

Dr. Rekha Bhandarkar, Prof. & Head, Dept. of E&C Engg.  
Dr. Udaykumar G., Prof. & Head, Dept. of Civil Engg.  
Dr. Udaykumar Reddy, Prof. & Head, Dept. of CSE  
Dr. Shashikanth Karinka, Prof. & Head, Dept. of Mechanical Engg.  
Dr. Muralidhara, Professor & PG Coordinator, Dept. of Mechanical Engg.  
Dr. Karthik Pai, Prof. & Head, Dept. of ISE

Dr. Surendra Shetty, Prof. & Head, Dept. of MCA  
Prof. Ramakrishna, B., Head, Dept. of Humanities  
Dr. Shankaran P., Prof. & Head, Dept. of Mathematics  
Dr. Ramesh Bhat, Associate Prof. & Head, Dept. of Chemistry  
Dr. Manjunath K. B, Asst. Professor & Head, Dept. of Physics.

#### Technical Advisory Committee :

- Dr. Omid Ansari, Senior Associate Dean, Office of the Chancellor, Penn Sate University, Harrisburg, PA 17057, USA.
- \* Prof. N. R. Shetty, Chancellor, Central University of Karnataka
- Dr. Ing. Gregory Van Barel, Assistant Professor - Machine Design & Automotive Engineering, University of Antwerp, Belgium
- Dr. Annappa, IEEE Mangaluru Sub Section Chair
- \* Dr. H. C. Nagaraj, Dean, VTU, Belagavi.
- Dr. Mohan Hegde, Director, Dept. of MCA
- Dr. Parasuram, Director, Dept. of E & C Engg.
- Dr. Swarnalatha Rao, Fellow, Computer Society of India
- Dr. Sateesh S. Kannegala, Chairman, CSI Bangalore Chapter
- \* Mr. Vishwas Bondade, Regional Vice President, Region V of CSI.
- Dr. Dhanesh N. Manik, Professor, Mechanical Engineering, IIT, Bombay
- Dr. Shrikantha S. Rao, Professor, Mechanical Engineering, NITK, Suratkal
- Dr. Anand B. Dhaulakhandi, Additional Director(Scientist E), Office of Director General (Micro Electronic Devices & Computational Systems), DRDO Bhawan New Delhi.
- Dr. Ramachandra Murty, Professor, Dept. of Biotechnology, MIT, Manipal
- Dr. Prasanna Bhat, Assoc. Prof., Dept. of Chemical Engineering, NITK, Suratkal
- Dr. Raja S, Assoc. Professor, Dept. of Biotechnology, MIT, Manipal
- Dr. Keshava Joshi, Asst. Prof. Department of Chemical Engineering SDM College of Engineering and Technology - Dharwad, Karnataka
- Dr. Samson Ojoawo, Ph.D, Deputy Dean, Faculty of Engineering and Technology, Ladoke Akintola University of Technology, Ogbomoso, Nigeria
- Dr. M. C. Narasimhan, Professor, Structural engineering, NITK
- Dr. Purushotham Sarvade, Professor, GeoTechnical Engg. MIT, Manipal
- Dr. Nitendra Palankar, Assoc. Prof., Transportation Engg. KLS Gogte Institute of Technology
- Dr. Rio Dsouza, Vice Principal, Dept. Computer Science & Engg, SJEC, Vamanjoor, Mangaluru
- Dr. Geetha M, Professor, Department of Computer Science & Engineering, MIT, Manipal
- Dr. Prashanth Kumar H, Dept. of E & C, NITK, Suratkal
- Dr. C G Nayak, Dept. of E & C, MIT, Manipal
- Dr. Prasanna Kumar H, Dept. of E & C, UVCE, Bengaluru
- Dr. Krishna Murthy, Professor, Dept. of Mechanical Engg., MIT, Manipal
- Dr. S. S. Sharma, Professor, Dept. of Mechanical & Manufacturing Engg., MIT, Manipal
- \* Prof. Gopinath, Former President, Indian Welding Society.

#### Important Dates

**Full Paper Submission ends on: 31st March 2018**

Author notification ends on : 15<sup>th</sup> April 2018  
Camera ready & Copyright form Submission ends on : 20<sup>th</sup> April 2018  
Author Registration ends on : 25<sup>th</sup> April 2018  
Conference Dates : 14<sup>th</sup> & 15<sup>th</sup> May 2018

#### How to submit research paper?

The papers are to be submitted through EasyChair Conference Management Tool. Visit conference website for more details. Queries related to the conference may be sent to [icete@nitte.edu.in](mailto:icete@nitte.edu.in).

1. All presented papers will be published in Conference E-Proceedings.
2. Selected and presented papers will be published in a Springer DE's journal on applied sciences which is likely to be published in June 2018. Publishers may review the presented papers once again before selecting the paper for publication. (Conference Registration fee covers publication charge for Springer DE).
3. Selected papers will be published in Scopus Indexed Journal "International Journal of Engineering & Technology (UAE)" with additional charges quoted by publishers. (Additional charges will be notified only after the acceptance of paper for publication).  
Journal Link: <https://www.sciencepubco.com/index.php/ijet> & <https://www.scopus.com/sourceid/21100805731?origin=sbrowse>

#### Paper Formats & Ethics:

The research paper submitted should be original work and should not have been submitted in another conference or journal. IEEE format should be followed for the paper.

#### Registration Fee:

The registration fee can be paid through Demand draft / NEFT.  
Demand Draft: In favor of "Principal, NMAMIT, Nitte", payable at Syndicate Bank Nitte / SBI, Karkala, to be sent to the Conference Secretary before due date.

#### NEFT/RTGS:

A/c Holder name: Principal, NMAMIT, Nitte  
Account No.: 01152200033493  
IFSC/RTGS code: SYNB0000115  
MICR Code: 576025533.

Account Type: S/B  
Syndicate Bank, Nitte-574110  
SWIFT code: SYNBINBB014

The proof of NEFT payment (with UTR No., date & time, Paper Id) needs to be communicated through email to Dr. Bharath B. R. ([icete@nitte.edu.in](mailto:icete@nitte.edu.in)).

For Foreign Delegates : 100 USD  
For Indian Delegates : Rs. 6000

#### Accommodation :

Accommodation will be provided on twin sharing basis in the institute hostel on request depending on the availability and first come first serve basis.

#### Contact details :

**Dr. I. R. Mithanthaya**  
Vice Principal & Dean (Academics)  
Prof. in Civil Engineering  
NMAM Institute of Technology  
NITTE - 574110, Udupi District  
(Karnataka State), India.  
Mob: +91-7899038760

**Dr. Bharath B. R.**  
Conference Secretary, ICETE-18  
Asst. Professor  
Dept. of Biotechnology Engineering  
NMAM Institute of Technology  
NITTE - 574110, Udupi District  
(Karnataka State), India  
Mob: +91-7204884735

Conference URL: <http://www.icete-nitte.in>  
Conference Email: [icete@nitte.edu.in](mailto:icete@nitte.edu.in)  
All communications to be made to this Email only.



## 8<sup>th</sup> INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

(Themes : E3S & D3A)

May 14<sup>th</sup> & 15<sup>th</sup> 2018



Organized by

**NMAM Institute of Technology**

An Autonomous Institution

Affiliated to Visvesvaraya Technological University, Belagavi  
(A Unit of Nitte Education Trust)

NITTE - 574 110, UDUPI DISTRICT, KARNATAKA

URL: <http://nmamit.nitte.edu.in>

Approved by AICTE, New Delhi

ISO 9001: 2015 Certified

Accredited by NAAC 'A' Grade



## About the Institute

NMAM Institute of Technology was established in 1986. The college is affiliated to Visvesvaraya Technological University, Belagavi and is recognized by the All India Council for Technical Education (AICTE), New Delhi. Institute is accredited by National Assessment & Accreditation Council (NAAC) and all the programs are accredited by National Board for Accreditation (NBA). Institute is placed in "A" grade by NAAC Bengaluru. Institute is certified by ISO 9001-2015 standards for quality education by NVT Quality Certifications (ANAB accredited). The institution has been granted Academic Autonomy under the Visvesvaraya Technological University from 2007-08.

The Institute offers graduate programs in 7 branches of Engineering - Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Science and Engineering, Mechanical Engineering and Biotechnology. The college also offers postgraduate programs like Master of Technology, Master of Computer Applications and Master of Business Administration. All departments have been recognized as research centres for offering M.Sc. (Engg.) & Ph.D. programmes under VTU, Belagavi.

The Institute is located on Padubidri-Karkala State Highway which is well connected with Mangaluru (60 KM) and Udupi/Manipal (45 KM) through NH 66 & NH 169. The participants can alight at Mangaluru or Udupi Railway Stations/Bus Terminals or Mangaluru Airport to reach the Institute.

## About the Conference

NMAM Institute of Technology is organizing International Conference on Emerging Trends in Engineering (ICETE-18) with two themes: 1- Environment, Energy & Engineering Strategies for Sustainability (E3S) and 2- Drives, Data Science & Disruptive Technologies for Advancement (D3A) on May 14<sup>th</sup> & 15<sup>th</sup> 2018, which is eighth international conference since 2011. For this conference, four eminent researchers will be visiting and delivering lectures. Besides, there will be an opportunity for students and research scholars of various branches of Engineering & Technology, and Professionals from industry to deliberate, present and discuss their research work.

## Invited Speakers



**Satoshi Soda**, Ph.D.  
Ritsumeikan University, Japan  
Environmental Engineering or Waste water Management



**Ryohei Nakayama**, Ph.D.  
Ritsumeikan University, Japan  
Artificial Intelligence



**Kazuhiro Shimonomura**, Ph.D.  
Ritsumeikan University, Japan  
Mechatronics or Robotics



**Omid Ansari**, Ph.D.  
University of Penn State, Harrisburg, USA  
Electrical and Electronics Engineering

## Thrust Areas

### Theme 1: Environment, Energy & Engineering Strategies for Sustainability (E3S)

#### T1.1 Civil Engineering

Construction Technology; Structural Engg.; Water resources Engg. Environmental Engg.; Transportation Engg.; Geotechnical Engg. and RS and GIS applications.

#### T1.2 Biotechnology Engineering

Environmental Remediation; Biofuels/Bioenergy; Bioinformatics; Nanotechnology and Fermentation Technology

#### T1.3 Mechanical Engineering

Alternative fuel technology; Alternative refrigerants and systems; Automotive engineering; CAD/CAM/CNC; Composites and smart material; Computational fluid dynamics; Condition monitoring and maintenance management; Energy management; Engine technology; Heat transfer and fluid flow systems; Surface Metrology; Micromachining and MEMS; Tribology; Modern Manufacturing Technology; Recent advances in machining; Sustainable Energy Technology; Robotics and Advanced Automation in Manufacturing.

#### T1.4 Allied Engineering Sciences and Humanities

##### Physics

Semiconductor devices; Nonlinear optics & Photonic materials; Thin films and nanotechnology; Radiation - matter interaction; Materials characterization; Superconductivity; Crystal growth and characterization; Polymers, glasses and ceramics; Bio-materials; Magnetism and Spintronics; Graphene & Novel Materials.

##### Chemistry

Synthetic organic green Chemistry; Nanolayer coatings and corrosion Inhibition; Nano materials and polymer composites.

##### Mathematics

Graph Theory, Lattice theory and Ring theory

##### Humanities

Sustainability and Development

### Theme 2: Drives, Data Science & Disruptive Technologies for Advancement (D3A)

#### T2.1 Computer Science / Information Science Engineering

Algorithms and Theory; Architectures, Compilers, and Embedded Systems; Artificial Intelligence & Expert Systems; Big Data Analytics; Cloud Computing; Database Systems; Data Mining; Data Science; Pattern Recognition; High Performance Computing; Image Processing; Multimedia Computing; Computer Vision; Internet of Things; Machine Learning; Networks, Distributed Systems, and Security;

Programming Languages; Software Engineering; Theoretical Computer Science; Web Services; Wireless networks; Cryptography and Network Security.

#### T2.2 Electrical Engineering

Control Systems; Industrial Drives; High voltage/FACTS; Renewable Energy; Transportation Engineering; Power quality, Energy Engineering; Power, Instrumentation and Control systems.

#### T2.3 Electronics and Communication Engineering

##### Communication:

Advanced Modulation Techniques; Channel Coding; Microwave and Optical Communication; Multimedia Communication; OFDM and Multicarrier System; Remote Sensing and Satellite Communication; Wireless Communication; Wireless and Cellular Networks.

##### Signal Processing

Array Signal Processing; Digital Signal Processing; Biomedical Signal Processing; Fuzzy Logic / Digital Speech Processing; Neural networks; Adaptive Signal Processing; Power Electronics and drives; Compressed Sensing; VLSI / MEMS / NEMS; Statistical Signal Processing; Image/Video Processing. VLSI & Embedded Systems

Micro controllers and Embedded Systems; Analog and Digital VLSI Technologies; Low power VLSI Design; Robotics.

##### Patron:

Sri N. Vinaya Hegde, Chancellor, Nitte (Deemed to be University) & President, Nitte Education Trust

##### Chairperson:

Dr. Niranjana N. Chiplunkar, Principal, NMAM Institute of Technology, Nitte

##### Program Committee Chair:

Dr. I. R. Mithanthaya, Vice Principal & Dean (Academics)

##### Conference Secretary:

Dr. Bharath B. R., Asst. Professor, Dept. of Biotechnology Engineering

##### Theme Coordinators:

Theme 1: Dr. Vidya S. M., Professor, Dept. of Biotechnology Engineering

Theme 2: Dr. K. S. Shivaprakasha, Associate Professor, Dept. of E&C Engineering

##### Programme Committee :

Dr. Srinivas Rao B. R., Vice Principal & Controller of Examinations

Dr. Sudesh Bekal, Dean - R & D

Dr. Vaman Rao C., Professor & Head, Dept. of Biotechnology Engineering

Dr. Subrahmanya Bhat, Professor & Dean (Student Welfare), ISO & IQAC Coordinator

Dr. K. Rajesh Shetty, Dean (Admission & Alumni Affairs)

Dr. Srinivas Pai, Deputy Controller of Examinations

Dr. Nagesh Prabhu, Prof. & Head, Dept. of E & E