

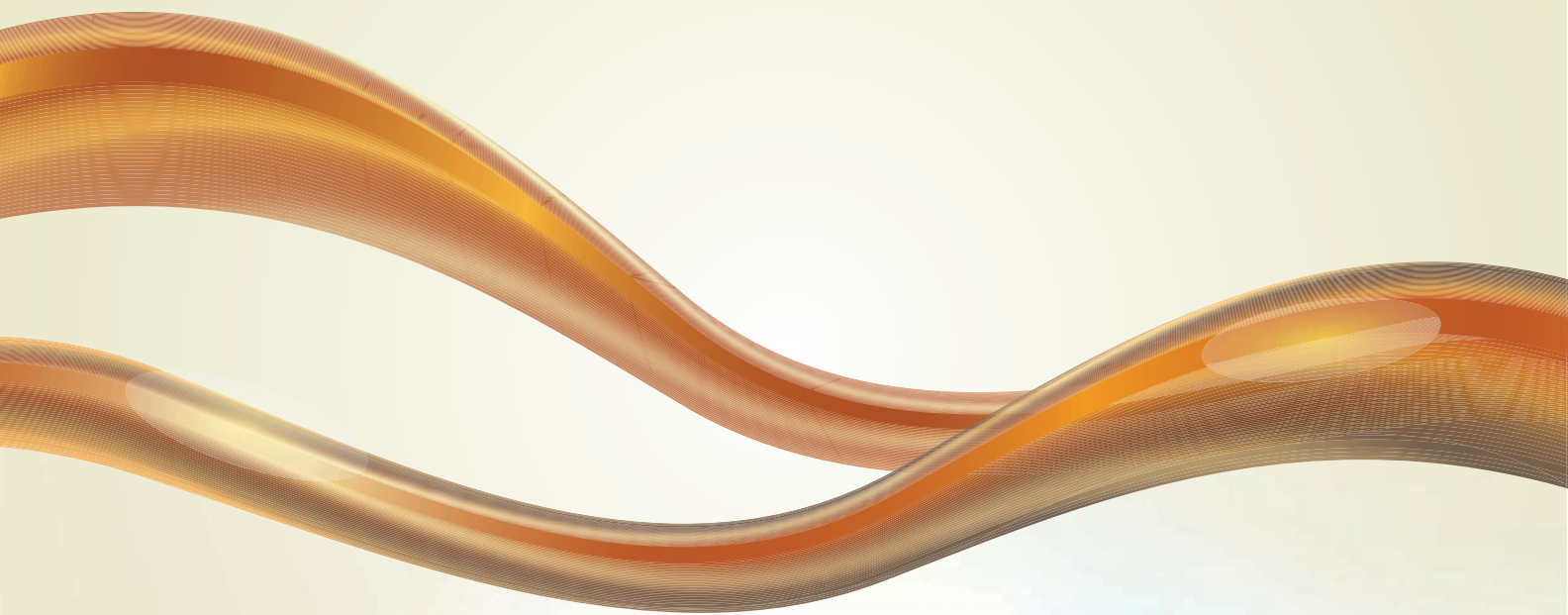
NITK NEWS LETTER

# WAVES

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National Institute of Technology Karnataka, Surathkal  
Mangalore - 575025, Karnataka, India

## Message from the Chairperson



### The Future of Education: Enabling Economic Growth

By 2030, India will be amongst the youngest nations in the world. With nearly 140 million people in the college-going age group, one in every four graduates in the world will be a product of the Indian education system. This underscores the importance of a sound education framework to build a progressive and economically successful society.

The sheer enormity of the challenges facing us within the education system will require innovative approaches for us to address some of the key issues. For instance, some of the performance indicators to keep in mind are

–India will require six million more teachers by 2020 to attain the world average in terms of student teacher ratio; 90% of our workforce is part of the un-organized sector; no Indian university features in the top 150 worldwide rankings and more. Such demand-supply gap is unprecedented anywhere in the world and calls for radical changes. If ‘necessity’ is the mother of innovation, then innovation at scale is the need of the hour for India and our education system.

The starting point for any initiative of this scale and magnitude is a strong government agenda around education and skills, with progressive policies. The Indian Government has taken the right first steps by embarking on the digital literacy mission to connect 600,000 villages. A digital infrastructure will help us achieve the reach and connect teachers and students across the country. The next step is bringing flexibility to policies and curriculum that will allow people to acquire the skills they need to be job ready. This is true for both vocational skills and traditional college education. For example, a person should be able to access training to become a plumber and pick up a basic course in maintaining accounts for his business. We will also need to promote common certification models and recognition of credits when earned through external channels. These approaches will be complemented by strong public-private partnership models leveraging technology.

Today, technology is making life easier for students and educators. Institutions are increasingly adopting digital teaching solutions to make the education environment more inclusive and participatory. Building platforms that foster a culture of free-thinking and innovation will help further engage and empower the born on the web generation. More importantly, development in technology is making it easier to be productive faster. Let’s just say, today, to develop an application, one requires a lot more domain knowledge than programming knowledge. This is very different from as recent as a decade ago. The pace of change is accelerating. The same has to reflect in our curricula.

Building a national scale digital platform that provides every Indian access to quality, standardized and affordable skills could be one of the key approaches to transform the education system. Technology can help reduce the scale gap via Massive Open Online Courses (MOOC), virtual classrooms and content digitization. MOOC combined with Cognitive computing can bring personalized e-learning, delivered over the Cloud on a mass scale. This can change the way teachers work with students in the classroom and also address the shortage of teaching staff. The business models can range from free to premium, based on educational policies and the public-private partnerships

For India to leapfrog into a knowledge economy and leverage the demographic dividend, the key is to skill, innovate and localize on a scale. We must commit to empowering our systems to reward creativity and original thinking and ensure that literacy and skills flourish in a broad based manner creating a learning economy.

**Vanitha Narayanan**

M.D, IBM India Pvt. Ltd.



## Message from the Director



It is a great pleasure for all of us in the family of NITK-Surathkal to present the first edition of our Institute News Letter, named “Waves” – which is in fact, new incarnation of such brochure with same title we had several years earlier. Effects of transformation from “Karnataka Regional Engineering College (KREC)” to “National Institute of Technology (NITK)” implemented about a decade back - which essentially concentrates on two key changes viz. “Regional” to “National” and “College” to “Institute” - are now very much visible – and a glimpse of such effects have been captured in the present edition of “Waves”.

It is said that an Institute can be established – but, excellence can only evolve. Emergence of KREC as a premier teaching Institute in the domain of technical higher system of our country has been a typical example of such a process of evolution of excellence over more than last five decades. Transformation towards evolution as a research-oriented project-driven teaching-learning environment with concerns for society and relevance to industries – both in national as well as

international arena, characterizes the foundation of the evolution of NITK in recent years. As the only NIT (and correspondingly REC) with the name of the state (Karnataka) integrated with the name of the Institute, our beloved Institute has shown over the years how to grow national (and international) without compromising with the root. This is in sync with the primary characteristic of our campus life which symbolizes perfect synergy between “discipline” and “enjoyment”.

Today, our alumni are well placed – in academic as well as industrial sectors – in India and abroad, and they act as true ambassadors of NITK (previous KREC). A very robust and disciplined academic system together with various domains centric clubs helps our students to develop their personalities in addition to their professional acumen. Inherent strength of our alumni in entrepreneurial activities has been of immense help in nurturing our students in this dimension in addition to taking care of regular academic challenges. The fact that Global

Alumni Meet of NITK-Surathkal for the year 2014 had been organized in the Bay Area of California, USA with around 400 registrations substantiates the inherent visibility and strength of our alumni.

Finally, it is worth mentioning that this “waves” could accommodate only some representative phenomenon (out of numerous activities in various dimensions) to showcase our beloved “NITK” which is situated right on the beach of Arabian Sea. We do believe that just like a set of waves characterizes the nature of the sea of their origin, this newsletter named as “waves” would be able to present NITK-Surathkal in one capsule. I thank entire team-“waves” for their tireless efforts and progressive vision in making sure that this inaugural version finds light of the day – and, I do firmly believe that henceforth, this newsletter will become a regular feature of our Institute with a periodicity of six months.

**Swapan Bhattacharya**

## Message from the Coordinator



It is with immense pleasure, I write this forward for releasing rejuvenated version of Institute News Letter “Waves”. The Senate of the Institute had decided to publish this News Letter biannually documenting the important events and activities of the Institute during the reporting period.

I thank all the Heads of Department/Section, Deans and other staff for providing us the necessary data for producing this issue of News Letter.

I congratulate and thank the entire editorial team for editing and producing this issue and I do hope that this News Letter will be a medium through which all other stakeholders will be able to know the activities and events conducted in the Institute.

With Regards  
**G. Srinikethan**



# Editorial Team

## **G. Srinikethan**

(Department of Chemical Engineering)

**Coordinator**

## **Katta Venkatramana**

Dean (Academic)

## **A. Kandasamy**

Dean (Faculty Welfare)

## **Mattur C. Narsimhan**

Dean (Planning & Development)

## **M.B Saidutta**

Dean (Alumni Affairs & Institutional Relations)

## **Udaykumar R.Y**

Dean (Students' Welfare)

## **K Chandrasekaran**

Dean (Research & Consultancy)

## **Lakshman Nandagiri**

Prof. I/C (Training & Placement)

## **Gaurav Chowdhury**

Assistant Registrar (Academic)

**Co-coordinator**

# Contents (Jan - June, 2015)

- Faculty @ NITK
- Farewell to the retiring staff
- Student Strength
- Mentoring of IIIT-D
- Golden Jubilee Celebration
- Incident
- Inter-NIT Tournament
- Ring Presentation Ceremony
- Institute day / Students Council day / Hostel day
- NSS Blood Donation Camp
- Banquet Dinner at Rashtrapati Bhawan
- In residence Programme for students at Rashtrapati Bhawan
- New Sponsored Projects
- Summer University
- NITK-CMU Winter School
- A Short course on Introduction to Biomedical Electronics and Biomedical Imaging
- Students' visit abroad
- NITK Summer Internship Programme - 2015
- Intel Fellowship
- Placement
- Upcoming Infrastructural Facilities
- Recent Activities & Achievements
- Upcoming Events

## Faculty @NITK

**Demographic Distribution of Faculty Members (as on June 18, 2015)**

Sanctioned Strength	Present Strength	PhD Holder	Male	Female
375	258	229 89%	221	37

**STATE WISE DISTRIBUTION**

S. No	Home State	No
1	Karnataka	134
2	Kerala	35
3	Andhra Pradesh	21
4	Tamil Nadu	34
5	Jharkhand	5
6	Rajasthan	2
7	Delhi	3
8	Assam	2
9	Maharashtra	1
10	Gujarat	3
11	West Bengal	9
12	Goa	1
13	Bihar	1
14	Orissa	3
15	U.P	3
16	Madhya Pradesh	1
	Total	258

*\*Out of 258 Faculty members, 32 have been newly selected.*

*\*\*20 faculty members have already joined and 12 are likely to join soon.*

**AGE WISE DISTRIBUTION**

Designation	Age Group			
	Below 40 years	40-50 years	50-60 years	Above 60 years
Assistant Professor	110	31	1	Nil
Associate Professor	3	20	12	Nil
Professor	Nil	13	45	11



## New Faculty

We, NITK students and staff welcome the newly joined faculty in the NITK family and wish them a great start and good luck.

S. No	Name	Designation	Department	Date of Joining
1.	Nasar T.	Asst. Professor	Applied Mechanics & Hydraulics	19.03.2015
2.	SheronFigarado	Asst. Professor	Electrical & Electronics	01.04.2015
3.	Beneesh P.B	Asst. Professor	Chemistry	01.04.2015
4.	Hariprasad Dasari	Asst. Professor	Chemical	06.04.2015
5.	Sharanappa Joladarashi	Asst. Professor	Mechanical	06.04.2015
6.	Ratnamala Rao	Asst. Professor	Electronics & Communication	06.04.2015
7.	Debashree Chakraborty	Asst. Professor	Chemistry	09.04.2015
8.	Debabrata Karmakar	Asst. Professor	Applied Mechanics & Hydraulics	05.05.2015
9.	Pradyot Ranjan Jena	Asst. Professor	Humanities, Social Sciences & Management	05.05.2015
10.	Armuga Perumal D	Asst. Professor	Mechanical	14.05.2015
11.	Bibhuti Bushan Das	Asst. Professor	Civil	25.05.2015
12.	Shajahan Thamara Kunnathu	Asst. Professor	Physics	01.06.2015
13.	Saikat Dutta	Asst. Professor	Chemistry	02.06.2015
14.	Venkatesha Perumal	Associate Professor	Electrical & Electronics	20.05.2015
15.	Hari Mahalingam	Associate Professor	Chemical	18.06.2015



## Farewell to the retiring staff

Farewell programmes were organised for our beloved colleagues who served the Institute with sincerity and dedication during their tenure. The list of staff who retired during the period of report are:

### A. Teaching Staff

S. No.	Name	Designation	Department	Date of Retirement
1.	S G Mayya	Professor	Applied Mechanics & Hydraulics	31.12.2014
2.	R.J.D'Souza	Professor	MACS	31.1.2015

### B. Non-Teaching Staff

S. No.	Name	Designation	Department	Date of Retirement
1.	Narayana Poojary	Sr. Security Guard	Watch & Ward Section	31.1.2015
2.	Narayana Naik.B	Works Asst.	Library Section	31.1.2015
3.	Vijayalaxmi	Attendant	Central Computer Centre	28.2.2015
4.	K.C.Shivappa	Jr. Asst.	Garden Section	28.2.2015
5.	Ganesh Holla	Sr. Asst.	Administrative Office	31.3.2015
6.	B.Sheena	Sr. Technician	Resident Engineer Office	30.4.2015
7.	M. Chandran	Sr. Attendant	Library Section	30.4.2015
8.	Ananda. K. Shetty	Sr. Security Guard	Watch & Ward Section	31.5.2015
9.	Thimmappa	Superintendent	Accounts Section - I	30.06. 2015
10.	Ananda Devadiga	Senior Attendant	Chemical Engineering	30.06. 2015
11.	Chandranath M	Senior Technician	Physics	30.06. 2015
12.	Chandrasah Shettigara	Senior Security Guard	Watch & Ward Section	30.06. 2015





## Student Strength (2014-15)

S. No	Programme	Male	Female	Total
1.	B. Tech	2689	567	3256
2.	M. Tech	768	274	1042
3.	M. Tech (Research)	43	19	62
4.	MBA	49	16	65
5.	MCA	187	75	262
6.	MSc.	27	59	86
7.	PhD	379	135	514
	<b>Total</b>	<b>4142</b>	<b>1145</b>	<b>5287</b>

## Mentoring of IIIT-D

The Director, NITK Surathkal has been nominated as the Mentor Director of IIIT Dharwad and the Registrar NITK Surathkal as Registrar (i/c) of IIIT Dharwad. Also,

Prof. Muralidhar Kulkarni of Department of Electronics and Communication has been nominated as the Coordinator of IIIT Dharwad.

## Golden Jubilee Celebration of 1965 Batch (Feb 28-March 01, 2015)

The first batch of students of Karnataka Regional Engineering College, who graduated in the year 1965, had a Golden Jubilee reunion on 28th Feb. and 1st March 2015. About 40 alumni of 1965 batch, many of them with their spouses attended the get together. The program was coordinated by Prof. B. R. Samaga, who belonged to the 1965 Civil batch and

had also served as a faculty in the institute. The alumni had a nostalgic get together where they remembered their teachers and felicitated a few of them and spent quality time catching up with each other. To mark the occasion they contributed financially to the Lion's School for persons with disabilities at Surathkal.

## Incident 2015 (March 4th to March 8th, 2015)



Incident, the annual cultural fest of the institute, touched new heights this year. It was the first time that both Encore & DJ Night were held in the Main Grounds. Since many years, it was our dream idea to host such a huge extravaganza in our main

grounds - a Herculean DREAM that was successfully accomplished. Mentoring a dedicated & hard-working team of students was indeed a rewarding experience for all of us.

#### Chief Guest :

**Sri Arjun Devaiah Theethamada**

Yesteryears Sprint King of India & Acclaimed International Athlete

### Inter-NIT Tournament



As part of OINSA Inter-NIT tournaments, this year NITK, Surathkal hosted the Inter NIT Swimming sport for men and women. This event was well attended

by the best swimmers across most of the NITs. NITK, Surathkal was crowned as the overall champion in both Men & Women, thus showing its excellence in all fields.

### Ring Presentation Ceremony

Ring presentation ceremony is one of the unique traditions of NITK Surathkal. As per history no other institution in India has a similar function. During this ceremony every graduating student is presented with a silver finger ring on which the NITK emblem and the year of graduation is embossed. The ceremony is unique in that faculty 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 first such ring presentation ceremony was initiated by the then Principal of KREC Prof. A.S. Adke and the

tradition has continued since then for over 50 years. The ring serves two purposes – it 'marries' the student to his/her beloved alma mater and also serves to bring KRECIans/NITKians across the globe together through recognition of the ring. This year the ring presentation was held on 16-04-2015 under convener Prof. Udaykumar R Y Dean (Students' Welfare). Man of Decade, Man of the Century, and finally Man of the Millennium by American Bibliographical Institute, USA Prof. K. K. Aggarwal Founder Vice Chancellor of GGS Indraprastha University, Delhi., was the chief Guest.

The Guest of Honor was a distinguished alumnus of KREC/NITK. Sri Bhupala Gopal President of the NITK Alumni Association and Director Prof. Swapan Bhattacharya, Presided over the Ring Presentation

2015. 1500 students were presented with silver rings. Three Gold medals and two silver medals were presented to best out going students.



### Institute day / Students Council day / Hostel day (April 22nd, 2015)



Institute day is celebrated during the last working week of the academic year. This day is a combination of three events viz. Institute day, Students Council day and Hostel day.

Dean (Faculty Welfare) presented the annual report of the institute detailing all the happenings of the institute including financial and administrative related developments.

Dean (SW) presented the report of the student activities and the achievements of the extracurricular and co-curricular activities along with the outgoing President of the student council presents the detailed report of the students' council.

Professor in charge of Hostel Affairs presents the report on all the happenings of hostels. A detailed report containing the expenditure and the development of the hostels (food and lodging etc.) was presented by him and his team.

Apart from these, during the event the new Student Council got installed and the old council handed over the charge to the New Council President and elected members and the felicitation of the new council took place.

Another main activity on this day is the felicitation of the meritorious students of each year. The department toppers and subject toppers of each year gets felicitated and they receive certificates. Some prestigious honors like best outgoing students award, best student in co-curricular activities etc. are also a part of this day.

Hostel authorities organize some recreational activities of sports and other extracurricular events amongst the mess staff every year. The winners are felicitated in this occasion. Even the winner of best kept mess also gets rewarded here.

### NSS Blood Donation Camp (Jan 17, 2015)



We all know how a single pint of blood can save not one, but three lives. The NSS Blood Donation Camp saw a large number of students rise up to do their bit almost

400 units of Blood was donated. Seeing our students taking up the mantle of social responsibility in this manner was indeed a proud moment for us.



## Banquet Dinner at Rashtrapati Bhawan (January 25th, 2015)



The US President Barack Obama in the Presidential banquet at Rashtrapati Bhawan along with the presence of political leaders, leading industrialists, Padma awardees, academicians and eminent citizens.

The banquet was held on January 25, 2015-the day US President Barack Obama landed in India.

Prof. Swapan Bhattacharya, Director NITK represented the entire NIT System.

## In residence Programme for students at Rashtrapati Bhawan (16th May to 22nd May, 2015)



Shubham Agarwal, final year student of B.Tech (Mining Engineering) was among the elite who was selected for "In residence Programme" along with a

group of 16 students from NITs across the country to spend one week at Rashtrapati Bhawan.



## PhDs Awarded

The following students completed their PhD Viva Voce during the period of report:

S. No.	Name	Department	Viva Date	Guide(S)
1	Chandrasekaran K	Electrical and Electronics Engineering	07th January, 2015	Gururaj S. Punekar
2	Yathish Ullal	Chemistry	13th January 2015	A Chitharanjan Hegde
3	Ganala Santoshi	Mathematical and Computational Sciences	13th January 2015	R. J. D'Souza
4	Panduranga Rao M V	Computer Science and Engineering	17th January 2015	K. C. Shet
5	A Muralidhar	Mechanical Engineering	21st January 2015	Narendranath S
6	Rajेश M	Humanities, Social Sciences & Management	2nd February 2015	K. B. Kiran
7	Prameela Kolake	Mathematical and Computational Sciences	3rd February 2015	Shyam S. Kamath
8	Ramesh G	Metallurgical and Materials Engineering	6th February 2015	K. Narayan Prabhu
9	Rajeswari M Kulkarni	Chemical Engineering	9th February 2015	G. Srinikethan & Vidya Shetty K
10	Bayyapu Neelima	Information Technology	12th February, 2015	G Ram Mohana Reddy & Prakash S Raghavendra
11	Alwyn Roshan Pais	Information Technology	13th February, 2015	G. Ram Mohana Reddy, John D'Souza & Subhasis Chaudhuri
12	Manjaiah M	Mechanical Engineering	13th February, 2015	Narendranath S
13	Senthil T	Metallurgical And Materials Engineering	9th February 2015	Anandhan Srinivasan
14	Gop Kumar P	Chemical Engineering	17th February 2015	Gopal Mugeraya
15	Rekha G Pai	Mathematical and Computational Sciences	18th February 2015	A Kandasamy
16	B Shivamurthy	Metallurgical and Materials Engineering	18th February 2015	Udaya Bhat K & Anandhan Srinivasan
17	Pruthviraj U	Applied Mechanics and Hydraulics	19th February, 2015	M. K. Nagaraj & Subhash C. Yaragal
18	K S Shiva Prakasha	Electronics and Communication Engineering	19th February, 2015	Muralidhar Kulkarni
19	Manjunatha L S	Civil Engineering	23rd February, 2015	B. M. Sunil



20	Bini A A	Electronics and Communication Engineering	24th February, 2015	M. S. Bhat
21	Rajeev P	Metallurgical and Materials Engineering	14th February 2015	A. O. Surendranathan & Ch. S. N. Murthy
22	Shashidhara Mecha Kotian	Electrical and Electronics Engineering	2nd March, 2015	Shubhanga K N
23	Sonage Basgonda Kallappa	Mechanical Engineering	13th March, 2015	P. Mohanan
24	Naveen Kumar D T	Civil Engineering	16th March, 2015	K. Swaminathan
25	Sogra Fathima B	Chemical Engineering	26th February 2015	Raj Mohan B
26	Manoj Kumar A P	Mechanical Engineering	12th March, 2015	P. Mohanan
27	Venkateswara Rao Gadupudi	Physics	9th March, 2015	H. D. Shashikala
28	Santhosh Kumar A	Physics	19th March, 2015	H. S. Nagaraja
29	Keerthi Laxmi	Applied Mechanics and Hydraulics	26th March, 2015	Lakshman Nandagiri
30	Vaishaka R Rao	Chemistry	10th April, 2015	A Chitharanjan Hegde
31	Srinivasa Murthy T	Mathematical and Computational Sciences	10th April, 2015	S M Hegde
32	Honnanagouda Somanagouda Shivanagouda	Civil Engineering	17th April, 2015	D. Venkat Reddy & Mahesha A
33	Keshava Joshi	Chemical Engineering	24th April, 2015	G Srinikethan & M B Saidutta
34	Melwyn D'Souza	Information Technology	7th May, 2015	Ananthanarayana V S
35	Naveen P	Chemistry	21th May, 2015	Udaya Kumar D
36	Nagaraja	Mechanical Engineering	02nd June, 2015	Mervin A Herbert
37	Kripa M Suvarna	Metallurgical And Materials Engineering	25th May, 2015	K. Rajendra Udupa & A. O. Surendranathan
38	Rajashekar P Mandi	Electrical And Electronics Engineering	14th June, 2015	Udaykumar R Y
39	Lokeshwari Navalgund	Chemical Engineering	23rd June, 2015	G Srinikethan & V. S. Hegde



## Sponsored Projects

The Institute is steadily transforming itself into a Teaching-cum-Research Institute, with more and more R&D initiatives being pursued by the faculty. The faculty are responding to such initiatives by getting a large number of innovative R&D Projects sanctioned by various funding agencies like DST, CSIR, DRDO, CPRI, ICSSR, UGC, AICTE & Coal India Ltd. Also, global R&D

activities are being carried out with higher learning Universities & Institutes across various countries.

Currently, there are 55 on-going sponsored projects which are being carried out across all the departments and the total financial outlay is to the tune of Rs. 34 Crores. New projects sanctioned are:

S.No	Faculty Name (Principal Investigator/ Co-ordinator)	Project Title	Grant (INR in Lakhs )	Department	Funding Agency	Project	
						Start (Year)	End (Year)
1	Debabrata Karmakar	Mathematical techniques in the gravity wave interaction with floating offshore structures	27.50	Applied Mechanics and Hydraulics	SERB	2015	2018
2	Keyur Raval	Heavy metals removal by adsorption on melanin coated polymer matrix	37.68	Chemical	DST/TSG	2015	2017
3	Arun M Isloor	Towards development of low cost fouling resistant nanoporous Hollow Fiber Membrane for the Hemodialysis Application	60.00	Chemistry	VGST	2015	2017
4	Debashisha Jena D. N. Gaonkar	FPGA based development of different MPPT algorithms for stand-alone photo voltaic system using artificial intelligence	25.07	Electrical & Electronics	Central Power Research Institute (CPRI)	2015	2017
5	Gangamma S	Biomass Fuel burning smoke induced inflammation- mechanism of biological path ways	17.0	Chemical	CSIR	2015	2018
6	Gangamma S	Air Pollution Induced Immune Cell Dysfunction: Implication in Viral Infection	23.17	Chemical	DST	2015	2018
7	Satyanarayana Engu	On the solutions of Convection-Diffusion equations	8.30	MACS	NBHM, DAE, Govt. of India	2015	2018
8	K. Ram Chandar	Development of Crushing & Grinding Characteristic Curves for Different Rocks using Insmart Crushers and Mills”,	4.31	Mining	M/s. Insmart Systems, Hyderabad	2015	2016





## International Summer University at Beijing, China – 6th July 2014 to 20th July 2014

The International Summer University is a part of the MoU between National Institute of Technology Karnataka, Surathkal and HEIG-VD, School of Business and Engineering, University of Applied Sciences, Western Switzerland for Faculty and Student exchange. The international leg of the Summer University 2014 was held at Beijing China. The International Summer University 2014 was hosted at the Beijing Institute of Technology, Beijing China from 6th July 2014 to 20th July 2014. The Indian contingent comprised of 5 MBA students, 2 B.Tech students and one faculty. The Swiss contingent comprised of 9 students and 2 faculty. 8

Chinese students participated in the International Summer University. The program consisted of visits to 7 companies in and around Beijing to understand the business practices with special reference to HR practices, Communications and Marketing and Quality. The Indian leg of the Summer University began with a preparatory visit by Laurence Larghi, Dean and Program Coordinator from HEIG-VD, School of Business and Engineering, University of Applied Sciences, Western Switzerland to NITK Surathkal during November 18 - 22, 2014 to finalise the companies and the program schedule. The Indian leg commenced on the

20th of February 2015 and ended on 5th March 2015. 6 students from the MBA Semester II and 2 students from B.Tech Semester VI were selected to participate in the program. The Swiss contingent comprised of 8 students and 3 faculty. During the course of the Summer University program, the students visited 7 companies in and around Mangalore. The International Summer University enabled the students to appreciate the differences in business practices and cultural aspects between countries and internalize the theoretical aspects through the lens of organizational practices.



## NITK-CMU Winter School



NITK-CMU Joint Winter School 2014, sixth in an annual series of intensive scientific research boot camps for undergraduate students organized each year by Carnegie Mellon University (CMU), Pittsburgh, USA in collaboration with India's premier institutions of technology was held at Department of Electronics & Communication Engineering, National Institute of Technology Karnataka, Surathkal. The Coordinators of the workshop were Bhiksha Raj, CMU and Sumam David, NITK. Rita Singh, CMU, MrPulkit Agrawal, University of California, Berkeley and Dr Deepu Vijayasanan, NITK were also faculty for the Winter School.

The workshop included a total of 44 participants (selected from over 645 applicants from 121 institutions) from 29 institutions spread geographically across the country. Participants included 2nd, 3rd, and 4th year undergraduates and masters' students in Computer Science, Electronics and Communication Engineering, Mathematics, and other related Engineering fields. Details are given in Table 1.

The objective of the Winter School is to train Indian students in skills required to perform independent research.

**Table I Demography of participants of Winter School**

Institution	Applications	Participants		
		Male	Female	Total
IITs	125	9	1	10
NITs	125	13	1	14
IIIT, IISER, IEST, ISM, ISI	81	2	2	4
Universities	249	8	4	12
Engg colleges	65	2	2	4
<b>Total</b>	<b>645</b>	<b>34</b>	<b>10</b>	<b>44</b>



## A Short course on Introduction to Biomedical Electronics and Biomedical Imaging

This course was jointly organized by the Department of E & C, NITK Surathkal and Department of ECE, Northeastern University, Boston, USA during 3rd -4th March, 2015. Mark Niedre from NU Boston delivered the lectures. 225 BTech, MTech and PhD students as well as ECE faculty attended the course.



Lecture session of short course on  
Biomedical Electronics and Biomedical Imaging (March 3-4, 2015)

## Students' visit abroad

The following students have been permitted to undertake internship & conferences abroad, as mentioned against their name:

Sl. No.	Student Name	Department	Course	Institute	Duration	Internship / Conference
1	Pamir Ghimire	E & E Engg.	B.Tech	Tsinghua University	May 5th - 25th July	Internship
2	Anand Gopalakrishnan	E & E Engg.	B.Tech	University of Waterloo, Canada	May to July 2015	Internship
3	Supriya N	E & E Engg.	B.Tech	University of Waterloo, Canada	May to July 2015	Internship
4	Bhaves Jain Lalwani	Mech. Engg.	B.Tech	NUS Singapore	May to July 2015	Internship
5	Hardik Patel	Mech. Engg.	B.Tech	NUS Singapore	May 15th, - Aug.5th, 2015	Internship



6	Omey Manyar	Mech. Engg.	B.Tech	Carnegie Mellon University, USA	May 18th - July 30th , 2015	Internship
7	Ujwal K M	Mech. Engg.	B. Tech	ECAM Lyon France	May 18th - July 18th, 2015	Internship
8	Pranav Channakeshava	E & C Engg.	B.Tech	Universitat Tubingen	May 10th - July20th,2015	Internship
9	Varun Amar Reddy	E & C Engg.	B.Tech	Eurecom, France	May 15th - July 31st 2015	Internship
10	Vivek Venkatraman	E & C Engg.	B.Tech	ECAM Lyon France	May 18th - July 17th, 2015	Internship
11	Sagnik Dam	E & C Engg.	B.Tech	Hepia, Switzerland	May 12th - July 18th 2015	Internship
12	Ishaan Rajankar	Mining Engg.	B.Tech	Ruhr University , Germany	May 15th -Aug. 8th 2015	Internship
13	Anupama Mohanlal	Civil	B. Tech	University of Seville spain	May 15th - July 15th 2015	Internship
14	Swastika Singh	Civil	B. Tech	University of Seville spain	May 15th - July 15th 2015	Internship
15	Karthik S	IT	B. Tech	Hepia, Switzerland	May 12th - July 18th 2015	Internship
16	Nikhila S.	Chemistry	M. Sc.	UTM, Malaysia	17th May - 1st July	Internship
17	R. Saravanakumar	E & E Engg.	Ph. D	Canada	3rd - 06th May 2015	Conference
18	Santoshkumar	E & E Engg.	Ph. D	Canada	3rd - 5th May 2015	Conference
19	Y V Srinivasa Murthy	Computer Sci.	Ph. D	Canada	3rd - 6th May 2015	Conference
20	Ajay Kumara M. A.	IT	Ph. D	Malaysia	May 26-28, 2015	Conference
21	Manjula P	Chemical Engg.	Ph. D	Copenhagen, Denmark	19-24 July 2015	Conference
22	Rajashekhara S	Chemical Engg.	Ph. D	Malaysia	10-12 August 2015	Conference
23	Harsha Kumar	Mech. Engg.	Ph. D	Rutgers University NJ, USA	May 25-29, 2015	Conference
24	Karthik S Bhat	IT	B. Tech	WEBIST 2015 Portugal	May 20 - 22, 2015	Conference
25	Shailaja M	Mining Engg.	B.Tech	Monash University, Malaysia	May 3rd - 20th July 2015	Internship



26	Swasthik Prabhu	Mining Engg.	B.Tech	TU Clausthal Germany	May 15th - July 15th 2015	Internship
27	Alston Lawrence D'Souza	Mining Engg.	B.Tech	Ecole Polytechnique de Montreal Canada	May 14 - August 5th 2015	Internship
28	S Sanjay	Civil	B.Tech	The University of British Columbia, Vancouver, Canada	May to August, 2015	Internship
29	Sri Krishna	E & E	B.Tech	NUS Singapore	May 15th - July 15th 2015	Internship
30	Jaiprasad	E & E	B.Tech	NUS Singapore	15th May- 15th July 2015	Internship
31	Srajan S Shetty	Chemical Engg.	B.Tech	UPM Malaysia	May 18th-July 1st 2015	Internship
32	Eureka Pai	Metallurgy	B.Tech	M S U, USA	May 13th - July 12th 2015	Internship
33	Nikhita Vinay Hegde	IT	B.Tech	UTM Malaysia	May 15th - July 1st 2015	Internship
34	S. Saboor	Mechanical Engg.	Ph. D	Thaksin University, Bangkok, Thailand	May 28-29 2015	Conference
35	Subha S. Raj	Applied Mech.	M.Tech	Wuhan, China	June 19th - 21st 2015	Conference

### NITK Summer Internship Programme – 2015

This is a unique programme offered by NITK, where the students of other Institutions are provided internships with financial support.

S. No.	Name of the Student	Department	Name of Faculty Mentor	Parent Institution & Address
1	Golla Kedar Kumar	AMD	T. Nasar	Pondicherry Engineering College
2	Rajeev Ranjan	AMD	D. Karmakar	IIITM - K, Trivandrum
3	Jidev P K	Chemical	Hariprasad Dasari	NIT Warangal
4	Renita Mishal D' souza	Chemistry	D. Krishna Bhat	VIT-University, Vellore, Tamil Nadu
5	Mamatha Shetty	Chemistry	Arun M Isloor	Mangalore University
6	Ms. Sharada K	Civil	Anjana Bhasi & Katta Venkataramana	NMAMIT, NITTE



7	Ms. Seeram Apoorva	Civil	C. Rajasekaran	Easwari Engineering College
8	Mr. Harishankar N	Civil	C. Rajasekaran	NIT Agartala
9	Ms. Ashwini Tirkey	Civil	Katta Venkataramana & Bhavana Patel	Radhakrishna Institute of Technology of BBSR
10	Mr. Shrish Gopal Upadhyay	Civil	Katta Venkataramana & K S Babu Narayan	PESIT
11	Mr. Pratheeth Hegde	Civil	K S Babu Narayan & Katta Venkataramana	NMAMIT
12	Ms. Anjana S Rao	Civil	B. R. Jayalakshmi & Katta Venkataramana	NMAMIT
13	Ms. Antara S Rao	Civil	B. R. Jayalakshmi & Katta Venkataramana	NMAMIT, NITTE
14	Jayashree P.	Computer Science &	Annappa	NIT Puducherry
15	Ankan Kar	Computer Science & Engineering	Saumya Hegde	Sikkim Manipal Institute of Technology
16	Erraguntala Kruti Rao	Computer Science & Engineering	Shashidhar G. Koolagudi	BITS Pilani
17	Saravana Kumar N	Computer Science & Engineering	Annappa	VIT University, Vellore
18	Thirtha Shetty	Computer Science & Engineering	Annappa	NMAMIT, NITTE
19	Nikhil S Murthy	Electrical & Electronics	K. P. Vittal	SJCE Mysore
20	Kajal K Shetty	Electrical & Electronics	Vinatha U	B.M.S. College of Engineering
21	Prajwal Raj M B	Electrical & Electronics	A. Karthikeyan	SJCE Mysore
22	Praveen R Nair	Electrical & Electronics	A. Karthikeyan	SJCE Mysore
23	Bhagya Joshi	Electrical & Electronics	K. P. Vittal	SJCE Mysore
24	Madhan R.	Electronics & Communication	A. V Narasimhadhan	NIT Patna
25	Dibyajyoti Basak	Electronics & Communication	U. Sripati	NIT Agartala
26	B. Venkateswarulu	Electronics & Communication	A. V Narasimhadhan	RGUKT, IIIT Nuzvid



27	Romsha Mangla	Electronics & Communication	Rathnamala Rao	NIT Agartala
28	Kannuri Vijay	Electronics & Communication	P. Srihari / U. Sripati	NIT Patna
29	Shreya Khurana	MACS	D. Pushparaj Shetty	Cluster Innovation Centre, University of Delhi
30	S. P. Sushmita	Metallurgical & Materials	Ravishankar K S	B. V. Bhoomaraddi College of & Tech. Hubli
31	Atif Suhail	Metallurgical & Materials	A. O. Surendranathan	Central University of Jharkhand
32	M. Udaya Sankar	Metallurgical & Materials	Shashi Bushan Arya	Kongu Engineering College
33	Chetan Aggarwal	Mechanical	Veershetty G	PEC University of Technology, Chandigarh
34	Yashas J N	Mechanical	K V Gangadharan	SJCE Mysore
35	Shashidhar Hosamani	Mechanical	Jayaraj	Basaveshwar Engineering College
36	Ashik B V	Mechanical	S Murugendrappa	VIT University, Vellore
37	Abhishek Yada	Mining	Ch. S. N. Murthy	IIT (BHU) Varanasi
38	Sushant Kumar	Mining	M. Aruna	College of Technology & Engineering Udaipur, Rajasthan
39	V Kanishma	Centre for System Design	Mohit P.	Sethu Institute of Technology
40	G Vanathi	Centre for System Design	K V Gangadharan	Sethu Institute of Technology
41	Megha Manoharan	Centre for System Design	K V Gangadharan & Mohit P.	VIT, University, Vellore



## Intel Fellowship

“Department of Electronics and Communication Engineering has been a part of Intel Embedded Initiative for many years now. Currently this program is called as Intel IOT Initiative. Under this program the department has received support from Intel in terms Intel Galileo kits, funds to organise workshops and summer internships for undergraduate students of NITK and technology Institutes all over India. Intel also supports training of faculty members on Internet Of Things (IOT). On an average, under this summer internship program, ECE Department offers internship to 10 students every summer. This offer includes stipend and travel allowance besides opportunity to develop an IOT application using Intel’s Galileo kit.”

Sl. No.	Name of the Student	Department	Name of Faculty Mentor	Parent Institution & Address
1	B.Manjunath Kamath	Electronics & Communication	Ramesh Kini M	NMAMIT Nitte
2	Vandana Soni	Electronics & Communication	Ramesh Kini M	VIT, University, Vellore
3	Sandhya R	Electronics & Communication	Ramesh Kini M	PESIT, Bangalore
4	T. K. Sushmitha Shushree	Electronics & Communication	Ramesh Kini M	MIT, Manipal
5	Bhavani Devi Yedurada	Electronics & Communication	Ramesh Kini M	Rajiv Gandhi University of Knowledge Technologies (AP IIIT - Nuzvid)





# Placement (2014-15)

## PLACEMENT % DURING THE YEAR 2014-2015

( DATA AS ON 25.06.2015 )

Branch	Eligible Students	Placed	Yet to be placed	% Placed
CIVIL	78	62	16	79
CHEMICAL	35	27	8	77
COMPUTER	93	87	6	94
E & C	94	83	11	88
E & E	96	90	6	94
I.T	83	79	4	95
MECHANICAL	120	110	10	92
METALLURGY	33	25	8	76
MINING	28	17	11	61
<b>Total(B.Tech)</b>	<b>660</b>	<b>580</b>	<b>80</b>	<b>88</b>
STRUCTURAL ENGG.	27	17	10	63
GEO TECH.	13	3	10	23
ENVIRONMENTAL	23	7	16	30
TRANSPORTATION SYSTEM	24	3	21	13
CONSTRUCTION TECH & MGMT	22	4	18	18
MARINE STRUCTURES	21	7	14	33
WATER RESOURCE ENGG & MGMT	10	3	7	30
REMOTE SENSING	18	2	16	11
I P C	17	2	15	12
C P D	5	0	5	0
INDUSTRIAL BIOTECHNOLOGY	14	2	12	14
COMPUTER SCIENCE & ENGG	27	25	2	93
INFORMATION SECURITY	21	17	4	81
VLSI	22	7	15	32
COMMUNICATION ENGG	23	3	20	13
POWER & ENERGY SYSTEM	23	9	14	39
INFORMATION TECHNOLOGY	23	20	3	87
THERMAL ENGG	14	1	13	7
MANUFACTURING ENGG	11	3	8	27
MECHATRONICS	22	6	16	27
DESIGN & PRECISION	12	3	9	25
PROCESS MET.	8	1	7	13
MATERIALS ENGG.	22	1	21	5
NANOSCIENCE AND NANOTECHONLOGY	7	0	7	0
S A C A	20	12	8	60
<b>Total(M.Tech)</b>	<b>449</b>	<b>158</b>	<b>291</b>	<b>35</b>
MCA	81	53	28	65
MBA	26	20	6	77
MSC-CHEMISTRY	19	0	19	0
MSC - PHYSICS	21	0	21	0
	Eligible	Placed	Yet to be placed	Total % Placed
<b>Grand Total</b>	<b>1256</b>	<b>811</b>	<b>445</b>	<b>65</b>
<b>UG: 88%,</b>	<b>PG: 39%</b>			

Total Companies Visited : 228

Core Companies : 83

Software/I.T Companies : 145



## Upcoming Infrastructural facilities

- A new Integrated Sports Complex.
- Extension of upper floors in Basic Sciences Block, Mechanical Engineering Department Building and Applied Mechanics Department Building
- New building for the Department of CSE
- New Annexe for Chemical Engineering building
- Western Side Teaching Block construction to be completed by the end of the year
- Two new residential apartments for Faculty (total 48 units)
- Two new residential apartments for Non - Faculty (Total 56 units)
- A new Boy's Hostel block (500 single occupy rooms)
- A new Ladies Hostel block (250 single occupy rooms)
- A new building for Central Library and renovation of existing Library



25



New ongoing projects



### Recent Activities & Achievements



#### \* IEEE Xplore

Central Library, NITK has received Highest User Award for IEL Online in 2014 amongst Level 2 Category comprising 23 institutions including 20 NITs, ISM, SLIET, NERIST and other 102 Self Supported Institutions.

Iranna Shettar, Assistant Librarian has received this award in 11th Annual Meet & Workshop of INDEST-AICTE Consortium held on 29th and 30th April 2015 at IISER, Mohali.

26

#### \* IES-2015



The 4th International Engineering Symposium 2015 was held at Kumamoto University, Japan. A total of 48 people (including 13 faculty, 12 undergraduate, 9 postgraduate and 14 PhD scholars) from NITK participated in the symposium, spread over three days. Totally there were about 120 participants, including participants from other parts of India, Japan, Taiwan, Thailand and USA. Three keynote lectures and 107 state-of-the art

technical papers were presented. The Welcome Address was delivered by Prof. Kazufumi Takamune, Vice Dean of Graduate School of 2 of 6 Science and Technology of Kumamoto University while the Inaugural Address was delivered by Prof Swapan Bhattacharya, Director, NITK. Prof Shuichi Torii from Kumamoto University and Prof Katta Venkataramana from NITK were the joint conveners of the symposium.

Team CSD (Vinay Kumar Yadav, K Srinivasa Sagar, Praveen Kumar H.N) of Department of Mechanical Engineering. NITK Won 2<sup>nd</sup> Prize in Techno Project Exhibition held at Dr.Ambedkar Institute of Technology, Bangalore on 14th April 2015.



Project: " Self Powered Remote Control Switch" working prototype was demonstrated under Green energy category. The designed switch harvests energy from the press of switch button which is utilized to transmit RF data to remote devices without using batteries. These switches can replace conventional electrical switches saving lot of wiring. labour cost and has vast application in Household electrical. Aircraft and automobile industry.



## Student Achievements

- Mr.SreecharanSankaranarayanan, IVyearB.Tech.(CSE)has been accepted to the Ph.D.programof the Language Technologies Institute in the School of Computer Science at Carnegie Mell on University starting in the Fall 2015 semester with Research Fellowship.
- Ms.Shruthi Puranik, IIIyear B.Tech.will be doing Research Internship on“Mining Mobile Software Repositories”at Queen’s University Kingston, Canada under the scheme of “Student research Mobility Programme” with MITACS, Canada during May-September 2015.
- Ajaykrishnan N (11EC09) got admission in University of Maryland, College Park for PhD for Fall 2015.
- SupreethPrajwalS(11EC101)got admission in Georgia Institute of Technology as well as in University of Maryland, College Park for PhD for Fall 2015.
- Raghavendra S H (11EC75) got admission in Ohio State University, Columbus for PhD in 2015
- Akshar Jain (11EC11) got admission in UC, Santa Barbara for MS in Fall 2015.
- Amit Raj (11EC13) got admission in Georgia Institute of Technology for MS in Fall 2015.
- ArjunA(11EC14)got admission in Univ.of Southern California, Univ. of Michigan Ann Arbor, Univ. of Maryland College Park, University of Minnesota and Arizona State University for M.S. admissions in Fall 2015.
- Arjun Jagdish (11EC15) got admission in North Carolina State University for MS in Fall 2015.
- David Joshy Manjaly (11EC28) got admission in North Carolina State University for MS in Fall 2015.
- Dishit Dak (11EC31) got admission in New York State University for MS in Fall 2015.
- Nithin Kamath (11EC59) got admission in North Carolina State University for MS in Fall 2015.
- Divya Venugopalan(11IT105) got admission in Carnegie Mellon University, USA for M.S in Computer Science.
- Susmitha P (11IT96) got admission in Carnegie Mellon University, USA for M.S in Computer Science.
- Vikas Mohandoss (11IT102) got admission in Columbia University, USA for M.S in Computer Science.
- Ruchika Shivaswamy (11IT73) got admission in University of California San Diego, USA for M.S in Computer Science.

*\*This is not an exhaustive list*

## Visits of dignitaries/experts

- T. Shripathi, UGC-DAE Consortium for Scientific Research, Indore.
- Ranjan Sen, CGCRI, Kolkata.
- Santanu Ghosh, IIT Delhi.
- Mr. Yann Busnel and Mrs. Esther Lalau Keraly Delegation from ENSAI (National Graduate School for Statistics and Data Analysis)

Mr. Vijayakant Nadadur from Tationem

Sathya Peri, Assistant Professor, Department of Computer Science and Engineering, IIT Hyderabad

- Balaji Rejandran, Senior Technical Officer, C-DAC, Bangalore Mr. Manish Kumar, Assistant Professor and Consultant, MSRIT Bangalore
- A. M. Shanmugharaj, Asst. Professor, Kyung Hee University, Korea
- Shri Vijayanand Gurudev, Co-Founder and CEO - Nikshepa IT Consulting and Services P Ltd., Bangalore,
- Atul Sharma, Gila Services Pvt. Ltd Bangalore
- Mr. Anand Madanagopal, Cardiac Design Labs, Bangalore
- Mark Niedre Professor, Dept. of Electrical & Computer Engineering, Northeastern University, Boston, USA
- Mr. Sainath Shanbhag, Technical Project Manager – Higher Education representing Intel Education
- Ranjan K. Mallik, Dept of Electrical Engg. IIT Delhi
- Experts from Calligo Technologies, Bangalore,
- Dr. P.H. Rao , SAMEER - Centre for Electromagnetics, Chennai
- Dr. K.J. Vinoy, , Indian Institute of Science, Bangalore
- Navakant Bhat, Dept. of ECE, IISc, Bangalore
- Dr. Prasanna Kumar T S, Former Professor, IIT Madras
- Swami Atmashraddanadha, Editor, Vedanta Kesari, Ramakrishna Mission, Chennai

*\*This is not an exhaustive list*

## List of Conferences, Short Term Courses, workshops, Seminars, Training Programs Organized

- A Meeting cum interaction session with Delegation from ENSAI (National Graduate School for Statistics and Data Analysis) Mr. Yann Busnel and Mrs. Esther Lalau Keraly on 26th February 2015. (Co-ordinator – Annappa)
- A two days Workshop on “Data Science”, during 27th– 28th February 2015, (Coordinators – Annappa, Mr. B.R. Chandavarkar)
- An Expert lecture on “Understanding the correctness requirements of software transactional memory systems” by Sathya Peri, Assistant Professor, Department of Computer Science and Engineering, IIT Hyderabad” on 25th March 2015. (Co-ordinator – Annappa)
- Microsoft HACKATHON during 21st-22nd February 2015. (Co-ordinator – K. Chandrasekaran)
- An Expert Lecture on “DNS Security” by Balaji Rejandran, Senior Technical Officer, C-DAC, Bangalore during 27th -28th March 2015. (Co-ordinator – K. Chandrasekaran)
- An Expert Lecture on “Penetration Testing” by Mr. Manish Kumar Assistant Professor and Consultant, MSRIT Bangalore during 27th -28th March 2015. (Co-ordinator – K. Chandrasekaran)



- Two-day National Workshop on “Non-Ferrous Extractive Metallurgy” 25th – 26th February, 2015.
- Two day workshop on Computational Material Science was 17th and 18th of April, 2015
- Santhosh George and D. P. Jidesh, in collaboration with others organized the International Conference on Mathematical and Computational Sciences, at Don Bosco College, Kannur, Kerala, during 22nd to 24th of January, 2015.
- Internet of Things (IoT) by Atul Sharma, Gila Services Pvt. Ltd Bangalore: 9th January 2015
- Cardiology by Mr. Anand Madanagopal, Cardiac Design Labs, Bangalore: 28th January 2015
- Introduction to Biomedical Electronics and Biomedical Imaging by Mark Niedre, Northeastern University Boston, USA: March 2-3, 2015
- Intel Galileo - Hands-on embedded system by Mr. Sainath Shanbhag: March 13-14, 2015
- Optimal Signaling for Multi-Level Amplitude-Shift Keying with Single-Input Multiple-Output and Noncoherent Reception by Ranjan K. Mallik Dept of Electrical Engg. IIT Delhi
- Nano-Electronics & Sensors by Navakant Bhat, CeNSE, IISc, Bangalore: 16th April 2015
- Expert Lecture on Heat Conduction: Feb 25, 2015
- Expert Lecture on Mind and its Control: March 24, 2015

*\*This is not an exhaustive list*

## Upcoming Events

**13<sup>th</sup> Annual Convocation** : November 14, 2015  
**Global Alumni Meet** : 18<sup>th</sup> – 20<sup>th</sup> December, 2015  
**Golden Jubilee Celebration**  
**(Department of Chemical Engineering)** :  
20<sup>th</sup> - 22<sup>nd</sup> December, 2015





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