CONFERENCE LOCATION

The Nirma University is located in peaceful and sylvan surroundings, on Sarkhej Gandhinagar highway (about 17 km from Ahmedabad railway station and 10 km from the Ahmedabad Airport) in Ahmedabad, Gujarat State of India.

Ahmedabad, one of the liveliest cities and a major industrial hub in India, had often been called the ‘Manchester of the East’. Ahmedabad is the largest city in Gujarat with a population of about 5 million. The city has developed itself into a leading industrial centre and has become economic capital of Gujarat. Vibrant Gujarat is an example to prove this. The city has many places to visit, like Science City, Akshardham Temple, Gandhi Ashram, Adalaj Vav (step well) etc. The weather of Ahmedabad is very pleasant during the month of November.
ABOUT NIRM UNIVERSITY

Nirma University is one of India’s leading universities based in Ahmedabad (Gujarat). The University was established in the year 2003 as a Statutory University under a special act passed by the Gujarat State Legislative Assembly. It is recognized by the University Grants Commission (UGC) under Section 2 (f) of the UGC Act. The University is accredited Grade A by National Assessment and Accreditation Council (NAAC). The University is a member of Association of Indian Universities (AIU) and the Association of Commonwealth Universities (ACU).

Dr Karsanbhai K. Patel, Chairman, Nirma Group of Companies and Chairman, NERF is the President of the University. Functioning under the aegis of NERF, the University consists of Faculty of Engineering and Technology, Faculty of Management, Faculty of Pharmacy, Faculty of Law, Faculty of Science, Faculty of Architecture, Faculty of Doctoral Studies and Research, Faculty of Design and Faculty of Commerce.

ABOUT INSTITUTE OF TECHNOLOGY

Institute of Technology, Nirma University, started in 1995, was the first self-financed engineering college in Gujarat. Within 21 years of inception, Institute of Technology is a leading hub of education, offering multidisciplinary undergraduate, postgraduate and Ph.D. programmes in engineering which are rated highly by accreditation agencies, industry, business magazines and students.

The Institute is ranked within top 25 self-financed engineering colleges of India in the survey conducted by various rating agencies. The faculty members and students of the Institute have won many prestigious awards and bring laurels to the institute such as ROBOCON Competition (7 times National Champion and represented India Internationally at Japan, Thailand and Malaysia.), SAE-BAJA All Terrain Vehicle Competition – “Go Green” and “Raftar” Awards at National level, 3rd prize in ELECRAMA project national level competition, regularly winning international/national level scholarships and awards like DAAD, ISA-PMCD scholarships, project competitions by IEEE, FreeScale, Motorola etc .

The Institute is located in peaceful and sylvan surroundings of Ahmedabad city in the heart of Gujarat. The Institute provides disciplined, serene and conducive environ for reflection, repose and research. The ardent pursuit of knowledge by the young aspirants leads to knowledge generation and innovative solutions for the community and society. The Institute is now aiming to emphasize on Outcome Based Education (OBE), Experiential Education (through Project Based Learning), research in thrust areas with translational impact, and the creation of engineers as leaders in society.

It has a dynamic curriculum, robust and talented pool of faculty members, and state of art infrastructure in all the departments. It is well known for imparting quality education, active research and also in nurturing students for holistic development.

ABOUT THE CONFERENCE

Nirma University International Conference on Engineering NUICONE is a flagship event of the Institute of Technology, Nirma University, Ahmedabad. This conference follows successful organization of four national conferences and five international conferences in previous years. Last conference of this series NUICONE-2015 was very successful with more than 570 research papers submitted, out of which approx. 171 papers were down–selected and presented after the rigorous reviews including plagiarism checks and blind-fold technical reviews by multiple reviewers. The expert speakers and conference delegates were from all across India and abroad covering researchers and eminent experts from academia, industry such as GE, Mitsubishi, ATE India, Linde etc. and government R&D organizations like IPR, ISRO, PRL and BISAG.

Upcoming NUICONE-2017 is being planned with a focal theme of “Technology Driver- The Engine for Growth”. It is a multi-conference with many inter-disciplinary technical themes encompassing and enabling a broad researchers from broad range of disciplines. Besides, NUICONE-2017 will also have exciting new set of events especially to enable and attract increased participation by practicing engineers, technologists and technopreneurs from industry through special knowledge sharing sessions involving applied technical papers by industry participants based on case-study applications, white-papers, panel discussions, industrial exhibitions of innovations and technology products etc. Major attraction are pre conference tutorials, technical papers, plenary sessions and white paper presentations by practicing engineers.

CALL FOR PAPER

Faculty members from academia, practicing professionals and researchers from industry and government organizations, and M.Tech/PhD scholars from any branches of engineering, applied mathematics and humanity from across the globe are invited to submit and present their research work in the following areas.

Researchers from industry and academia are invited to present their research work in the following areas.

1. **Autonomic Computing: Architectural Challenges and Solutions**

2. **Networking Technologies: Performance and Security Challenges**

3. **Next Generation Pattern Analysis**
   The theme encompasses novel techniques for pattern analysis in domains including computer vision, image processing, speech analysis and document analysis. It also covers usage of various existing approaches such as statistical techniques, neural networks, genetic algorithms, fuzzy techniques and machine learning for pattern analysis applications in mentioned domains.

INTERDISCIPLINARY THEMES

- **1. Autonomic Computing: Architectural Challenges and Solutions**

- **2. Networking Technologies: Performance and Security Challenges**

- **3. Next Generation Pattern Analysis**
  The theme encompasses novel techniques for pattern analysis in domains including computer vision, image processing, speech analysis and document analysis. It also covers usage of various existing approaches such as statistical techniques, neural networks, genetic algorithms, fuzzy techniques and machine learning for pattern analysis applications in mentioned domains.
11. Recent Trends in Applied Mathematics
Research in the Mathematics is a key element for the advancement of all areas of science and technology. Being one of the vital areas of science in itself, Pure and Applied Mathematics works in tandem in all the domains of engineering and technology. Moreover, research areas like mathematical modeling of industrial processes. Need of the hour is to cultivate and sustain core research capability, and at the same time cross the borders to promote transformative and interdisciplinary research.

12. Recent Trends in Teaching-Learning in Engineering Classrooms
It is a fact that university teachers are trained researchers but not educators. More than any other time, this is the need of the hour to cultivate and sustain core research capability, and at the same time cross the borders to promote transformative and interdisciplinary research.

13. Chemical Process Development and Design
This theme focuses on new process design and development where it can suggest substantial alteration in equipment or process design or developing new catalyst or employing novel techniques like use of ultrasound or microwave, micro or nano technology.

14. Technologies for Green Environment
Quest for the development of new alternative technologies is never ending process, so this theme will provide platform for research related to various environmentally benign technologies to solve the current problems such as, treatment of effluents, environmental management, recovery & reuse of materials and other issues related to environmental problems.

15. Advances in Transportation Engineering
Pavement materials, Pavement analysis and design, Traffic operations and management, Transportation economics, Road safety and traffic awareness, Accident analysis, Transportation planning and modelling. Intelligent transportation systems, Sustainable transportation system, Public transportation system, Road construction technology, Use of Geometrics in transportation engineering.

16. Emerging Trends in Water Resources and Environmental Engineering
Impact of climate change on water resources, Ground water modelling and management, Hydrological modelling and forecasting, Application of remote sensing and GIS in water resources, Irrigation planning and management, Reservoir operation and optimization, Sustainable development of water resources, Watershed management, Water quality monitoring and assessment, Environment hydraulics, Environmental impact assessment, Water and waste water treatment, Solid waste management, Air and noise Pollution, Recycle and reuse of waste.

17. Construction Technology and Management

18. Concrete and Structural Engineering
Advances in cement based materials and concrete technology, Structural analysis & design of Reinforced, Steel and Pre-stressed concrete, Repair, Rehabilitation and Retrofitting of structural systems, Earthquake resistant design of structures, Computational techniques in structural engineering, Geotechnical investigations & design of structures, Smart material applications and Structural Health Monitoring, Response measurement and control of structures.

19. Sustainable Manufacturing Processes
Sustainable manufacturing seeks to profitably produce goods while minimizing a firm’s environmental impact, natural resource use, and energy consumption. Under this theme, the research work related to methodologies, manufacturing processes and materials that contribute to sustainable manufacturing processes is invited.

20. Design and Analysis of Machine and Mechanism
Design and analysis of machines and mechanisms is the key for reduction of lead times from concept stage to detailed design stage. The static and dynamic analysis to ensure the functionality, safety and reliability of systems made up of different kinds of materials is backbone of successful machine design and development. The theme aims to invite original work in the area of computational methods, experimental work and analytical solutions for design and analysis of machines and mechanisms.

Energy is the “Energy” for growth and development. The objective of Energy Management and Conservation is to achieve and maintain optimum energy procurement and utilization to minimize energy costs / waste without affecting production, comfort and quality. The articles invited under this theme are expected to be in the area of production, utilization and conservation of energy.
Submission of Research Papers

1. The papers submitted to themes at serial number 1 to 12 will be recommended to IEEE Conference Publication Program (CPP) to include on the IEEEExplore subject to strictly meeting and complying with IEEE guidelines and signing of IEEE copy-right transfer form. The format of the paper is given on conference website: http://www.nuicone.org.

2. The papers submitted to themes at serial number 13 to 21 will be published as conference proceedings with CRC press Taylor & Francis. The format of the paper is given on conference website: http://www.nuicone.org.

3. Soft copies of the papers in specified format should be uploaded on the conference website.

4. For the final selection, all the papers will be reviewed and scrutinized by a Technical Committee comprising of subject experts after plagiarism checks for the originality of paper.

5. Along with the final submission of the selected paper, authors are required to submit an undertaking form which implies that, the paper has not been published previously, is not under consideration for publication elsewhere, and if accepted it will not be published elsewhere in the same form.

6. One of the authors must register for the conference and present the paper, otherwise paper will not be published in the conference souvenir and proceeding.

7. Important dates

   • Paper Submission: May 14, 2017
   • Intimation of Acceptance: August 13, 2017
   • Final Camera Ready Copy for accepted papers: September 01, 2017
   • Conference dates: November 23–25, 2017

REGISTRATION
Registration and presentation by at least one of the authors is must to consider the paper as included and published in the conference souvenir and proceedings. The registration process will be online from the conference website.

- Indian Delegate: Rs. 6000/- + Service Tax
- Indian Students (non-sponsored): Rs. 2000/- + Service Tax
- Industry Delegate: Rs. 8000/- + Service Tax
- Foreign Student Delegates: US $300 + Service Tax
- Foreign Delegate: US $300 + Service Tax

Accommodation is not included but the organizing committee can help the delegates in arranging suitable accommodation in the Nirma University guest house (limited numbers) and nearby hotels/hostels on the payment basis:
- The delegate fee includes day time hospitality during conference days, proceedings, and kit and Banquet Dinner.
- Duly filled online registration form should be supported by a bona fide certificate for Students.
- The Indian authors should pay the registration fees through NEFT/RTGS along with the duly filled registration form, bona fide certificate (if applicable) and signed copy-right form.
- For foreign delegates, the account details for transferring registration fee is available on the conference website.
- Non-author delegates are also welcome to register for the conference.

For any details, please send your email to nuicone@nirmauniv.ac.in

EXHIBITION on GREEN TECHNOLOGY and INNOVATIONS
It is aimed to bring awareness about the GREEN TECHNOLOGY and INNOVATIONS among the researchers, academia, industry and students. Where the industry and research organizations will exhibit the latest developments and applications in the area of solar energy, wind energy, rural technology, sustainable environment and indigenous innovations.

Pre-Conference Tutorials
There would be great experience of learning with the experts from industry / academia like last conference through the Pre-Conference tutorials. The tutorials will be on the novel topics related to technology and innovations like Computational Fluid Dynamics (CFD), Lean Six Sigma, SoC - NoC Test Challenges, Remote Sensing Image Processing using python, FPGA for Hardware/Software Developers, Analog IC Design etc. For more details visit the conference website.

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