

**National Institute of Technology Karnataka, Surathkal**  
**Mangalore-575025, Karnataka, India**  
**[www.nitk.ac.in](http://www.nitk.ac.in)**

# ***NITK Newsletter***

## ***“Waves”***

## Message from the Director



*Waves* is the reflection of most significant activities of the institute, covering academic and extra academics of both the faculty, staff and students.

Responding to the initiative of MHRD through – Revitalising Infrastructures and System in Education (RISE), NITK Surathkal is the only institute under the umbrella of NITs, made a most significant mark being granted fund through HEFA (Higher Education Financing Agency) for the financial year 2017-18. The grant through HEFA is earmarked for the creation of Central Funding Research (CRF). The CRF will be creating funds through more Institute – Industry – Partnership. Towards this, STEP under the new leadership, is stepping forward with an inclusive approach to promote startups in the institution.

The Vertical expansion of infrastructure facilities and state-of-the-art equipment and with a team of talented and dedicated faculty members, contribute to visibility of the institute beyond the ocean banks.

Once again, wish all our students and faculty a successful and rewarding career.

**K. Umamaheshwar Rao**

## *Message from the Registrar*



It is a great pleasure to introduce the Institute's Newsletter 'Waves' for the period from July 2017 to December 2017.

This Newsletter is showcasing the development of the Institute that has been achieved in the last half of the year. It brings out into the open the things hitherto unrevealed with the names of the achievers and their mighty accomplishments.

Our Institute has made deep forays in contributing to the world, the world renowned technocrats, successful entrepreneurs, competent leaders, innovative scientists and researchers. 28000+ highly successful Alumni in all walks of life are testimony to the quality of nurturing they got in this Institution. Excellence is a continuous process, may all our 5600 + students soar still high in uncharted skies and bring glory to their alma mater and chosen profession all over the world.

I take this opportunity to congratulate the editorial board for bringing out this newsletter as per schedule, which in itself is an achievement considering the effort and time put into it.

With best Wishes,

K. Ravindranath



Dear Readers,

I am extremely happy to release the yet another version of “Waves Vol 3, Issue 2”. This issue contains the Institute activities during the period July 2017 to December 2017, which includes Institute academic activities, convocation details, GIAN programmes and other achievements of faculty, staff and students.

I would like to extend personal thanks to all those who were involved directly or indirectly in bringing out this latest version of waves, Our biannual publication of Institute Newsletter.

Cheers....

G. Srinikethan  
**(Co-ordinator)**

## **Editorial Team:**

**G. Srinikethan**

*(Professor, Department of Chemical Engineering)*

**Coordinator**

*M B Saidutta*

*Dean (Academic)*

*Ashok Babu T. P.*

*Dean (Faculty Welfare)*

*Dwarakish G S*

*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 & Placement)*

*Priyanka Dattanand Amadalli*

*Assistant Registrar (Academic)*

**Co-coordinator**

## Contents (July 2017 to December 2017):

- Administrative appointments
- Special Assignments – Faculty members
- Awards & Achievements of Faculty Members
- Awards & Achievements of Students
- Workshops/Conferences organized
- GIAN Programmes conducted
- Institution of Eminence (IOE)
- Higher Education Financing Agency – ( HEFA )
- Programmes conducted at the Institute
- Alumni Meet
- Management Development Programme
- 15<sup>th</sup> Annual Convocation function
- Curriculum Revision
- Placement Statistics (2017 – 18)
- Admission statistics for the year 2017 – 18
- Faculty/Staff Retired
- Buildings/ Projects completed/ Planned/ New Infrastructure

## ADMINISTRATIVE APPOINTMENTS:

### Assistant Registrar (Academic)



We welcome Ms. Priyanka Dattanand Amadalli to the NITK family. She has been appointed as the Assistant Registrar (Academic), NITK, Surathkal, w.e.f. Dec 15<sup>th</sup> 2017.

## SPECIAL ASSIGNMENTS – FACULTY MEMBERS:

### Dean( Academic)



We thank Prof. Katta Venkataramana, Department of Civil Engineering for his sincere efforts as Dean (Academic). His service as Dean(Academic) is appreciated and placed on office records.



We Congratulate Prof. M B. Saidutta Department of Chemical Engineering on taking over the charge as Dean(Academic) w.e.f. 01.10.2017.

### Dean (P&D)



We thank Prof. A. U. Ravishankar, Department of Civil Engineering for his sincere efforts as Dean (P&D). His service as Dean(P&D) is appreciated and placed on office records.



We Congratulate Prof. G. S. Dwarakish, Department of Applied Mechanics and Hydraulics on taking over the charge as Dean(P&D) w.e.f. 01.01.2018 We also congratulate Prof. G. S. Dwarakish for taking over the charge as Chairman of Staff Recreation Club (SRC) w.e.f. 19.12.2017.

### **Chief Vigilance Officer (CVO)**



We thank K. Rajendra Udupa Department of Metallurgical and Materials Engineering for his sincere efforts as part-time Chief Vigilance Officer (CVO) His service as Chief Vigilance Officer (CVO) is appreciated and placed on office records.



We Congratulate Prof. K. Chandrasekaran Department of Computer Science and Engineering on taking over the charge as part-time Chief Vigilance Officer (CVO) w.e.f. 17.07.2017



**AWARDS & ACHIEVEMENTS OF FACULTY MEMBERS**

<b>SI. No</b>	<b>Name of Faculty</b>	<b>Department</b>	<b>Achievements</b>
1.	Keyur Raval	Chemical Engineering	Funded research project from SERB on "Impact of maternal diabetes on pre-implantation embryo development: Non-invasive approach to assess embryo quality using oxygen consumption.
2.	Dr. Mohit P. Tahiliani	Computer Science & Engineering	Invited to participate in "Intel India Colloquium" at Bangalore, 9 <sup>th</sup> October 2017.
3.	Dr. Mohit P. Tahiliani	Computer Science & Engineering	Funded by Google Summer of Code to participate in GSoC Mentor Summit at Google Campus, Sunnyvale, California from 13 <sup>th</sup> – 15 <sup>th</sup> October, 2017.
4.	Dr. Nagendrappa H	Electrical and Electronics Engineering	1. Received Best Research Paper Award in the IEEE-International Conference – ICSPACE 2017 held at Bangalore. 2. Received Research Funding for the project titled "Grid Interfacing of Solar Power Generation: Design, development, and Investigation on High-frequency Transformer Isolated DC-DC Soft switching Resonant Power Converters" of Rs. 48.94 Lakhs from DST- SERB, GOI - July 2017. Principal Investigator: Dr. Nagendrappa H. [Sole]
5.	Dr. Debashisha Jena	Electrical and Electronics Engineering	Funded Project on "Adaptive MPPT of Grid- tied Photovoltaic System using Magnetically Coupled Impedance Source Inverters" (DST SERB, EMR project SERB/EMR/2016/005851), 24.36 Lakhs) (PI) Co-PI : Dr Nagendrapa H
6.	Krishnamoorthy K	Electronics and Communication Engineering	Early Career Research Award (Young scientist), SERB - DST, Govt. of India

7.	Shyam Lal	Electronics and Communication Engineering	Early Career Research Award (Young scientist), SERB - DST, Govt. of India
8.	Dr. Sowmya Kamath	Information Technology	Awarded Early Career Research Grant for the project "A Framework for Deep Learning based Analytics for Intelligent Healthcare Applications" Amount: 35 Lakhs. Agency: SERB-DST, Govt. of India.
9.	Prof. V.R. Sastry	Mining Engineering	Dr. Rajendra Prasad Gold Medal for best paper published in JI. The IE(I), presented in Indian Engineering Congress Chennai-December 21, 2017.
10.	Dr. K. Ram Chandar	Mining Engineering	Received IE-NDRF National Design Award-2017.
11.	Dr. A. O. Surendranathan	Metallurgical & Materials Engineering	<p>1) 6-7-2016: Selected to be honoured with "Mother Theresa Excellence Award", and Certificate by Integrated Council for Socio-Economic Progress (Regd.), Kerala - 680001</p> <p>2) 22-7-2016: Selected for the "Life Time Education Achievement Award" by the International Institute of Education &amp; Management, Delhi.</p> <p>3) 15-9-2017: Conferred the Engineers' Day Honour-2017 by The Institution of Engineers (India), Mangaluru Local Centre, &amp; Kodagu, Dakshina Kannada &amp; Udupi Engineers' Association</p> <p>4) 28-12-2017: Marquis Who's Who selected for their official 2018 Albert Nelson Marquis Lifetime Achievement Award.</p>
			Selected for the National Metallurgists' Day (NMD) Award - Metallurgist of the Year in the

12	Dr. K. Narayan Prabhu	Metallurgical & Materials Engineering	Nonferrous Category. The award was presented on the 55th National Metallurgists' Day held on 14th November 2017 at BITS Pilani-Goa by Shri Chaudhary Birender Singh, Union Minister of Steel, Government of India. NMD award scheme is instituted by the Ministry of Steel, Government of India to honour technologists/scientists in recognition of their specific original contributions made in the fields of production/research made in the last 5 years and its impact on National Scenario.
13	Dr. S. Anandhan	Metallurgical & Materials Engineering	Elected Fellow of the Institution of Engineers (India) from the 31st of August 2017.
14	Dr. Arumuga Perumal D	Mechanical Engineering	Albert Nelson Marquis Lifetime Achievement Award, Who's who in the world, 2017
15	Dr. Ranjith M	Mechanical Engineering	Best Paper Award at 7th International Conference on Soft Computing for Problem Solving (SocProS 2017) , December 23-24, 2017, Indian Institute of Technology Bhubaneswar, Bhubaneswar, India.
16	Dr. Ramesh M.R.	Mechanical Engineering	Received best paper award during International Conference on Emerging Trends in Materials and Manufacturing Engineering, organized by department of Metallurgical and Materials Engineering, NIT Thiruchirapalli, Tamil Nadu, during Mar 10-12, 2017.
17	Dr. Kartick Tarafder	Physics	Project: Development and Characterization of Advance Solar Cell. Funded for Rs. 30.0 lakhs by Govt. of Karnataka (Co-PI)

### AWARDS & ACHIEVEMENTS OF STUDENTS

Sl. No	Department	Name of the student	Programme and Semester	Awards and achievements
1.	CSE	Team "For The Damaged Code",	Second year B.Tech	Got first rank in the country out of 600+

		comprising of Arvind Sai K, Somnath Sarkar of third year and Ashwin Joisa		teams in "IEEEExtreme 11.0 ",A Global Online Contest conducted by IEEE. Secured 54 <sup>th</sup> rank globally out of 2700+ teams.
2.	CSE	Team "Mindsweeper", comprising of Aneesh Aithal, Sagar Bharadwaj K.S and Vilas M	Third year B.Tech	Got second rank in the country out of 600+ teams in "IEEEExtreme 11.0 ",A Global Online Contest conducted by IEEE. Secured 94 <sup>th</sup> rank globally out of 2700+ teams.
3.	CSE	Team "SAM", comprising of Ananda Rao H, Sandeep Menon, and J. Mohit Reddy	Fourth year B.Tech	Got fourth rank in the country out of 600+ teams in "IEEEExtreme 11.0 ",A Global Online Contest conducted by IEEE. Secured 104 <sup>th</sup> rank globally out of 2700+ teams.
4.	CSE	Jeshventh Raja T. K., co-founder and Hrishikesh Hiraskar, web and App Developer of "Wheels On Roll", a startup	Third year B.Tech	Selected for the final round of ELEVATE100.
5.	CSE	Team "Sparkles", comprising of Sourabh Jain, Parth Shah and Bhaskar Gautam	Final year M.Tech	Won SAMSUNG APPATHON organized during Engineers 2017.
6.	CSE	Bhaskar Gautam	Final year M.Tech	Selected for "11 <sup>th</sup> European Summer School in Information Retrieval"(ESSIR 2017) summer school program held at Universitat Pompeu Fabra, Barcelona, Spain on 04 <sup>th</sup> September to 08 <sup>th</sup> September 2017.
7.	CSE	Team "Anything", comprising of Ashwin Joisa of second year B.Tech and Somnath Sarkar of third year B.Tech CSE and Siddharth Gangwani of third year EEE	Second year B.Tech., Third year B.Tech. and Third year EEE	Participated in ACM-ICPC 2017 regionals held at IIT Kharagpur and Amritapuri, Kerala.
8.	CSE	Team "team_harambe",	Third year B.Tech	Participated in ACM-ICPC 2017 regionals

		comprising of Siddhartha Chowdhuri, Harsh Shah and Elvis Menezes		held at Guru Nanak Institute of Technology, Kolkata.
9.	Chemical Engineering	Ms. U. Priyanka	Ph.D.- 7 <sup>th</sup> Semester	Selected for WARI fellowship programme - 2017-18 by IUSSTF at university of Nebraska-Lincoln (US).
10	Civil	Kaushik Bhattacharjee	M.Tech (CTM) 2017 Passed Out	ACCE-NIRMANA NIRVAHANE PURASKARA 2017 for Best M.Tech. Thesis on 18 <sup>th</sup> September 2017.
11	Civil	Santhosh M Malkapur	PhD Thesis 2016-17 Studies on Performance Characteristics of Hydrogen Loaded Concrete Mixes	Indian Concrete Institute, Bangalore Centre conferred the Best PhD thesis in the area of concrete technology to any University in Karnataka for the year 2016-17.
12	Civil	Ms. Anusree Anand	M.Tech (Transportation Engg.), Graduated in 2017	Best Paper Award, 4 <sup>th</sup> Conference on Transportation Research Group of India (CTRG), IIT Bombay, Dec 2017
13	Mechanical Engg.	Mithun Vijay Kanchan	PhD, 4 <sup>th</sup> Sem.	Best Paper Award at 7 <sup>th</sup> International Conference on Soft Computing for Problem Solving (SocProS 2017), December 23-24, 2017, Indian Institute of Technology Bhubaneswar, Bhubaneswar, India
14	Metallurgical & Materials Engineering	Sudheer R.	Ph.D.	Best Poster Award for the paper titled 'Heat Transfer Characteristics of Nanoparticle Dispersed Nitrate Salt-PCM for Thermal Energy Storage Applications' at the International Conference on Sustainable Energy & Environmental Challenges 2018 held at IISc Bangalore during 31 <sup>st</sup> Dec 2017 to 3 <sup>rd</sup> Jan 2018.

15	Metallurgical & Materials	T. Baskaran	Ph.D.	Best Poster Award – Structural Ceramics Poster Presentation on Int. Conference on EH-TACAG'17 during December 2017 at Indian Ceramic Society, Pune
16	Metallurgical & Materials	Sangamesh	Ph.D.	Best Paper for the paper titled 'Ballistic Impact Study on Jute – Epoxy and Natural Rubber Sandwich Composites' in IMME'17 at NIT Trichy
17	Metallurgical & Materials	Preitish Crimson D'Silva & Gurudath	Ph.D.	Best Short Oral & Poster Presentation – 1 <sup>st</sup> Prize (Theme: Materials Science & Engineering), paper titled Failure Analysis of a Tongue Rail
		Abhilash Agnihotri, Dhananjay Anirudha C. S.	B.Tech.	
18	ECE	NITK IEEE Student Branch	B.Tech.	NITK IEEE Student Branch has been awarded the IEEE Bangalore Section Best Large Student Branch Award for 2017
19	ECE	Abhishek M B	Ph.D. 7 <sup>th</sup> Semester	Best paper award in ICEE 2017, 29-31 August 2017.
20	ECE	Shreyas Simu	Ph.D 7 <sup>th</sup> Semester	Best paper award in ICISS 2017, 07-08 December 2017.
21	IT	Shashi Roshan, Manish Kumar, Nikhil Vandanapu	B.Tech (8th semester)	Best paper award for "Model Selection among log-normal, Weibull, Gamma and Generalized Exponential Distributions" in the 6th International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2017), Sep 20-22, 2017.
22	Applied Mechanics & Hydraulics	Ms. Jhoga Parth Other authors : T.Nasar	M.Tech (R) - MS	Best Paper award” at 37th INCA International Congress on Geoinformatics for Carto-Diversity and it's management, Nov 1- Nov 3 2017 held at Naval

				Hydrographic Office, Indian Navy, Dehradun : , Paper titled "A geospatial approach to study shoreline configuration Dynamics - pre, during and post construction of training wall"
23	Applied Mechanics & Hydraulics	Ms. Geetha S. Kuntoji Other Authosr : Subba Rao, Manu, Nava Bharath Reddy	Research Scholar	Best Paper award at International Conference 'Softcomputing for Problem Solving', SocPros2017 held at IIT, Bhubaneswar, Dec. 23,24 2017 : paper titled 'Prediction of damage levels of inner conventional rubble mound breakwater of Tandem breakwater using Swarm Inteligence based Neural Network (PSO-ANN) approach'

**Note: This is not an exhaustive list**

### WORKSHOPS/CONFERENCES ORGANIZED

Sl. No.	Title	Workshop/ Conference/ STTPs/Expert Lecture	Chief Guest	Date
1.	Need of Interdisciplinary Research in Contemporary Research Arena	Expert Lecture	Prof. Swapan Bhattacharya Professor, Jadavpur University, Kolkata	03 <sup>rd</sup> July 2017
2.	Practical Formal Methods for Mainstream LLVM Developers	Technical Talk	Dr. Santosh Nagarkatte Assistant Professor of Computer Science at Rutgers University	10 <sup>th</sup> August 2017
3.	Modern Speech Interfaces	Expert Talk	Prof. Samudra Vijaya IIT Guwahati	10 <sup>th</sup> August 2017
4.	Data Visualization	Technical Talk	Mr. Praveen Uchil IISc Bangalore	04 <sup>th</sup> September 2017
5.	Big Data Analytics Software Development Life Cycle(BDA-SDLC)	Expert Talk	Dr. Asoke K Talukder Precision Genomics	03 <sup>rd</sup> November 2017

6.	Cryptanalysis : Tools and Techniques	Five days Faculty Development Programme	Dr. Bimal K. Roy Professor, ISI, Kolkata	4 <sup>th</sup> - 8 <sup>th</sup> December 2017
7.	Algorithmic foundations of Wireless Sensor Networks with Applications	A GIAN (Global Initiative of Academic Network) (MHRD, Govt. of India) supported 5 days short term Course	Dr. Sajal K. Das Distinguished Professor, Computer Science & the Daniel St. Clair Endowed Chair Professor, Missouri University of Science & Technology, Rolla, USA	10 <sup>th</sup> -14 <sup>th</sup> December 2017
8.	Software Based Networks : SDN and Integration of Virtualization in Networks	A GIAN (Global Initiative of Academic Network) (MHRD, Govt. of India) supported 5 days Course	Prof. K.K. Ramakrishnan Professor, University of California, Riverside, USA	19-23 <sup>rd</sup> December 2017
9.	SDN Online Lab	Seminar	Ms. Sweta Anmulwar and Ms. Richa Jha CDAC, Pune, India	20 <sup>th</sup> December 2017
10.	Wireless Alternative to Fiber for Residential, Enterprise and Urban Access	Seminar	Dr. Aravind R. Raghavan Director of Product Management at Tarana Wireless, Inc., Santa Clara, USA	21 <sup>st</sup> December 2017
11.	Modeling and Scale up of Bioreactors	Workshop Coordinators: Prof. G.Srinikethan and Dr. Vidya Shetty K	Prof.K.V.Venkatesh , IIT Bombay	24/03/2017 to 25/03/2017
12.	Chemical Engineering principles in the treatment of infectious diseases	Guest Lecture	Prof. Narendra M. Dixit, Dept. of Chemical Engineering, Centre for Biosystems Science and Engineering	10/08/2017



			Bangalore	
13.	Multiphase Flow	Workshop	Shri. M. Venkatesh, Director(Refinery) MRPL, Mangalore	02/09/2017
14.	Indigenous Technologies: From laboratory to the field	Seminar	Dr. Sirshendu De, Professor & Head Department of Chemical Engineering, IIT, Kharagpur	11/10/2017
15.	Recycling of Carbon Dioxide to Methanol and Derived Products – Closing the Loop	Seminar	Dr. G.K. Surya Prakash, Professor, Department of Chemistry, University of Southern California, USA	23/11/2017
16.	Basics and Technologies in natural gas processing & Career counselling for prospective process engineers	Talk	Mr. Jamil Ahamed Advisor (Technical & Operations) Ministry of Energy and Industry State of Qatar, Doha, Qatar.	15/01/2018 (Planned)
17.	Risk Reduction & Disaster Management in Industries	National Conference	Sri. Sasikanth Senthil S. Deputy Commissioner, D.K. District	20 <sup>th</sup> and 21 <sup>st</sup> January, 2018(Planned)
18.	Recent Trends in Highway Pavements Design and Highway Geometrics	Continuing Education Programme Sponsored by Engineering Staff College, Krishnarajas agara, Mysore.	Dr. Suresha S.N. (Coordinator) and In- house Faculty Members	11-15 Sep., 2017
19.	Topics in Partial Differential Equations Coordinator : Dr. Satyanarayana Engu	National Workshop	Prof. Karanam Uma Maheshwar Rao, Director NITK	July 24 – 28, 2017
20.	Analytical & Numerical Solutions Of	National Workshop	HOD MACS Department NITK	December 18 - 22 , 2017

	Partial Differential Equations Coordinator : Dr. Satyanarayana Engu			
21	Design Thinking Coordinator : Dr. Pushparaj Shetty D	One Day Workshop	DELL INDIA R&D	November 4 <sup>th</sup> 2017
22	Algebraic Graph Theory Coordinator : Dr. Senthil Thilak Dr. Pushparaj Shetty D Dr. Srinivasa Rao Kola	Workshop	Resource Persons from IIT Bombay, TIFR Mumbai, IIT Kharagpur, CUSAT	Planned During January 25 <sup>th</sup> - 30 <sup>th</sup> , 2018
23	Methodologies for designing an aluminium intensive vehicle platform	Expert lecture	Prof. Anindya Deb, CPDM,IISc- Bangalore	7 <sup>th</sup> Nov 2017
24	International Conference on Design, Materials and Manufacture 2018	Conference	Prof. Gurumoorthy IISc Bangalore	29 <sup>th</sup> -31 <sup>st</sup> Jan 2018
25	Stochastic ore body modeling and mine planning under	Expert Lecture	Dr. Snehamoy Chatterjee, Assistant Professor, Michigan Technological University, USA.	23-24 July, 2017
26	Brain-Computer Interfaces: Sci-fi or Science?	Seminar	Mr. Vikram Shenoy Handiru PhD Student, Nanyang Technological University, Singapore (BTech ECE 2013)	11 <sup>th</sup> August, 2017
27	SRAM Design for Advanced Technologies	Guest Lecture	Dr. Pramod Kolar Staff Engineer Intel Corporation Portland, Oregon Area (BE ECE 1998)	17 <sup>th</sup> August, 2017
28	Hands-on Training programme on IoT	Training Programme	Team from FluxGen Engineering Technologies Pvt. Ltd., Bangalore	18 <sup>th</sup> - 19 <sup>th</sup> August, 2017

29	Brain-Computer Interfaces: Sci-fi or Science?	Seminar	Mr. Vikram Shenoy Handiru Ph.D. Student, Nanyang Technological University, Singapore (B.Tech. ECE 2013)	11 <sup>th</sup> August, 2017
30	SRAM Design for Advanced Technologies	Guest Lecture	Dr. Pramod Kolar Staff Engineer Intel Corporation Portland, Oregon Area (BE ECE 1998)	17 <sup>th</sup> August, 2017
31	Hands-on Training programme on IoT	Training Programme	Team from FluxGen Engineering Technologies Pvt. Ltd., Bangalore	18 <sup>th</sup> – 19 <sup>th</sup> August, 2017
32	A brief insight into spintronics and ultrafast magnetism: Towards Ultrafast Spintronics	Technical Talk	Mr. Akshay Pattabhi UC Berkeley PhD Student (B.Tech, ECE 2014)	20 <sup>th</sup> September 2017
33	CoE related discussions	Guest Lecture	Dr. R. K. Malaviya Eminent Scientist, Chairman ATMS, SAC Ahmadabad	7 <sup>th</sup> December 2017
34	Information Security	Workshop	Mr. Shreyas Chidambara, Information Security Engineer II OLA, Bangalore Mr. Poorna Chandra P. R, Offensive Security Consultant, Mercedes Benz, Bangalore	30/10/17 & 31/10/17
35	Deep Neural Networks and GPU Computing	Expert Lecture	Dr. Prakash S R Principal Member of Technical Staff AMD India Pvt. Ltd. Bangalore	20/12/17
36	Nano Transistors with 2-D materials: Challenges and Opportunities	Expert Lecture	Prof. Navakant Bhat (IISc.)	October 17, 2017

**Note: This is not an exhaustive list**

**GIAN Programmes Conducted**

<b>Sl. No.</b>	<b>Title</b>	<b>Chief Guest</b>	<b>Date</b>
1.	“Algorithmic foundations of Wireless Sensor Networks with Applications”	Dr. Sajal Kedar U.S.A.	10 <sup>th</sup> - 14 <sup>th</sup> December 2017.
2.	“Software Based Networks: SDN and Integration of Virtualization in Networks”	Dr. K.K. Ramakrishnan U.S.A.	19 <sup>th</sup> - 23 <sup>rd</sup> December 2017
3.	Concrete Microstructure Characterization Coordinator: Dr. B.B.Das	Prof. Narayanan Neitalath Professor of School of Sustainable Engineering and the Built Environment, Arizona University Tempe, USA	18-22 June 2018
4.	Whole -life Managemet of Concrete Structures - Theory to Practice Coordinator: Dr. B. B. Das	Dr. Sree nanukuttan, Faculty of Civil Engineering, Queen’s University, Belfast, JK	10 <sup>th</sup> -14 <sup>th</sup> Sept 2018
5.	Modern Perspectives on Renewable Energy and Biorefinery	Prof. Mark Mascal, University of California Davis, California, USA	November 06 <sup>th</sup> -10 <sup>th</sup> , 2017
6.	Mathematical Methods for Image Processing, Coordinator: Dr. Jidesh P	Prof. Francois Malgouyres	October 23 <sup>rd</sup> - 27 <sup>th</sup> , 2017
7.	Algorithmic Foundations of WSN with Applications Coordinator: Dr. Pushparaj Shetty D, Mrs. Saumya Hegde	Prof. Sajal K Das	December 10 <sup>th</sup> – 14 <sup>th</sup> , 2017
8.	MHRD Supported GIAN Advance Level Course on Remote Sensing Image Processing and Analysis	Prof. Fabio Dell’Acqua, University of Pavia, Italy	16 <sup>th</sup> - 20 <sup>th</sup> November, 2017
9.	MHRD Supported GIAN Advance Level Course on Estimation, Tracking and Information Fusion	Dr. T. Kirubarajan Distinguished Engineering Professor McMaster University, Canada	04 <sup>th</sup> -08 <sup>th</sup> December, 2017

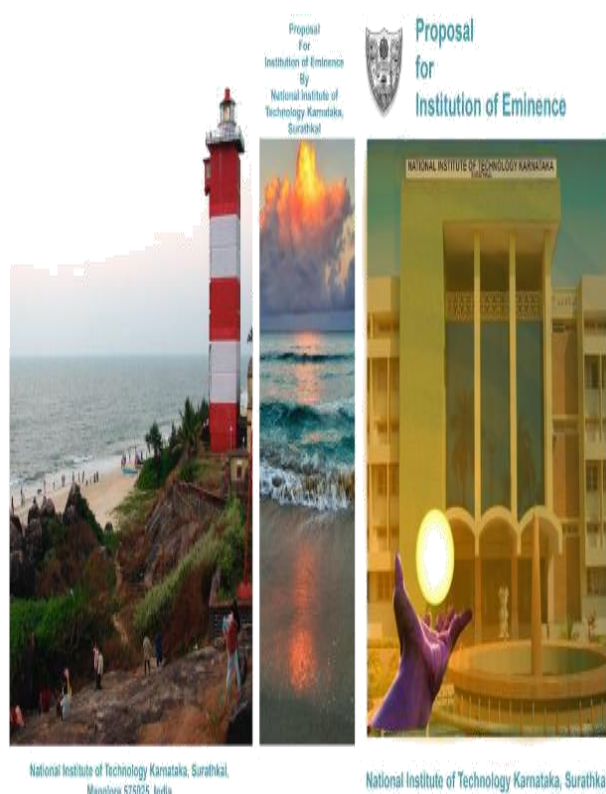
**Note: This is not an exhaustive list**

### **Institution Of Eminence (IOE):**

To provide an enabling regulatory architecture to ten public and ten private Higher Educational institutions to emerge as world-class Teaching and Research institutions, applications are sought from Government Academic Institutions and Private Institutions by UGC

The Government Academic Institution which is selected for IoE will enjoy unprecedented administrative and financial autonomy in a wide range of matters, including faculty and staff salaries, student fees, course offerings and content, among others. There is an assistance up to the tune of Rs. 1000 Crores in a span of five years starting from the financial year of declaration of Institute as Institution of Eminence..

NITK has submitted its proposal for IoE on 11<sup>th</sup> December 2017.



### **Higher Education Financing Agency (HEFA) : NITK Surathkal among six institutes to get over ₹2,000 cr. interest-free loan from HEFA**

NITK's proposal to establish a Central research facility (Phase I) with an estimated cost of 80 crores has been approved for funding from Higher Education Financing Agency (HEFA)

The Proposed Central Research Facility (CRF) aimed

- To be a catalyst in the growth of the Nation through research and development
- To facilitate quality research with international and national research collaborations
- To strengthen graduate and undergraduate education by providing training opportunities with access to facilities for students
- To aid extramural research fund proposals
- To carry out institute and public service programs confined to NITK's research expertise
- To provide high end research facilities to neighbouring education/research institutions and industries

CRF in its first phase will have research equipment like Field Emission gun-Scanning Electron Microscope(FEG-SEM), Advanced X-ray Diffractometer (XRD), Atomic Force Microscope (AFM), 300 kN Servo Hydraulic Fatigue Testing unit, 3D Particle Image Velocimetry, X-ray Fluorescence (XRF) spectroscopy, 600 MHz NMR Spectrometer (Multi nuclear), Selective Laser Melting (SLM) Unit, Tensile Testing Machine with Micro specimen gripper, Video camera, etc., The total list contain about 48 research equipment and related accessories including power backup and data connectivity. CRF is proposed to be a 24X7 research Centre catering to all departments of NITK and facilities will be open to other research institutions and industry

Under HEFA loan, the repayment period is 10 years and every year, 10% of the principle amount need to be repaid by the institute.

### Programmes Conducted at the Institute:



**Swachhta Pledge Administration by**



**Swachhta Execution by Director**

1. Swachhta Pakwada programme was conducted in the Institute from 19<sup>th</sup> August to 2<sup>nd</sup> September 2017 with various activities. The programme was started with Swachhta Pledge by students and staff. The institute started the Swachhta programme by brooming and picking dirt inside and outside the campus. Many activities like Essay Competition, Debate Competition, Poster Competition, Seminar on Recycling, Seminar on Atmospheric Cleanliness and Seminar on Noise Pollution were conducted to create awareness among the students of NITK on Swachhta Bharat Pakhwada.

2. The Institute celebrated the Rashtriya Ekta Diwas on 31.10.2017 to salute Sardar Vallabhbhai Patel, the Unifier of India, observing his Birth Anniversary by taking Ekta pledge. Unity Run was organized by students with the message of a unified Bharat.

**ORIENTATION PROGRAMME:** Orientation Programme was conducted on 01<sup>st</sup> of August, 2017, where the first year students along with their parents attended. Prof. G.S. Bhat, Centre for Oceanic Sciences, IISc., Bangalore was the Chief Guest. Students were briefed about the academics, co-curricular, sports, Placements, Hostels at NITK Surathkal. Dr. S M Hegde, Dean (Students- Welfare) welcome the gathering and Prof. K Uma Maheshwar Rao, Director, NITK Surathkal Inaugurated the programme.



### **3RD NITK FILM FEST - 22ND TO 24TH SEPTEMBER, 2017**

The Film Festival was Inaugurated by the Chief guest Mr. Vivek Agnihotri, Bollywood Director. The program commenced with the lighting of the Diya by the Chief Guest. Prof. S.M. Hegde Dean Students Welfare, Faculty advisor Dr. Harshwardhan and the Films Club convenor, Shrinidhi Rao, were present, which was followed by words of wisdom by Mr. Vivek Agnihotri. During this festival, famous Directors and Actors were called. Interaction sessions were arranged with students after their movies screened. Short film contest & films quiz were also conducted.



### **ENGI-CONNECT -7 October, 2017**

'Engiconnect 2017' is the annual science exhibition for higher primary, high school and pre- university students. Attracting some of the brightest innovative minds, be ready to be dazzled by a myriad of ideas and projects each out shining the other and offering you 'food for ideas'.



### **NOTHING IS MORE POWERFUL THAN AN IDEA!**

Engiconnect 2017 has truly been a successful event with a whopping 400+ participants taking part in various categories of the competition. These young minds have collectively put together an amazing show. There was a valedictory function in the evening at SJA. Prizes were distributed to all the winners along with participation certificates to all the students.

## **ENGINEER - 2017**

ENGINEER '17– Annual technical fest of NITK held during Oct. 11-15, 2017. More than three thousand students participated in this technical festival, which had numerous events, conducted in diverse fields of Computers, Mechanical Engineering, Material Sciences, Civil Constructions, Astronomy and Technological Management. Some new attractions that added further colours to ENGINEER '17 were Engi Talks which brought forth eminent personalities from various fields to give talks that are idea based.



### **Vigilance Awareness Week at NITK (October 30 to November 4 – 2017):**



As per the directives of the MHRD and Central Vigilance Commission, Govt. of India, the Vigilance Awareness Week was observed from October 30 to November 4, 2017, at NITK Surathkal. The theme for the year 2017 was “My Vision – Corruption Free India”. During the Vigilance Awareness Week, several activities were conducted within the NITK Surathkal Campus and also outside the NITK Campus, which included other colleges and schools. The activities included seminars, essay writing competitions, debates,

collage-making competitions and pamphlets distribution. All the activities were conducted in an effort to educate the public and spread the awareness about the corruption related practices and how the activities related to corruption may be reported.



## Alumni Meet:

**The 11<sup>th</sup> GLOBAL CONVENTION of NITK Alumni was held on 28<sup>th</sup> and 29<sup>th</sup> October 2017 in Mumbai.**



The 11<sup>th</sup> Global convention of NIT-K Alumni Association was held in Mumbai on 28<sup>th</sup> and 29<sup>th</sup> October 2017. The venue for this Mega Event hosted by the Mumbai Chapter was the five star hotel Sahara Star. More than 400 Alumni and their family members from all over India and abroad attended the event recording the highest attendance for any GC11 event.

The inaugural day of the convention started on 28<sup>th</sup> Oct 2017 at 6:30 PM with invocation and traditional lighting of lamp by the dignitaries. Dr. Dayasagar, Convenor GC11, Mr. Salian, President Mumbai Chapter and Mr. Krishnamurthy, Global President welcomed the delegates.

Prof. Devang Khakhar, Director IIT Bombay the Guest of honour then addressed the gathering. In his speech, he stressed the importance of contribution of Alumni in nurturing their Alma mater and enabling it to reach greater heights. Padma Vibhushan Dr. Kakodkar former Chairman Atomic Energy Commission, who was the Chief Guest for the event, addressed the gathering. In his speech, he recalled his association with NIT-K since his BARC days and found the institution one of the top for recruiting quality engineers/scientists. He urged the Alumni to associate themselves with the activities of the institute and contribute their time, money and experience and enable their alma mater to reach greater heights by producing quality engineers who would serve the nation and society in general. A souvenir to mark the occasion was released.

On 29<sup>th</sup> Oct 2017, the second day of the event the proceedings started at 9:30 AM, a number of presentations were lined up for the day. Eminent alumni made presentations on topics of current relevance such as different aspects of Start Ups, Ethical leadership, Integration of Management and Technology to name a few. Dr. Balaveer Reddy, ex-Professor @ NITK, & VC of VTU, advised NITK to take immediate action to recover and upgrade the ratings of the Institution, by modernising the systems.

Prof. K. Uma Maheshwar Rao, Director NIT-K addressed the gathering. In his passionate speech, he urged the Alumni to assist him in his untiring efforts to make NIT-K one of the top most institutes in the country. He requested the alumni to come forward, give their time, money, and experience for the benefit of their alma mater.

**List of MoUs Partners - (July - December 2017):**

Sl. No.	Date of Signing MOU Duration	Organization/Institute	Domain
1	6 <sup>th</sup> December 2017 1 year	Networkers Home New Delhi	Collaboration in education and training
2	4 <sup>th</sup> December 2017 10 years	Mangalore Refinery and Petrochemicals Ltd (MRPL)	Collaborative research
3	25 <sup>th</sup> October 2017	IEEE Power and Energy Society Bangalore Chapter	Collaborative research

**MANAGEMENT DEVELOPMENT PROGRAMME:**

A Management Development Programme (MDP) on Talent Management and Succession Planning for Kudremukh Iron Ore Company Limited (KIOCL) was conducted by the School of Management, NITK Surathkal during 11<sup>th</sup> to 15<sup>th</sup> December



2017. In today's competitive and fast changing environment, both Business & HR leaders consider talent management to be one among their topmost priorities. It has been well-recognized that a robust talent strategy is required for organizations to achieve peak performance, be it for the present or the future. Hence, ensuring continuous flow of high quality talent has become part of the larger business agenda.

Hence the MDP was designed for the senior managers of KIOCL. 25 senior management personnel from the General Manager and the Deputy and Assistant General Manager cadres participated in

the programme. The programme was designed to accommodate diverse topics ranging from Enhancing managerial success by leveraging alignment strategies, strategic analysis, disaster management, safety management, electrical engineering, remote health monitoring and control of systems, succession planning, leadership, talent management to integrating strategies with vision and mission of KIOCL. The MDP was conducted with the help of resource persons both within the Institute and from outside. The MDP was coordinated by Dr. Rashmi Uchil, Assistant Professor, School of Management. The programme was conducted on a full day basis for 5 days.

**15<sup>th</sup> Annual Convocation (October 28, 2017):**

The 15th Annual Convocation was held on October 28, 2017 (Saturday). Dr. Ganesh Natrajan, Chairman of 5F World Skills Alpha and Global Talent Track was the Chief Guest. The distribution of graduands are as follows:

**15<sup>th</sup> Annual Convocation Statistics 2017:**

<b>Programme</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
B.Tech	669	154	823
M.Tech	318	130	448
M.Tech Research	21	5	26
MBA	19	15	34
MCA	50	37	87
M.Sc	14	33	47
Ph.D	47	11	58
<b>Total</b>	<b>1138</b>	<b>385</b>	<b>1523</b>

## Curriculum Revision

The main objective of NITK, Surathkal is to prepare engineering graduates who can go on to serve the industry or take up research. To ensure that the training is up to date, curriculum revision needs to be taken up periodically, so that the graduates are able to serve the industry, in particular and society at large, with the latest knowledge. We at NITK have taken up the process of curriculum revision, which would after undergoing due process, will be implemented from the academic year 2018-19.

Some of the salient points under consideration in the curriculum revision process are:

- B.Tech. with Major and Minor ( Minor will have 4/5 courses during 3<sup>rd</sup> to 8<sup>th</sup> semester)
- B.Tech. Honours program ( 5 courses at masters level)
- First year branch specific courses to be introduced.
- Biology/Life Sciences course as MLC.
- Direct Ph.D. from B.Tech.
- M.Sc. and M.Tech. conversion after first year to PhD.
- Integrated M.Sc. Program.
- NPTEL/ Swayam/Certified courses as open electives.
- Integrated M.Tech.
- 7<sup>th</sup>/8<sup>th</sup> Semester free- (only electives) - so that students can do 6 months internship/project outside.
- Fractional courses, only electives, not core subjects.
- Four theory courses per semester for regular students; 5 courses per semester for students doing Minor and 5 courses per semester for Honours students.
- Credits requirement for Degree to be 140-160.

### **Placement Statistics 2017 – 18**

**(Placement Statistics as on 31-12-2017)**

BRANCH	TOTAL STUDENTS	PLACED	YET TO BE PLACED	% PLACED
<b>UG (B.Tech.)</b>				
CIVIL	83	45	38	54
CHEMICAL	40	28	12	70
COMPUTER SCIENCE	101	92	9	91
ELECTRONICS & COMMUNICATION	99	80	19	81
ELECTRICAL & ELECTRONICS	88	72	16	82
INFORMATION TECHNOLOGY	95	91	4	96
MECHANICAL	125	87	38	70

METALLURGICAL & MATERIALS	27	17	10	63
MINING	37	24	13	65
<b>Total B.Tech</b>	<b>695</b>	<b>536</b>	<b>159</b>	<b>77</b>
<b>PG (M.Tech.)</b>				
<b>CIVIL</b>				
STRUCTURAL ENGG.	18	3	15	17
GEO TECH ENGG	7	1	6	14
ENVIRONMENTAL ENGG.	20	3	17	15
TRANSPORTATION SYSTEMS ENGG.	16	0	16	0
CONSTRUCTION TECHNOLOGY & MGMT	14	1	13	7
<b>APPLIED MECHANICS &amp; HYDRAULICS</b>				
MARINE STRUCTURES	10	4	6	40
WATER RESOURCES ENGG & MGMT	5	0	5	0
REMOTE SENSING & GIS	10	0	10	0
<b>CHEMICAL</b>				
INDUSTRIAL POLLUTION CONTROL	5	0	5	0
CHEMICAL & PLANT DESIGN	5	0	5	0
INDUSTRIAL BIOTECHNOLOGY	7	0	7	0
<b>COMPUTER SCIENCE</b>				
COMPUTER SCIENCE & ENGG.	19	18	1	95
INFORMATION SECURITY	24	20	4	83
<b>ELECTRONICS &amp; COMMUNICATION</b>				
VLSI	21	14	7	67
COMMUNICATION ENGG	16	10	6	62
<b>ELECTRICAL &amp; ELECTRONICS</b>				
POWER & ENERGY SYSTEM	19	5	14	26
<b>INFORMATION TECHNOLOGY</b>				
INFORMATION TECHNOLOGY	15	13	2	87
<b>MECHANICAL</b>				
THERMAL ENGG	13	4	9	31
MANUFACTURING ENGG	10	2	8	20
MECHATRONICS	17	8	9	47
DESIGN AND PRECISION	11	5	6	45
<b>METALLURGICAL &amp; MATERIALS</b>				
PROCESS METALLURGY	0	0	0	0
MATERIALS ENGG.	11	1	10	9
NANOSCIENCE AND NANOTECHNOLOGY	3	0	3	0
<b>MATHEMATICAL &amp; COMPUTATIONAL SCIENCES</b>				
COMPUTATIONAL MATHEMATICS	11	8	3	73

<b>Total M.Tech</b>	<b>307</b>	<b>120</b>	<b>187</b>	<b>39</b>
<b>PG</b>				
MCA	83	58	25	70
MBA	13	6	7	46
M.Sc.(CHEMISTRY)	6	3	3	50
M.Sc.(PHYSICS)	3	0	3	0
<b>Total</b>	<b>Total Students</b>	<b>Placed Students</b>	<b>Yet to be Placed</b>	<b>Total Percentage Placed</b>
	<b>1107</b>	<b>723</b>	<b>384</b>	<b>65</b>
<b>Total Companies Visited - 185</b>				

## FACULTY & STAFF RETIRED

### Faculty

Sl.NO	Name	Department	Date of Joining	Date of retirement
1.	Dr. D.V. R. Murthy	Chemical Engineering	20.09.1982	31.08.2017
2.	Dr. P. Mohanan	Mechanical Engineering	27.08.1980	31.10.2017

### Staff

Sl.NO	Name	Department	Date of Joining	Date of retirement
1.	Shri. Divakar Bhanjan	Accounts Section	18.11.1985	31.07.2017
2.	Shri. Nataraja R.	Civil Engineering	11.07.1985	31.08.2017
3.	Smt. Pushpalatha	Electronics and Communication Engineering	05.01.1978	31.01.2018

**Buildings/ Projects completed/ Planned/ New Infrastructure:**

- The newly constructed Ladies Hostel Block of 250 single occupancy rooms [Ladies Hostel Block No. 5] was inaugurated on 16-10-2017 by the Hon'ble Director Prof. K Uma Maheshwar Rao in the presence of Er. P K Naidu, Project Manager, CPWD, NITKS Project Circle and his officials. This building was constructed through CPWD at a cost of nearly ₹ 22 crore.
- The newly constructed additional floors (4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> floors) over Mechanical Engineering block was inaugurated on 01-12-2017 by the Hon'ble Director Prof. K Uma Maheshwar Rao in the presence of Er. P K Naidu, Project Manager, CPWD, NITKS Project Circle and his officials. This building was constructed through CPWD at a cost of nearly ₹ 23 crore.
- The BOG has accorded in-principle approval for the construction of a new Security Gate and a Security Office at the main entrance to the campus from the National Highway during its meeting held on 18-12-2017. The proposed work will be carried out through CPWD for which plan and estimation are being prepared by the CPWD.
- The BOG has accorded in-principle approval for the construction of a new boundary wall on either side of the National highway at the new boundary line of the campus, during its meeting held on 18-12-2017. The proposed work will be carried out through CPWD for which estimation is being prepared by the CPWD.
- It has been proposed to initiate the following new works during the financial year 2018-19 through CPWD:
  - ✓ New Residential apartments of Type – III, Type – IV, Type – V and Type – VI.
  - ✓ A new building for Centers of Excellence.
- It has been proposed to renovate 7<sup>th</sup> Boys' hostel building and refurbish 2<sup>nd</sup> block of Ladies Hostel building during the financial year 2018-19 for which a detailed proposal and estimate are under preparation at Works Establishment Section.