IPR, legal cell, HR template, and entrepreneurship training.

For encouraging students to take up start ups, a deferred placement policy for students engaging in startups in the campus should be given.

He mentioned that Incubatee should come through the hard route and not through shortcuts.

Prof. Ashok Jhunjhunwala and Commerce and Industry Ministry team has actively interacted with successful Alumni entrepreneurs, Faculty Mentors and Industry players from the region. The purpose of the visit is to identify and suggest the best ways to nurture innovation, incubation and entrepreneurial skills of the students, faculty and people of the region.

## **PLACEMENTS 2016-17**

## PLACEMENT STATISTICS DURING THE YEAR 2016-17

	(Data as on 30.06.2017)		
Department	ELIGIBLE STUDENTS	PLACED	% PLACED
	B.Tech		
CIVIL	68	46	68
CHEMICAL	32	32	100
COMPUTER SCIENCE	94	94	100
ELECTRONICS & COMMUNICAITON	92	87	95
ELECTRICAL & ELECTRONICS	81	74	91
INFORMATION TECHNOLOGY	88	84	95
MECHANICAL	113	107	95
METALLURGICAL & MATERIALS	28	20	71
MINING	32	21	66
Total B.Tech	628	565	90
	M.Tech		
	CIVIL		
STRUCTURAL ENGG 25	12	48	
GEO TECH ENGG	12	3	25
ENVIRONMENTAL ENGG	23	5	22
TRANSPORTATION SYSTEMS ENGG	21	3	14
CONSTRUCTION TECHNOLOGY & MGMT	24	1	4
APPL	IED MECHANICS & HYDRAUI	LICS	
MARINE STRUCTURES	16	5	31
WATER RESOURCES ENGG & MGMT	11	2	18
REMOTE SENSING & GIS	9	1	11
	CHEMICAL		
INDUSTRIAL POLLUTION CONTROL	10	9	90
CHEMICAL PLANT DESIGN	6	4	67
INDUSTRIAL BIOTECHNOLOGY	12	3	25
<u> </u>	COMPUTER SCIENCE		'
COMPUTER SCIENCE & ENGINEERING	22	20	91
INFORMATION SECURITY	21	19	90
ELEC	TRONICS & COMMUNICAITO	N	
VLSI	22	9	41
COMMUNICATION ENGG	26	13	50

EL	ECTRICAL & ELECTRONICS		
POWER & ENERGY SYSTEM	16	2	13
IN	FORMATION TECHNOLOGY	7	
INFORMATION TECHNOLOGY	16	16	100
	MECHANICAL		
THERMAL ENGG	14	7	50
MANUFACTURING ENGG	11	3	27
MECHATRONICS	26	6	23
DESIGN AND PRECISION	15	9	60
ME	TALLURGICAL & MATERIAI	.S	
PROCESS METALLURGY	7	1	14
MATERIALS ENGG	19	5	26
NANOSCIENCE AND	6	1	17
NANOTECHNOLOGY			
MATHEMAT	FICAL & COMPUTATIONAL	SCIENCES	
COMPUTATIONAL MATHEMATICS	13	6	46
Total M.Tech	403	165	41
	PG		
MCA	82	60	73
MBA	33	9	27
M.Sc (CHEMISTRY)	15	3	20
M.Sc (PHYSICS)	9	5	55
TOTAL	Eligible	Placed	Total Percentage
	Students	Students	Placed
	1170	807	69
Total Companies Visited - 248	Maxi	mum Salary Rs.25	5.00 LPA
Average Salary UG: Rs. 8.88 LPA		UG:90%	PG: 44%

## **ADMISSION STATISTICS FOR THE ACADEMIC YEAR 2017-18**

Sl. No.	Programme	Admissions 2017-18
1.	B.Tech	834
2.	M.Tech	506
3.	M.Tech (Research)	39
4.	MCA	87
5.	MBA	34
6.	MSc (Physics)	25
7.	MSc (Chemistry)	27
8.	Ph.D (July session)	148
	Total	1700

## **FACULTY & STAFF RETIRED**

## **FACULTY**

Sl.No.	Name	Department	Date of Joining	Date of retirement
1	Dr. Keshav Prasad Halmane	MACS	19.08.1991	31.01.2017
2	Dr. G. Umesh	Physics	17.01.1992	31.01.2017
3	Dr. Venkat Reddy	Civil Engineering	04.08.1986	30.04.2017

## **STAFF**

Sl.No.	Name	Department	Date of Joining	Date of retirement
1	Sri. S. Peus D'souza	Works Establishment Section	19.11.1985	31.01.2017
2	Smt. Indira J Devadiga	Cash Section	17.11.2000	28.02.2017
3	Smt. Shashikala	Chemical Engg	12.11.1985	28.02.2017
4	Sri. A.M Kamaluddin	Works Establishment Section	01.05.1978	31.03.2017
5	Sri. K Dasu	Library Section	19.12.1979	31.05.2017
6	Sri. Gangadhara	Watch and Ward Section	14.11.1998	31.05.2017
7	Sri. Krishnappa M	Library Section	24.07.1995	31.05.2017
8	Sri. Deenanath Shettigar	Purchase Section (Stationery)	24.12.1981	31.05.2017
9	Smt. Anasuya P.V	Office of Dean (FW & P&D)	26.12.1980	31.05.2017

## **UPCOMING BUILDINGS/PROJECTS**



New building for the Department of Computer Science & Engineering



**New Building for Library** 

#### **UPCOMING EVENTS**

- Guest Lecture by Prof. Narendra M Dixit on 10<sup>th</sup> August 2017 (Chemical Engineering department)
- "Multiphase flow" workshop on September 02, 2017 (Chemical Engineering department)
- Hands-on Training programme on IoT, Sponsored by NITK Surathkal, Royal Academy of Engineering and Newton-Bhabha Fund from August 18<sup>th</sup>–19<sup>th</sup>, 2017 (Electronics & Communications Engineering department)
- "ENGINEER" scheduled on October 11th-15th, 2017
- 15<sup>th</sup> Annual Convocation scheduled to be held on October 28, 2017 (Saturday).



