NUiCONE 2015, 5<sup>th</sup> conference headed with lots of exciting events to be catered to our delegates. NUiCONE-2015 was organized with collaborative efforts from the two esteemed giants of academia, IEEE and Taylor and Francis.

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

1. Process System Engineering

2. Robotics, Control and Automation

3. Latest trends in Electrical Power Systems

4. Control of Power Electronics Converters and Drives

5. Advanced Electrical Machines and Apparatus

6. Autonomic Computing: Architectural Challenges and Solutions

7. Networking Technologies: Performance and Security Challenges

8. Next Generation Pattern Analysis

9. Communication Systems

10. VLSI Design and Embedded System

11. Signal Processing

12. Crossing Borders: Mathematics

13. Crossing borders - frontiers of Engineering Education

14. Concrete and Structural Engineering

15. Infrastructure Project Planning and Management

16. Chemical Process Development and Design:

17. Technologies for Green Environment

18. Sustainable Manufacturing Processes

19. Design and Analysis of Machine and Mechanism

20. Energy Conservation and Management

We received total 573 research papers from India and few from across the border. With a view of establishing the credibility and quality of original research, papers were checked for plagiarism. The technical committee of conference had invited very reputed personalities of the relevant field to review the papers. 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 stringent and rigorous double blind review process, we have selected 171 research papers and finally 136 papers were registered for the conference keeping merely 30 % acceptance ratio. Out of this 71 were published with Taylor and Francis and 65 were published by IEEE.  146 authors made registration to present their papers. Authors from various states and different organisations such as CSIR, ISRO, IPR, IIT and NIT's presented their papers.

Pre-conference tutorial sessions were arranged for delegates on 25<sup>th</sup>November, 2015.Total 6 tutorials were arranged with 2 external speaker (SVNIT and IIT roorkee) and around 80 participants attended these tutorials.

Inaugural function:
 Inaugural function was scheduled on 26<sup>th</sup>November, 2015. The details are as follows:

 **Shri Hirenbhai  Patel MD, Nirma Ltd**,  presided over the Inaugural function.

 **Padmashri Dr. Vijay Bhatkar** was the Chief Guest at the inaugural function. He is best known as the architect of India's first supercomputer and as the founder Executive Director of C-DAC, India's national initiative in supercomputing.

 **Padmashri Dr. Avinash Chander** delivered the keynote address at the inaugural function. He is Scientist and the Scientific Advisor to the Defence Minister and was the Director General of Defence Research and Development Organization (DRDO). He is former Secretary of Department of Defence Research and Development.

Valedictory function:

**Shri Devdatta Hambardikar**, Deputy Division Manager – R&D and Manufacturing, Factory Automation and Industrial Division, Mitsubishi Electric India P. Ltd. Pune, chaired as Chief Guest during Valedictory function scheduled on 28<sup>th</sup> November 2015.

This technical extravaganza was supplemented by the Industry delegates during the second day explicitly i.e. on 27<sup>th</sup> November 2015.
**Panel discussion** by leading industry experts was scheduled on this day along with several expert talks and Technical White Paper presentations by industry experts.

Plenary sessions:
Plenary sessions by industry experts and researchers were arranged during the conference. Following are the details.

- Industrial Expertise in Social Analytic Mobile Over Cloud, By Vijayalakshmi Ragothaman, Associate Director, IBM Bangalore
- GP-GPU Computing, By Mr Gaurav Mishra, NVIDIA Corporations, Pune
- Internet Of Things: Automatic Computing: Architectural Challenges and Solutions, By Mr Neeraj Shodhan,  Senior Director, Oracle JD Edwards, Gandhinagar and  Mr. Doni Ninan, Director, Oracle JD Edwards, Gandhinagar
- Real time Optimal Control through MPSP, By Dr. Radhaknat Padhi, IISC Bangalore
- Process control - Challenges in industry, By Shri Jagdish Shukla, Director, Servilink Systems Ltd, Vadodara
- Instrumentation for energy optimization in process industry, By Shri P. N. Parikh, Consultant to UPL and BEE certified consultant (Former consultant to GACL), Vadodara

- Improving Chemical Plants' process safety by SIS / SIL study- A concept, By Shri Paresh Adhwaryu, DGM (Process Safety), United Phosphorous Ltd.,  Bharuch
- Robotics in Automotive/Manufacturing Industry - Global and Indian Scenario, By    Mr. Vikas, Manager, M/s Kuka Robotics Academy,  Gurgaon
- Latest Trends in Smart Manufacturing, By Mr. Sameer Chitnis,  Asst. General Manager, Mistubishi Electrical,  Pune
- Smart Manufacturing : An Indian Perspective, By Mr. Rahul Jaiswal, Manager, Cosmo Group,  Sanand.
- Embedded System Design using LabView, By Charles S. , Embedded Systems Solution, National Instruments,  Pune.
- Technology trends in Transmission Substation, By Mr. Nihar Raj,  Business Head Power Consulting & Asst. Vice President, ABB India Limited,  Vadodara.
- Electrical Power System Design of Large Supercritical Plants By Shri Arijit Biswas (and team), Head – Electrical Engineering Department, L&T-S&L Limited, Vadodara.
- Signal and Power Integrity considerations in High Speed Designs, By Dr. Rajkumar Nagpal, Synopsys, Noida
- Role of Machine Learning in Industry Automation, By Mr. Nikunj Patel, Associate Vice President, IGATE Solutions, Gandhinagar
- Intelligent Scalable learning  for Big Data using  Soft Computing Framework, By Dr. Aruna Tiwari, IIT Indore
- How well we are teaching Mathematics to our Engineering students , By Prof  T P Singh, Gandhinagar
- Innovative Methods in Curriculum design and delivery, By Dr. S K Bhagwan, Director, Learning and Development Centre, MEFGI, Rajkot
- Qs for Teachers, By Dr. K Kotecha, Provost, Parul University, Vadodara
- Bridging the gap between the industry and academia, By Mr. Manish Bhopatkar, Pune
- Futuristic trend in Engineering Education, By Dr. P H Shah, Mehsana
- Perspective View on GIFT SMART City Development, By Shri Pankaj Sampat, VP (Planning) GIFT City, Gandhinagar.
- Techinical Session by Industrial Expert-II, By Shri Manish Sarupia, Mehta Group, Ahmedabad.
- Collaborative Design and Engineering Practices, By Mr. Jayesh Hariyani, MD, Senior Principal, Business Leader – South Africa/India, Stantec Consulting, Ahmedabad.
- Fallacious Assumption in Practice With Reference to Earthquake Engineering By Shri Vijay Shah, Director, Bhoomi Consultants, Ahmedabad.
- Sabarmati Riverfront: A Case Study of City Rejuvenation through Riverfront Development By Shri Jagdishkumar A. Patel, Additional City Engineer, AMC, Ahmedabad  & General Manager Sabarmati River Front Development Corporation Limited (SRFDCL), Ahmedabad.
- Crossing Borders - Frontiers of Engineering Education Lecture, By Mr. Kalpesh Parikh, Vice President & head of engineering, Linde Engineering India,  Vadodara
- Hazardous Area Classification & its protection method, By Mr. Bhavnesh Thakkar , Head of Department, Instrument & Controls, Linde Engineering India, Vadodara
- Modularization By Mr. Amit Agrawal, Section Head, Civil and Steel structures,  Linde Engineering India,  Vadodara

- Productivity Improvement – Case Studies By Mr Bharat Patel, Managing Director, Waterman Pumps Pvt Ltd. Ahemedabad.

 The conference was managed by a strong conference management team comprising various committees and sub committees.
Sponsors have played major role in this conference to be a success.
Conference dinner was sponsored by Naroda Environ Project Pvt. Ltd (NEPL).

**List of various sponsors:**

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