

Report of NUICONE 2013

Nirma University International Conference on Engineering NUiCONE is a flagship event of the Institute of Technology, Nirma University. The conference is in its seventh year. NUiCONE-2013 showcases University's commitment towards bridging the gap between various disciplines, converge and amalgamate various new ideas, fields and technologies. The event comprises themes related to various disciplines of Engineering & Technology, namely Civil, Chemical, Computer Science & Engineering, Instrumentation & Control, Electrical, Electronics & Communication Mechanical Engineering tracks and Mathematics & Humanities in Engineering respectively.

The objective of the conference is to bring academia, researchers and practitioners matching with similar or varied interests on a common platform to explore, reflect, and rediscover the new frontiers of knowledge and technology in various fields of Engineering and Technology.

The technical collaborations from different institutes across India and abroad were also made in order to disseminate the information about the conference to wider cross-section of scientists, researchers and professionals, as well as to get quality papers. These institutes include IEEE, Institute of Engineers (India), IICE, CSCE, IAS, SMFRA, ISHRAE, ASHRAE , University of Dundee, ISTE, Gujcost and more.

The conference promises to generate seminal ideas during scheduled various events and scientific program consisting of peer-reviewed paper presentations in parallel technical sessions. In addition, keynote lectures, presentations by industry professionals, panel discussions, tutorials and poster presentations will also be conducted during the conference. Such interactions will facilitate better understanding about technological developments across the globe amongst the peers.

Around nineteen plenary talks by eminent personalities of the respective fields in different tracks are arranged. The details are available in track related sections. The total eleven tutorials on emerging field of technologies are arranged on the 27th November, 2013 i.e. pre-conference day.

With a view of establishing the credibility and quality of original research papers, the authors were asked to submit the plagiarism report along with the full paper submission itself. It is noteworthy that the conference has got overwhelming response, and more than 780 good quality research papers are submitted to the various tracks of conference. The submissions were from countries like Australia, China, Iran and so on. Submission were also made from the industry and

R&D organizations like Infosys, Intel, ONGC, ISRO, DRDO, GE, Mitsubishi, IPR, IITs, Linde and more.

The technical committee of conference had invited very reputed personalities of the relevant field to review the papers. The paper has undergone double blind review process. The criteria decided for paper selection includes content, relevance with current trends, format, quality of figures/charts, quality of tables and equations, citation of references and among all, the most important is specific contribution towards theory development/ experimental verification/ practical application. After rigorous review process, out of more than 780, nearly 300 papers are selected for oral presentation in eight different tracks.

The conference is managed by a strong conference management team which has various committees and sub committees. One of the website system management committee- developed by the Institute indigenously, is responsible in playing the pivotal role in streamlining the process of paper submission, including the complete review and registration process thus making the whole Procedure simple, fast and environment friendly.

We hope that this conference will be the repository of knowledge that will assimilate and synthesize the new dimensions of the existing knowledge and will ignite the minds of the younger generation for undertaking more interdisciplinary collaborative research, and thus realize and understand the philosophy of creation of knowledge, putting focus on the forefront researches and its application for the up gradation of technology.

Chief Guest Inaugural function:

Dr. Gopichand (Gopi) Katragadda, Chairman and Managing Director ,GE India Technology Centre

Brief Profile:

Gopi Katragadda leads GE's India Technology team of 5300 engineers and scientists. He is also the Chairman, Board of Directors for GE-BEL. Prior to his current role, Gopi held various leadership roles within GE including General Manager for India Energy Engineering and General Manager for GE Global Research, Bangalore. Before joining GE, Gopi worked with Karta Technologies, San Antonio, Texas, as Vice President of Research and Development and also Adjunct Professor at the University of Texas and on the board of directors for Texas Public Radio. Gopi is a certified Six Sigma Master Black Belt. He is a member of CII Karnataka Innovation Task Force, CII India Innovation Council and the Industry Advisory board of King Abdullah University of Science and Technology. Gopi has authored a book on innovation (published by Wiley), over 30 publications and five patents.

Gopi holds MS and PhD degrees in Electrical Engineering from the Iowa State University.

Chief Guest Valedictory Function:

Mr. Noriyuki Shimizu, Deputy Managing Director & Division Manager – Factory Automation & Industrial Division, Mitsubishi Electric India Private Limited

Brief Profile:

Mr. Noriyuki Shimizu graduated from Seikei University in Tokyo, Japan specializing in Economics. With a strong experience of 27 years in the field of Factory Automation; he has worked in various capacities in sales, marketing, planning department with a flexible thought process and a strong leadership quality.

He started his career as a trainee in Mitsubishi Electric Corporation, Kansai Branch in 1986; and moved over to the Controller Section at Mitsubishi Electric Tokyo Headquarters in April 1994. In 2005 he was deputed as a Section Manager at Mitsubishi Electric Himeji Works for 4 years before being promoted to the post of Manager in the Factory Automation Planning Section at Tokyo Headquarters of Mitsubishi Electric from 2009. From May 2012, he is in the position of Deputy Managing Director and Head of the largest Business Unit of Mitsubishi Electric India - Factory Automation Industrial Division.

Keynote Address

Dr.- Ing. Suryakant B. Gupta, Scientist, FCIPT, Institute for Plasma Research

Topic: Societal Benefits of Plasma Technology

Brief Profile:

Dr.-Ing. Suryakant B, Gupta earned his Master's degree in electronics and communication and MBA degree from DAVV Indore. He has obtained PhD degree in information and communication technology from KIT, Germany. He has more than 25 years of research experience with prestigious national and international reputed scientific laboratories of Department of Space, Department of Atomic Energy and Forschungszentrum Karlsruhe Germany. He has published more than 50 research papers in various international Journal and conference proceedings. He is reviewers of many journals and international scientific funding agencies. During 2006 – 2008 he has served as a member board of Directors of International Ozone Society, Paris France. He is affiliated to many national and international scientific and technical societies and delivered more than 40 invited talks. He is a fellow of IETE and a member of Board of Studies Nirma University Ahmadabad and Kadi University Gandhinagar. His area of interest is Plasma Instrumentation and Bioelectronics.

List of other Experts as follows:

1	Dr. Virendrakumar C. Bhavsar, Professor Faculty of Computer Science, University of New Brunswick Fredericton, NB, Canada
2	Dr. Sisil Kumarawadu, Professor of Electrical Engineering and the Director of Engineering Research Unit of University of Moratuwa

3	Mr. Prasad Kelkar, Linde Engineering, Baroda
4	Mr. Kalpesh Shah, Linde Engineering, Baroda
5	Dr. Prasanna Rao Dontula, Head - R& D, A.T.E. Enterprises P Ltd Bangalore
6	Dr. Rishi Gupta, Faculty, University of Victoria, British Columbia, CANADA
7	Dr. Abhijit Mukhurjee, Professor, IIT Gandhinagar
8	Dr. Manjunath Joshi, Professor, DAIICT, Gandhinagar
9	Shri Gurdeep Singh, M.D., Gujarat State Electricity Company Ltd (GSECL), Vadodara
10	Mr. Sunil Mehta, Chairman CLPA, Mitsubishi Electric India Pvt. Ltd.
11	Mr Bhavesh Thakkar, Manager, Linde Engg, India
12	Prof. Yogendra Singh, Professor, IIT Roorkee
13	Dr. G. R. Reddy, BARC, Mumbai
15	Mr. R. Murlidharan, Tata Power Company Ltd., Mumbai
16	Dr. K R Pardasani, Professor, Mathematics Department, MANIT, Bhopal
17	Dr. M N Mehta, Professor, Mathematics Department, SVNIT, Surat
18	Dr. Neerja Gupta, Principal, Bhavan's Arts and Commerce College
19	Mr Tarun Kaw, Associate Director at BMT Consultants India

List of Pre-conference Tutorials as follows:

1. Static and Dynamic Single Objective Optimization with Improved Differential Evolution Algorithms (CSE Department)
By: Dr. Swagatam Das (Indian Statistical Institute, Kolkata)
2. Spectrum sensing techniques in Cognitive Radio (EC Track)
By: Dr. Yogesh N. Trivedi
3. Testing of VLSI Design (EC Track)
By: Dr. Usha Mehta
4. The Hands on CC-Link and CC-Link IE: Prominent Network for Factory Automation (Instrumentation & Control)
By: Experts from CLPA
5. Analysis and Design of Bridge Structure (Civil Track)
By: Mr. Devang Patel, Dr. P. V. Patel, Mr. M. Vinayagamoorthy
6. Electrical, Structural and Civil Design of transmission line (EE Track)
By: Shri S. M. Takalkar

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