

NITK NEWS LETTER

WAVES

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**National Institute of Technology Karnataka, Surathkal
Mangalore - 575 025, Karnataka, India**





Message from the Director

I express my sincere thanks to the Ministry of Human Resource Development, GoI, for giving me the opportunity to take additional charge as Director, NITK, Surathkal and also, I would like to thank Prof. Swapan Bhattacharya (Former Director) for his endeavours and support to the Institute. The ultimate goal of the Institute is to prepare each student to meet life's challenges with strong knowledge base, supported by wisdom, ethical values, good decision making skills, respect for all life and above all strong commitment to the society. It gives me immense pleasure to release the second revived version of Institute News Letter "Waves". The idea behind publishing Waves is to create awareness on the significant activities and developments carried out both at Institute as well as at department level. I also take this opportunity to wish all the members of the NITK family, the best in their future ventures and wish NITK to accomplish as one of the leading Technological Institute. I also congratulate the entire editorial team for bringing out this edition of "Waves" with all the information to showcase the Institute.

Dr. Srinivasan Sundarrajan

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Visitor's Conference (November 04-06, 2015)



The Visitor's Conference was held on November 4 to 6, 2015 at Rashtrapati Bhawan. It included Vice Chancellors/Directors/Director General of institutions of higher learning. This is the first time such a conference brought all heads of higher education institutions together and was convened by the Hon'ble President, Sri Pranab Mukherjee. Earlier, separate conferences were held of Vice Chancellors of Central Universities, Directors of NITs, IITs, IISERs and IISc.

The agenda for the Visitor's Conference included (a) improving the quality of higher education in institutions to bring them at par with the top institutions of the world; (b) capacity development of faculty; (c) engagement of institutes of higher learning with community and society for sustainable and inclusive development and (d) promotion of gender equity and cultural inclusion through higher education.



***MoU Exchange with PepsiCo India Holdings Pvt. Ltd.
at Rashtrapati Bhavan during the Visitor's Conference***

Appointment of Director

The MHRD, GoI have entrusted the responsibility of Director NITK, Surathkal to Prof. Srinivasan Sundarrajan (Director NIT Trichy) as Director with additional charge w.e.f December 28, 2015. We are thankful to Prof. Swapan Bhattacharya (Former Director) for his guidance and support during his tenure which witnessed many transitions.

Some of the achievements during the last 3 years are:

| S.No. | Area | 2013-14 | 2014-15 | 2015-16 |
|-------|--|---------|---------|------------|
| 1. | *Recruitment of faculty | 34 | 26 | In Process |
| 2. | Faculty Strength | 227 | 249 | 248 |
| 3. | No. of ongoing sponsored projects | 57 | 52 | 66 |
| 4. | Total value of ongoing sponsored projects (Crores) | 36 | 33 | 42 |
| 5. | PhDs Awarded | 62 | 60 | 79 |

** Faculty recruited during 2012-13: 30; faculty strength during 2012-13: 196*

In addition to the above mentioned points NITK, Surathkal is the only NIT with 5years accreditation by NBA for all the 9 B.Tech programmes. Also, NITK, Surathkal is the first among its kind to adopt 4-tier flexible cadre structure at all levels.

CCMT - 2016

MHRD, GoI has entrusted the responsibility of conducting Centralized counselling of M.Tech/M.Arch/M. Plan to NITK, Surathkal. The registration process is scheduled to begin from April 12, 2016 (tentative).

Earlier NITK has co-ordinated DASA scheme during its formative years from 2010 to 2014 & Central Counselling Board (CCB) in the year 2011.

Admission 2015-16

| Year | Intake | | | Admissions | | | | | | | | |
|---------|--------|-----|-----|------------|--------|-------|------|--------|-------|------|--------|-------|
| | UG | PG | PhD | UG | | | PG | | | PhD | | |
| | | | | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2015-16 | 868 | 911 | 150 | 666 | 159 | 825 | 481 | 208 | 689 | 103 | 42 | 145 |
| 2014-15 | 868 | 911 | 150 | 636 | 200 | 836 | 523 | 244 | 767 | 91 | 34 | 125 |
| 2013-14 | 868 | 877 | 100 | 672 | 155 | 827 | 537 | 185 | 722 | 67 | 24 | 91 |

Note: Includes DASA, MEA, ICCR;

All the 9 B.Tech. Programmes have been accredited by NBA for a maximum feasible period of 5 years w.e.f July 01, 2014.

SARs of all the 18 eligible M.Tech Programmes has been uploaded. The NBA team visits are scheduled to take place soon.

Orientation Programme (July 31st, 2015)

The orientation programme is held every year for all newly admitted before the commencement of the classes. The students are introduced with the background of the Institute and departments, placement statistics and the functionalities. The programme was followed by a lunch session and a beach party.

Rankings by leading survey agencies

| S.No. | Survey | All India Rank | Rank among NITs | Date |
|-------|---|----------------|-----------------|---------------|
| 1. | Data Quest | 8 | 1 | May 31, 2015 |
| 2. | The Week | 12 | 1 | May 31, 2015 |
| 3. | Edu Rand Rankings | 15 | 2 | June 09, 2015 |
| 4. | India Today | 10 | 1 | June 29, 2015 |
| 5. | GHRDC- Top Engineering Colleges of Super Excellence | 2 | 1 | July 2015 |
| 6. | Outlook | 10 | 2 | July 06, 2015 |

13th Annual Convocation (November 14, 2015)

Students Graduated

| Program | Boys | Girls | Total |
|-------------------|------|-------|-------|
| B.Tech | 703 | 95 | 798 |
| M.Tech | 379 | 120 | 499 |
| M.Tech (Research) | 14 | 15 | 29 |
| MCA | 61 | 22 | 83 |
| MBA | 20 | 08 | 28 |
| MSc | 13 | 27 | 40 |
| Ph.D | 54 | 25 | 79 |
| Total | 1244 | 312 | 1556 |

Chief Guest: Prof. Kazuhiko Hasegawa

Chairman, Department of Naval Architecture & Ocean Engineering

Graduate School of Engineering

Osaka University, Japan



Peer Tutoring

| Even 2013-14 | | | | | | |
|--------------|---------|---|----|----------|----|-----|
| Topic | Mentors | | | Students | | |
| | M | F | T | M | F | T |
| EC110 | 29 | 6 | 35 | 350 | 51 | 401 |

| Even 2014-15 | | | | | | |
|---|---------|---|---|----------|----|----|
| Topic | Mentors | | | Students | | |
| | M | F | T | M | F | T |
| Analog Electronics | 6 | 0 | 6 | 16 | 9 | 25 |
| Digital System Design | 5 | 3 | 8 | 25 | 2 | 27 |
| Digital Signal Processing | 7 | 0 | 7 | 32 | 24 | 56 |
| Embedded System and Do It Yourself Electronics | 8 | 0 | 8 | 40 | 15 | 55 |

| Odd 2015-16 | | | | | | |
|--------------------------------|---------|---|---|----------|----|----|
| Topic | Mentors | | | Students | | |
| | M | F | T | M | F | T |
| Electronic System & Simulation | 4 | 2 | 6 | 45 | 21 | 66 |
| Matlab / Octave | 6 | 0 | 6 | 58 | 10 | 68 |
| Python & Perl | 8 | 1 | 9 | 61 | 14 | 75 |
| Sensors & Microcontrollers | 9 | 0 | 9 | 67 | 23 | 90 |

ENGINEER (8th - 11th October, 2015)



ENGINEER 2015 was held during 8th to 11th October 2015. 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. **TEDx** conferences; is a recent edition in the ENGINEER by our students wherein luminaries coming from different spheres exchanged ideas with the participants. Some new attractions that added further colours to ENGINEER '15 were **Engi Talks** which brought forth eminent personalities from various fields to give talks that are idea based. For main shows this edition of ENGINEER had Technical DJ, Laughter night and concert by Laghori Band.

NIT CONCLAVE (22nd - 23rd August, 2015)



NIT Conclave 2015 was held at NIT Jalandhar on 22-23 August, 2015. The theme was “INNOVATION, INTELLECTUAL PROPERTY AND STARTUP ECOSYSTEM”, an attempt to encourage the innovative ideas to bloom and thrive. The NITK Surathkal team comprised of three students, Almas Parveen, Vikas Meena and Nimish Gera, bagged the “BEST NIT” award based on their presentation and the activities undertaken at the college. This is the second time that NITK Surathkal is bagging the “BEST NIT” Award out of the five editions of the conclave.

Foreign visitors to the Institute

| S. No. | Department Visited | Name of the Visitor | Organisation | Date of Visit (DD-MM-YY) |
|--------|---|---------------------------|---|--------------------------|
| 1. | Electronics & Communication Engineering | Prof. Michel Kocher | Centre d'Imagerie BioMédicale (CIBM) Genève, Switzerland | 14-07-2015 to 25-07-2015 |
| 2. | Information Technology | Prof. Raghava Gowda | Professor, Dayton University | 03-08-2015 |
| 3. | Metallurgical & Materials Engineering | Dr. K. V. Sudhakar | University of Montana, USA | 07-08-2015 |
| 4. | Mechanical Engineering | Prof. Ramana Grandhi | Wright State University, Dayton, Ohio, USA | 27-08-2015 to 28-08-2015 |
| 5. | Electronics & Communication Engineering | Prof. Prahlad Vadakkepat | Associate Professor Electrical & Computer Engineering, NUS Singapore as part of the IEEE activity | 22-09-2015 |
| 6. | Applied Mechanics & Hydraulics | Dr. Hiromichi Akimoto | Professor, Dept of Naval Architecture and Ocean Engineering, Osaka University, Japan | 01-10-2015 |
| 7. | Applied Mechanics & Hydraulics | Mr. Kazuhiri Lijima | Research scholar Naval Architecture and Ocean Engineering, Osaka University, Japan | 01-10-2015 |
| 8. | Applied Mechanics & Hydraulics | Prof. Tad S Murty | University of Ottawa Canada | 02-11-2015 |
| 9. | Mechanical Engineering | Prof. Aleksander Zhilin | Department of Materials Science, Ural Federal University, Russia | 12-11-2015 |
| 10. | Mechanical Engineering | Prof. Arcady Finkelstein | Dept. of Mechanical Engineering, Ural Federal University Russia | 12-11-2015 |
| 11. | Mechanical Engineering | Prof. Jean-Bernard Michel | Professor and Head, Industrial Bioenergy Systems, HEIG-VD, SWITZERLAND | 20-11-2015 |
| 12. | Information Technology | Mr. Jeffrey | Motorolo, Chikago, USA | 29-12-2015 |
| 13. | Electronics & Communication Engineering | Dr. Krishna Shenai | Vice President, LoPel Corporation, Illinois, & Adjunct Professor, EECS, North Western University, USA | 30-12-2015 |

Publications

| Sl. No. | Department | National Conference | International Conference | National Journals | International Journals |
|--------------|---|---------------------|--------------------------|-------------------|------------------------|
| 1. | Applied Mechanics and Hydraulics | 3 | 35 | - | 45 |
| 2. | Chemical Engineering | 05 | 24 | - | 34 |
| 3. | Chemistry | 10 | 14 | - | 60 |
| 4. | Civil Engineering | 03 | 08 | 17 | 11 |
| 5. | Computer Science & Engineering | 4 | 65 | - | 20 |
| 6. | Electrical & Electronics Engineering | 1 | 18 | - | 10 |
| 7. | Electronics & Communication Engineering | 2 | 23 | - | 14 |
| 8. | Information Technology | - | 48 | - | 07 |
| 9. | Mathematical & Computational Sciences | - | 2 | - | 49 |
| 10. | Mechanical Engineering | 10 | 27 | 02 | 48 |
| 11. | Metallurgical & Materials Engg. | 2 | 6 | 03 | 35 |
| 12. | Mining Engineering | 05 | 04 | 04 | 04 |
| 13. | Physics | 3 | 9 | - | 09 |
| 14. | School of Management | 03 | - | 06 | - |
| Total | | 42 | 283 | 23 | 348 |

Sponsored projects

| S.No. | Department | Number of Projects | Total Sanctioned Grant (INR in Lakhs) |
|--------------|---|--------------------|---------------------------------------|
| 1. | Applied Mechanics and Hydraulics | 5 | 319.65 |
| 2. | Chemical Engineering | 9 | 506.45 |
| 3. | Chemistry | 5 | 271.55 |
| 4. | Civil Engineering | 6 | 341.7895 |
| 5. | Computer Science and Engineering | 4 | 482.871 |
| 6. | Electrical and Electronics Engineering | 4 | 320.05 |
| 7. | Electronics and Communication Engineering | 4 | 162.35 |
| 8. | Mathematical and Computational Sciences | 3 | 13.19 |
| 9. | Mechanical Engineering | 15 | 1657.22 |
| 10. | Metallurgical and Materials Engineering | 1 | 30.17 |
| 11. | Mining Engineering | 2 | 18.61 |
| 12. | Physics | 4 | 134.73 |
| 13. | School of Management | 4 | 25.825 |
| Total | | 66 | 4284.45 |

Department associated activities

| S.No. | Activities | Department | Title | Date/ Year |
|-------|----------------|---|--|--------------------------|
| 1. | Workshop | Computer Science & Engineering | Simulation of Wired and Wireless Networks (SWN-2015) | 08-06-2015 to 10-06-2015 |
| 2. | Workshop | Information Technology | Research Issues In Green Cloud Computing | 18-06-2015 to 20-06-2015 |
| 3. | Workshop | Information Technology | Human Centered Computing: Tools and Applications | 25-06-2015 to 27-06-2015 |
| 4. | Workshop | Electronics & Communication Engineering | Industry Interaction to review Academic and Research Program of the Department of E&C Engg. | 13-07-2015 to 14-07-2015 |
| 5. | Short Course | Electronics & Communication Engineering | Mathematical Morphology and its applications in Image Processing | 14-07-2015 to 24-07-2015 |
| 6. | Expert Lecture | Computer Science & Engineering | "Cloud Computing" by Dr. Rahul Ghosh and Dr. Tridib Mukherjee, Xerox Research Center (India), Bangalore | 25-07-2015 to 26-07-2015 |
| 7. | Expert Lecture | Computer Science & Engineering | "Advanced Data Structure" and "Advanced Computer Architecture" by Dr. Ansuman Banerjee, Xerox Research Center (India), Bangalore | 25-07-2015 to 26-07-2015 |
| 8. | CEP | Applied Mechanics and Hydraulics | Design and management of irrigation schemes | 27-07-2015 to 03-08-2015 |
| 9. | Expert Lecture | Computer Science & Engineering | "Heterogeneous Computing-Research Problems" by Prof. Matthew Jacob Thazhuthaveetil, Professor, Indian Institute of Science Bangalore | 30-07-2015 |
| 10. | Workshop | Civil Engineering | "Recent Trends in Piling and Ground Improvement" | 31-07-2015 to 01-08-2015 |
| 11. | Workshop | Applied Mechanics and Hydraulics | Open Source Latex Software | 15-08-2015 |
| 12. | CEP | Applied Mechanics and Hydraulics | Water supply and sanitation schemes | 24-08-2015 to 29-08-2015 |
| 13. | Expert Lecture | Computer Science & Engineering | "Cloud Computing", by Dr. Praveen Jayachandran, IBM, Bangalore | 01-09-2015 |

| | | | | |
|-----|--|---|---|--------------------------|
| 14. | Workshop | Applied Mechanics and Hydraulics | Reef 3D : Open source CFD for Hydraulic and Coastal Engineering flow | 14-09-2015 |
| 15. | National Conference | School of Management | Challenges in Banking and Capital Markets | 24-09-2015 |
| 16. | Special lecture | Computer Science & Engineering | "Research issues in Image Processing and Analytics", by Dr. V. Vijayakumar, Dean, Anurag Group of Institutions | 26-09-2015 |
| 17. | Special lecture | Computer Science & Engineering | "Research Directions in Networking", by Dr. Krishna V, Professor, Anurag Group of Institutions | 26-09-2015 |
| 18. | Special lecture | Computer Science & Engineering | "Data Visualization" by Dr. Easwara Reddy, Vice Principal, JNTUA College of Engineering, Anantapuram | 26-09-2015 |
| 19. | Short Course | Electronics & Communication Engineering | EM Theory | 08-10-2015 to 12-10-2015 |
| 20. | Workshop | Mathematical And Computational Sciences | Cyberspace Security: Digital India Context | 17-10-2015 |
| 21. | Workshop | Applied Mechanics and Hydraulics | Water Resources Management under changing environment | 20-10-2015 |
| 22. | Expert Lecture | Computer Science & Engineering | "Introduction to Open stack and its Adaptation in IT Industry", by Mr.Ranjith Kumar N., Staff Software Engineer, EMC2 (NITK M.Tech. CSE Alumni, 2000 batch) | 23-10-2015 |
| 23. | Expert Lecture | Computer Science & Engineering | "Dynamic Graph Algorithms", by Dr. Sayan Bhattacharya, Faculty in Institute of Mathematical Sciences, Chennai | 23-10-2015 |
| 24. | Workshop | Computer Science & Engineering | "Cryptography, Applications and foundations of Data Science | 26-10-2015 to 30-10-2015 |
| 25. | Golden Jubilee Celebration and International Symposium | Metallurgical & Materials Engineering | "Make in India – Role of Metals & Materials – 2015 (MIRMM – 2015) | 30-10-2015 to 31-10-2015 |
| 26. | Workshop | Applied Mechanics and Hydraulics | Tsunami Threats and its mitigation along Indian coast | 02-11-2015 |

| | | | | |
|-----|--------------------------|---|--|--------------------------|
| 27. | Workshop | Information Technology | Intel HPC Code Modernization (Parallelization) | 07-11-2015 |
| 28. | Workshop | Applied Mechanics and Hydraulics | Scientific Research – Hurdles & Solutions | 20-11-2015 |
| 29. | Workshop | Mathematical And Computational Sciences | Topological Dynamics | 10-12-2015 to 12-12-2015 |
| 30. | National Conference | Mechanical Engineering | Fluid Mechanics and Fluid Power | 14-12-2015 to 16-12-2015 |
| 31. | Special lecture | Computer Science & Engineering | “Art of innovation”, Prof. Prakash Sai L, IIT Madras | 29-12-2015 |
| 32. | Special lecture | Computer Science & Engineering | “Trends in Internet of Things and the Business Impact”, by Mr.Reguraman Ayyaswamy, Vice President, Engineering Services, Tata Consultancy Services | 31-12-2015 |
| 33. | International Conference | Chemical Engineering | Advances in Chemical Engineering-2015(ICACE-2015) | 20-12-2015 to 22-12-2015 |

****Please note this is not an exhaustive list.***

Events organized

Mathematical Morphology and its applications in Image Processing (14th - 24th July, 2015)



The short course on Mathematical Morphology and its applications in Image Processing was organized at Department of Electronics & Communication Engineering, National Institute of Technology Karnataka, Surathkal from July 14-24, 2015 jointly with School of Business & Engineering, Yverdon les Bains, (HEIG-VD) and Centre d'Imagerie BioMédicale (CIBM), Geneva, Switzerland. The objective of the course was to provide valuable inputs on advanced techniques in image processing to students and young researchers. The resource person for the course was Prof. Michel Kocher, Professor of Signal and Image Processing at the University of Applied Science HEIG-VD, Yverdon, and an affiliated Professor of Centre for Biomedical

Imaging (CIBM), University Hospital of Geneva.

Forty six participants comprising of 6 Faculty, 15 PhD scholars, 12 MTech, 13 BTech students (5 - VII semester, 7 V semester and 1 - III semester) registered for the Workshop. The participants were from Depts. of E&C, CSE, E&E, Mechanical, MACS and Applied Mechanics & Hydraulics. In total there were 52 hours of theory and practice sessions spanned over 10 days. For effective learning the theory and practice sessions were mixed. The practice sessions were on Matlab and SDC morphology toolbox for Matlab. A 1.5 hour theory test and a 3hr practical examination was conducted on July 23, 2015. 27 participants took both the tests.

The participants have rated the course and the course instructor as Excellent. It was a new experience of learning for the students & faculty as it was an intense course covering from basics to advanced to practical applications in various fields over a short span. The course was of similar rigor of a 4 credit course offered by NITK Surathkal and we strongly feel that NITK should consider such courses for credit in line with the MHRD proposal for GIAN (Global Initiative for Academic Networks). Prof Kocher also interacted with research scholars working in the area of Image processing and

has shown interest to be a co-guide for students working in the area of Biomedical Image Processing. Prof Kocher was very happy with the performance and attitude of the students and the hospitality extended by NITK. The Department hopes that we will be able to offer more such intense courses in future which will help augment our academic competency in an accelerated manner.

The Department of E&C would like to thank NITK Surathkal and TEQIP II for supporting us in organizing a very successful course.

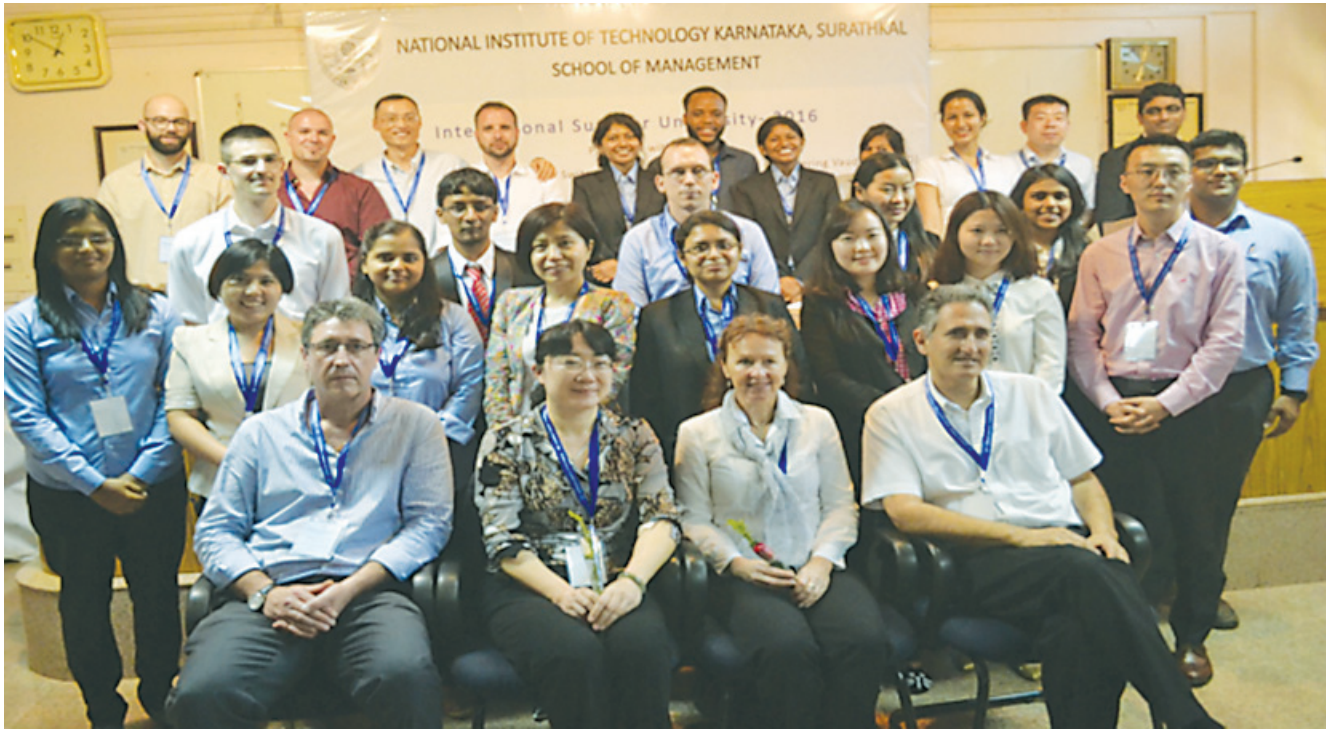
Expert lecture on Renewable Energy (September 27 – October 2, 2015)



Professor Hiromichi AKIMOTO (Center for the Advancement of Research and Education Exchange Networks in Asia, Osaka University, Japan) and Professor Kazuhiro IIJIMA (Department of Naval Architecture and Ocean Engineering, Osaka University, Japan) visited NITK during September

27 – October 2, 2015 for research interaction with faculty and students and for delivering expert lectures. Both these faculty are experts in the field of Renewable Energy and delivered lectures on offshore turbines for generation of wind energy. The entire program was funded by TEQIP II.

International Summer University- 2016



International Summer University- 2016 was held during February 19th to March 3rd, 2016 at National Institute of Technology Karnataka, Surathkal. School of Management, NITK, Surathkal partnering with University of Applied Sciences Western Switzerland, School of Business and Engineering Vaud (HEIG-VD) and Beijing Institute of Technology, China organised the Indian leg of the Summer University program.

Participants from Switzerland and China arrived on 19th February, 2016 and visited different places in Mangaluru on first two days. Inauguration of the program was held on 21st February, 2016 and industry visit started from 22nd of February. Over next six days, total eight companies were visited viz. Bharath Tile Company, Lamina Suspensions,

Primacy, Bharath Beedi, Dakshina Kannada Co-operative Milk Producers' Societies Union Ltd, Kalbavi Cashews, Achal Cashews, and waste water treatment plant of Udupi City Municipal Corporation. Students were divided into two groups, first group examined the quality and security management whereas, the second group examined the marketing and communication aspect. Students were divided into two groups and each group consisted equal number of students from all three institutions. They compared the similarities and differences in the business practices across three countries. It provided an opportunity for the students to work in an international setting, to understand and appreciate the cultures of other people.

Golden Jubilee Celebrations of Department of Chemical Engineering, NITK



The department of Chemical Engineering, NITK, Surathkal started in the year of 1965, has completed 50 years of existence in the field of chemical engineering education. As a part of golden jubilee year celebrations, the department organised (i) felicitations to the retired faculty and staff members, (ii) International conference, (iii) Industrial exhibition, and (iv) Students project competition during 20th to 22nd December, 2015. The felicitations function was conducted on 20th December, between 2:00 P.M to 5:00 P.M., Prof. M.M.Sharma, Padma Vibhushan, former Director of UDCT, and Prof.M.S.Ananth, former Director of IIT Madras, along with the faculty members and Alumni of the department felicitated the founder head of the department, Prof.M.G.Subba Rao and

other retired Professors and non-teaching staff members.

The inauguration of the International Conference on Advances in Chemical Engineering (ICACE-2015) was conducted between 6 and 7:30 PM, 20th Dec. 2015. This was followed by a cultural event on "Dances of India" by a professional troop.

The technical paper presentation and keynote lectures by invited experts on different themes of the conference was held on 2nd and 3rd day of the conference, i.e., 21st and 22nd Dec., 2015. Around 270 registered delegates, along with a large number of undergraduate, postgraduate students and all faculty members of the department participated in the conference. All the registered delegates

presented their research work in the presence of a chair and co-chair of the session, who recommended the best papers in each session.

The industry exhibition was inaugurated by Mr.Kumar, Managing Director, MRPL on 21st morning in New Teaching Block (NTB). Various industries such as MRPL, MCF, BASF, JBF, NMPT, Usha fire equipments, etc., participated in the exhibition. The department also presented the details of the faculty members and their expertise/ research areas, key infrastructure/facilities and the list of funded projects being undertaken by the department.

Student project competition attracted good number of participation from various institutions across the country and was judged by a panel of academic and

industry experts for the award of prizes.

The poster presentation was held simultaneously and the best posters were awarded merit prizes.

On the second day, i.e. 21st Dec., a cultural programme, Yekshagana (in English) was performed by a professional team to portray the local folk art.

The golden jubilee celebration activities came to an end with a valedictory function arranged in the evening, around 6 PM. On 22nd Dec 2015 Mr. Prabhakar Rao, Director of Works, MCF was the chief guest of the function. Merit prizes and citations for best papers of the various technical tracks, poster presentations, and student competition were awarded. The feedback from delegates were provided, which indicated the success of the programme.

Awards & Recognition

Student's

| Sl. No. | Department | Student Name | Programme | Year | Award Detail |
|---------|---|--|---|------|---|
| 1. | Electronics & Communication Engineering | Sarwesh P (EC13F05), Research Scholar | Best paper award for his technical paper titled "Energy Efficient Network Architecture for IOT Applications" IEEE ICGCIOT, 2015 | 2015 | Best paper award |
| 2. | Electronics & Communication Engineering | Karthik Hegde (11EC39), 8th sem BTech (E&C) student | Best paper award for his technical paper titled "High Speed FFT for low end GPGPUs" at Intl. conf. on High Performance Computing. | 2015 | Best paper award |
| 3. | Electronics & Communication Engineering | Prajwal M V (11EC66) Srinivas B S (11EC97) | Texas Instruments analog design contest | 2015 | First prize |
| 4. | Electronics & Communication Engineering | Naveen John (12EC67) | Google student ambassador representing NITK for the 2014-15 academic year. He is one among 177 participants selected from over 2000 applicants around the globe | 2015 | Selected |
| 5. | Electronics & Communication Engineering | Pranav Chennakeshava (12EC74) | IET India Scholarship 2015 | 2015 | Selected for Regional Presentation Round for South India Region |
| 6. | Electronics & Communication Engineering | Pranav Channakeshava (12EC74) Abhishek Rathan Kumar (12EC03) | Anveshana-2015 held by Freescale Semiconductors, Bangalore. | 2015 | Entered the finals of competition |
| 7. | Electronics & Communication Engineering | Abhinav Roy Burman (12EC01) | Justice Tarkunde National parliamentary debating tournament, ILS, Pune. | 2015 | 2nd place |

| | | | | | |
|-----|---|--|--|------|--|
| 8. | Electronics & Communication Engineering | Abhinav Roy Burman (12EC01) | RV debating tournament, Bangalore | 2015 | 3rd place |
| 9. | Electronics & Communication Engineering | Abhinav Roy Burman (12EC01) | Freestyle relay, swimming, Inter-NIT, Surathkal | 2015 | Gold medal |
| 10. | Electronics & Communication Engineering | Lakshmana Kumar (12EC50) Alok Babu (12EC21) | Kabaddi competition | 2015 | Were part of the inter-NIT team which came first |
| 11. | Electronics & Communication Engineering | Kevin D'souza (13EC256) | E-Yantra Robotics competition held at IIT Bombay Conducted by Nex robotics in collaboration with IIT Bombay | 2015 | Winner |
| 12. | Mining Engineering | Dhyvik G.J | In All India inter NIT sports Tournament organized by Dept.of Physical Education, SVNIT, Surath during 3-5th April, 2015 | 2015 | FIRST place in BEST PHYSIQUE (80 Kg) |
| 13. | Applied Mechanics & Hydraulics | Ms. Ganasri B.P., Research Scholar | International Conference on Water Resources, Coastal and Ocean Engineering (ICWRCOE '15), 12-14 March 2015 organised by Department of Applied Mechanics and Hydraulics, NITK Surathkal | 2015 | Young Scientist Award and Best Paper Award for the paper titled "Study of Land Use/ Land Cover Dynamics through Classification Algorithms for Harangi Catchment Area, Karnataka State, INDIA |
| 14. | Chemical Engineering | Jyothivanan E | Developed, DyAgram (Beta) - A Unique DNA Based Ink and Hologram for Authentication Security. | 2015 | Awarded the best innovative student project award by Indian National Academy of Engineering. |

| | | | | | |
|-----|----------------------|--------------------|---|------|----------------------|
| 15. | Chemical Engineering | Srajan Shetty | Dr. P. K. Karanth Memorial quiz competition organized by Indian Institute of Chemical Engineers, Mangalore Chapter. | 2015 | First Prize |
| 16. | Chemical Engineering | Acharya Dharmanand | The quiz was organized on 30th October 2015, in Department of Chemical Engineering, at Manipal Institute of Technology, Manipal | 2015 | Second Prize |
| 17. | School of Management | Mr. Anil Kumar | PhD consortium 2015 conference for the paper title "Legal Insider Trading Behaviour Imperical evidence from India" at IIT, Bombay | 2015 | 2nd Best Paper award |
| 18. | Civil Engineering | Mr. Suman Saha | Best M.tech Thesis Award | 2015 | ACCE award 2015 |

**Please note this is not an exhaustive list.*

Faculty

| Sl. No. | Department | Name of Faculty | Award Details |
|---------|--------------------------------|--------------------|--|
| 1. | Applied Mechanics & Hydraulics | G. S. Dwarakish | Prof. Satish Dawan young Engineers State award' for the year 2013 |
| 2. | Computer Science & Engineering | Mohit P. Tahiliani | EMC Young Achiever Award 2015, EMC Corporation |
| 3. | Mechanical Engineering | Vijaykumar H | Award of excellence in thesis work, IITB Convocation 2015 |
| 4. | Mining Engineering | K.Ram Chandar | Smt. Kiran Devi Single Memorial National Award availed from Mining Engineers Association member Technical Committee under RTPP Act- 1999 under Section - 4-(b) of Mysore Minerals Ltd. |

| | | | |
|----|----------------------|-------------------------------------|---|
| 5. | School of Management | Sunil D'Souza & Prof. A.H. Sequeira | Best Outstanding Research Paper Award, International Management Research Academy, UK, London and IIM Bangalore, Competitive Paper Category titled "Inclusive Growth in Enhancing Healthcare Service Quality" |
| 6. | School of Management | Sheena | Best paper award in the category of "Case based Research" in the ICIER International conference organized by the IIM, Bangalore paper titled "Orchids in the Wild" AN INVESTIGATION INTO ENTERPRENEURIAL EDUCATION EFFECTIVENESS AND TOURISM DEVELOPMENT AMONG WOMEN SHGs |
| 7. | Civil Engineering | Manjunath B M and Ravi Shankar A.U | Award of Bihar PWD Medal, presented at 76th annual Session of Indian Roads Congress, Indore(M.P) on December 19,2015 |

**Please note this is not an exhaustive list.*

Farewell organized

| S. No. | Name | Department | Date of Joining | Date of Retirement |
|--------|---|----------------------------|-----------------|--------------------|
| 1. | Dr. Shivakumar Professor | Physics | 30.10.1990 | 31.7.2015 |
| 2. | Sri. Shashikantha Kumar Senior Assistant | Library | 4.5.1978 | 30.9.2015 |
| 3. | Sri. Narayana Senior Attendant | Central Computer Centre | 31.10.1978 | 31.10.2015 |
| 4. | Sr. Purandara Senior Attendant | Central Computer Centre | 1.12.1977 | 30.11.2015 |

Special assignments faculty members

- Prof. S. M. Kulkarni appointed as faculty in charge IIP cell.
- Prof. S. M. Kulkarni served as Editor in chief, Journal of Mechantronics and Automation, STM Publishers
- Prof. M S Bhat
 - Member Board of Studies of Engineering - MSRSAS, B'lore and Goa University.
 - Handling Editor, Journal of Circuits, Systems and Computers (JCSC), World Scientific
- Prof. Sumam David S
- Member, DASA 2015 Implementation & Technical Committee DASA 2015 coordinated by MNIT Jaipur
- Prof. Muralidhar Kulkarni
- Member, Board of Governors, Malnad College of Engineering, Hassan.
- Joint Secretary (Research and Academics), Vice Chair, IET (UK), Bangalore Local Network
- Vice Chairman, IET(UK), Local Network, Joint Secretary Bangalore (Research and Academics)
- Dr. Arun M. Isloor, was invited by University Putra Malaysia, Kuala Lumpur for delivering an Invited lecture in "International Workshop on Advanced Materials & Nanotechnology" held during 04-05 November 2015.
- Prof. R. Shivashankar is the Guest Editor for a special issue on 'Geosynthetics', (Southeast Asian Geotechnical Society - Association of Geotechnical Societies of Southeast Asia) SEAGS-AGSSEA Journal: 2018 -2019

PLACEMENT STATISTICS DURING THE YEAR 2015-16
(DATA FROM 01.07.2015 TO 31-12-2015)

| Branch | Total Students | Placed | % Placement |
|------------------------------------|----------------------------|-----------------------------|---------------------|
| CIVIL | 92 | 29 | 32 |
| CHEMICAL | 49 | 23 | 47 |
| COMPUTER | 99 | 85 | 86 |
| E & C | 102 | 74 | 73 |
| E & E | 102 | 62 | 61 |
| I.T | 97 | 76 | 78 |
| MECHANICAL | 147 | 81 | 55 |
| METALLURGY | 40 | 19 | 48 |
| MINING | 38 | 11 | 29 |
| Total(B.Tech) | 766 | 460 | 60 |
| M.TECH | | | |
| STRUCTURAL ENGG. | 26 | 5 | 19 |
| GEO TECH. | 13 | 1 | 08 |
| ENVIRONMENTAL | 24 | 3 | 13 |
| TRANSPORTATION SYSTEM | 22 | 0 | 00 |
| CONSTRUCTION TECH & MGMT | 23 | 1 | 07 |
| MARINE STRUCTURES | 20 | 0 | 00 |
| WATER RESOURCE ENGG & MGMT | 12 | 1 | 08 |
| REMOTE SENSING & GIS | 23 | 0 | 00 |
| INDUSTRIAL POLLUTION CONTROL | 17 | 1 | 06 |
| CHEMICAL PLANT DESIGN | 10 | 2 | 20 |
| INDUSTRIAL BIOTECHNOLOGY | 21 | 1 | 05 |
| COMPUTER SCIENCE & ENGG | 27 | 22 | 81 |
| INFORMATION SECURITY | 24 | 20 | 83 |
| VLSI | 25 | 6 | 24 |
| COMMUNICATION ENGG | 27 | 7 | 26 |
| POWER & ENERGY SYSTEM | 27 | 5 | 19 |
| INFORMATION TECHNOLOGY | 21 | 17 | 81 |
| THERMAL ENGG | 13 | 5 | 38 |
| MANUFACTURING ENGG | 15 | 4 | 27 |
| MECHATRONICS | 25 | 7 | 28 |
| DESIGN & PRECISION | 14 | 5 | 36 |
| PROCESS MET. | 13 | 0 | 00 |
| MATERIALS ENGG. | 24 | 4 | 17 |
| NANOSCIENCE AND NANOTECHONLOGY | 11 | 4 | 36 |
| C M A | 19 | 10 | 53 |
| Total(M.Tech) | 471 | 131 | 28 |
| MCA | 91 | 51 | 56 |
| MBA | 35 | 2 | 06 |
| M.Sc(Chemistry) | 20 | 0 | 00 |
| M.Sc(Physics) | 20 | 0 | 00 |
| TOTAL | 1428 | 644 | 45 |
| NUMBER OF COMPANIES VISITED | Average Salary(LPA) | Maximum Salary (LPA) | Median (LPA) |
| 174 | 8.77 | 25.0 | 7.24 |

Start-ups @NITK

Startup activities have spanned several domains ranging from Cloud based technologies to cash collection services to Environmental solutions to health care solutions to Embedded System development.

A brief overview of some successful startup ventures by our students:

- **Practo** (www.practo.com)
 - ❖ Set up by Shashank N D and Abhinav Lal.
 - ❖ Valued at Rs. 3300 crores.
 - ❖ Batch of 2009
- **Taxi for Sure**(www.taxiforsure.com)
 - ❖ A start up venture that made headlines in the recent past: ``Taxi for Sure'' - Pioneered Call Taxi Service in India.
 - ❖ Started by Aprameya and Raghunandan
 - ❖ Batch of 2003
 - ❖ Recently acquired by ``Ola cabs'' for Rs. 1200 Crores.
- **Kyash** (www.kyash.com)
 - ❖ Major chunk of revenue for internet business in India comes from off-line payment methods like cash on delivery.
 - ❖ Automated and secure system to collect payments.
 - ❖ Set up by Sandeep Koujalgi (Batch of 2005)
- **Simplilearn** (www.simplilearn.com)
 - ❖ Provider of a suite of professional certification courses.
 - ❖ Works with companies and professionals to address their unique training needs.
 - ❖ Set up by Krishna Kumar (Batch of 2005)
- **Sampurn(e)arth Environment Solutions Pvt. Ltd:** (www.sampurnearth.com)
 - ❖ Focuses on transformation of waste into utilizable products without exploiting people.
 - ❖ Works towards breaking the current cycle of extraction, production, consumption and dumping which has lead to ground water pollution and climate change.
 - ❖ Set up by Jayanth N (batch of 2006)
- **Karma Health Care** (www.karmahealthcare.com)
 - ❖ Deals with Mobility Rehabilitation care.
 - ❖ Deals with sales and service of Bariatric, Pediatric, Active and Ergonomic wheelchairs.

- ❖ Set up by Jagdeep Gambhir (Batch of 2008)
- **Rhapsody Labs** (www.rhapsodylabs.com)
- ❖ Brings state of the art computer vision, computer graphics and machine learning research to realize the full potential of augmented reality technology.
- ❖ Set up by Siddharth C (batch of 2012)

Upcoming Events

● E & C Dept.:

- ❖ Short Course Sponsored by GIAN (MHRD) on “Internet of Things (IoT)” by Dr. Krish Prabhu, CTO, AT&T Labs, USA from January 18 – 22, 2016.
- ❖ One day workshop on “Identifying and Protecting IPR in Academia” by Mr. Omprakash Director, M/s Om Patent Services Pvt. Ltd., Bangalore during 27-1-2016.
- ❖ Guest lecture by Dr. Venkat Ajjanagadde, Ph.D., President, QuaSci Labs LLC, USA on “Build and simulate electronic circuits virtually in an interactive 3D environment” on 29-1-2016.

● CSE Dept.:

- ❖ 05 days Faculty development Programme on Information Security & research Challenges (ISRC'16) during 25th to 29th January 2016. (Coordinators – Dr. Alwyn R. Pais and Dr. P. Santhi Thilagam)

● Chemistry Dept.:

- ❖ National Level Chemistry Fest, Uthkhanan 16 on Feb. 06, 2016.
- ❖ A course (one week program) on “NOVEL FUNCTIONAL MATERIALS FOR ENERGY CONVERSION”, under GIAN (Global Initiative of Academic Networks), during October 3-7, 2016; Foreign Faculty: Prof. Prashanth V. Kamath, Notre Dame University, USA; Host Faculty: Prof. A. Vasudeva Adhikari, Chemistry Department.

● School of Management

- ❖ Two days National Conference on “Outcome Based Education” during 16-17th January 2015
- ❖ National Conference on Emerging Issues in banking and Finance in a Technology Driven Economy is being organized by the School of Management on February 20th, 2015
- ❖ National Workshop on “Big Data Analysis: Deriving Causal Inferences Using Statistical and Computational Techniques organized by the School of Management on 1st – 2nd April 2016 in the Main Seminar Hall of the Institute.

● Civil Engineering

- ❖ Workshop on “Action Plan for Sanitation” for UBA Subject Experts of Theme - Sanitation - 21 Experts from various IIT's and NIT's are expected to participate, 17-18 March 2016.

- ❖ 10th International Symposium on Lowland Technology (10ISLT2016), 15th to 17th September 2016, in association with International Association of Lowland Technology (IALT), Institute of Lowland and Marine Research (ILMR), Japan
- ❖ Asia Collaborative Lecture Series for students (Research Scholars) from Japan, Asia and India, September 12-17, 2016, in association with IALT and ILMR, Japan.

****Please note this is not an exhaustive list.***





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