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GOVT. OF INDIA



International Society of Automation  
**ISA Delhi Section**

**POWAT – 2013**

Automation – For Sustainable Development

12th & 13th April 2013  
(Friday - Saturday)

at **Hotel Hyatt Regency**  
Bhikaji Cama Place, New Delhi



**POWER AUTOMATION TECHNOLOGY EVENT**  
(Conference and Exhibition)

## The International Society of Automation (ISA)

Founded in 1945, the International Society of Automation (ISA) is a leading, global, nonprofit organization that is setting the standard for automation by helping over 30,000 worldwide members and other professionals to meet, interact and share their knowledge. Based in Research Triangle Park, North Carolina, ISA is organized into 14 districts and hundreds of sections across the world. The South East Asia region is designated as District-14 and within this district, the Delhi Section is an active organization drawing members from the entire spectrum of automation industry across Power, Oil & Gas, Metallurgy, Chemicals & Fertilizers including the Engineering fraternity from Consultants, EPC Contractors, Automation Component Suppliers & Equipment Manufacturers, System Integrators and many other industries.

### ISA has been involved in promoting emerging technologies across the globe by a variety of ways such as:

- Developing and updating standards for existing & evolving technologies in automation related fields ;
- Publication of Text-books, hand-books, journals, proceedings etc. on a wide array of automation related subjects from primary field sensors to integrated automation and management systems for various kinds of plants & processes;
- Facilitating Interface & interaction with other agencies like IEC, IEEE, EPRI, ASME and others to develop and maintain automation related standards with regular updating, keeping pace with the march of technology in various fields;
- Organising Training, Seminars/Workshops, Webinars and Exhibitions
- Carrying out certification programs for technicians, engineers and senior professionals.
- Recognizing the talented and the dedicated professionals in the field of Automation through various honours and awards
- Interaction with Student members, formation of student section and annual scholarships, competitions etc. are many interesting student programs of the ISA.



**A K JHA**  
DIR(TECH) NTPC Ltd.  
CHIEF PATRON ISA(D)-POWAT

### The ISA Delhi Section - ISA(D)

ISA Delhi Section had been formed almost a decade back and has progressed well since then with a membership of more than 350 and growing. ISA Delhi Section had taken many initiatives in the past including organizing two exhibitions ISA (D) EXPO' 05 & '07, a large number of seminars and workshops on emerging technologies. Regular Monthly technical exchanges on diverse topics are organised for the benefit of all members of ISA(D), thereby increasing the knowledgebase & technical capabilities of members.

ISA Delhi Section has taken quite a few initiatives in the recent past to better address the need for knowledge sharing among industry specific groups of Automation Engineers. Notably, within the overall ambit of ISA(D), two industry specific interest groups have already been created, one for the Power Industry namely Power Automation Technology group (or POWAT) and one for the Oil & Gas Industry called Petroleum & Natural Gas Industries Automation Domain (PNID).



**N MURUGESAN**  
DIR. GENERAL CPRI  
PATRON ISA(D)-POWAT

### ISA(D) Power Industry Automation Technology Group (POWAT)

POWAT is an initiative taken by ISA-Delhi section to provide a common platform to all stakeholders of the Power Sector Automation community including End Users, Power Equipment suppliers, Automation Equipment & Component suppliers, System Integrators, Consultants, R&D establishments, Academicians, Independent Experts and Students for sharing of knowledge and experiences. The purpose of this forum is to enable learning from peers and industry experts and their experiences in the field of Power sector automation, so as to promote sustainable development of power sector automation solutions.

#### The vision of the ISA (D) - POWAT is :

“Take the Automation in the Indian Power Sector to global heights and acquire numero-uno position.”

#### The mission of the ISA (D) – POWAT is :

“Engage all stake holders of power sector in adopting the latest instrumentation and automation standards, there-by achieving safe, reliable, efficient and environment friendly power availability in country.”

**To realize the above vision and to execute the mission, the various long term and short term activities being carried out by ISA(D) - POWAT are :**

- Enable knowledge sharing among power sector automation fraternity including utilities companies, consultants, equipment manufacturers, turnkey suppliers and academicians.



**D K JAIN**  
CEO, NSL Power  
PATRON ISA(D)-POWAT



**A K GUPTA**

ED (Engg) NTPC Ltd  
PATRON ISA(D)-POWAT

- Facilitate through integrated automation, the realization of world class power plants in India with green, clean and lean visualization, there-by establishing global benchmarks in power generation in terms of reliable & quality power, at a competitive cost.
- Provide an opportunity for Indian power sector automation experts to get an exposure to the global developments in automation and there by providing an opportunity to seek & implement latest state-of-the-art solutions best adapted for India Specific conditions.
- Provide an interface for the automation fraternity with the policy markers and regulators



**K JAGANNATH**

ED, NPCIL  
PATRON ISA(D)-POWAT

ISA Delhi Section has deep convictions that the engagement and involvement of various stake holders including technology providers and developers would certainly help in achieving the roadmap for implementing automation solutions for power sectors that are equipped to handle the complex challenges of modern era.

After the resounding success of POWID-INDIA-2009 organized in Delhi on 24-25 April-2009, POWID-INDIA 2010 organised in Mumbai on 28-29 May 2010 and POWAT-2012 on 13-14 January 2012 in New Delhi, ISA Delhi Section Proudly announces the largest focused Power Sector Automation Show, POWAT-2013 on 12-13 April 2013 at Hotel Hyatt Regency, Bhikaji Cama Place, New Delhi.

The last three POWER automation events were held under the able patronage of topmost Power leadership of India. The event was attended by very senior level power automation professionals from all segments of power sector. On an average over 300 delegates had attended these shows each year representing around 90 organizations.



**S SEN**

DIRECTOR(THERMAL),  
Jaiprakash Power Ventures Ltd.  
PATRON ISA(D)-POWAT

This two day conference and exhibition seeks to engage all stakeholders & players in the field of Power Sector Automation. The Symposium intends to engage automation experts from Thermal Power, Nuclear Power, Hydro Power, Renewable Energy, Transmission & Distribution, Automation Component Providers & Equipment Manufacturers, System Integrators, Consultants, R&D Organisations, Academicians and others for an invigorating exchange of knowledge on Business, policy and Technology trends. We attempt to bring on stage, the key technology issues before a well represented audience from the full spectrum of the Indian Power sector.

It is our Endeavour to develop a technology road map through continual efforts and various programs of POWAT, so that Indian power industry can develop a vision of being world class, by retaining the leadership through the management of Innovation, R&D, technology and talent. This calls for the involvement of not only the Technocrats, Scientists, Academicians, IT and Management professionals, but also the senior policy and decision makers and doyens of industry to influence future course of power industry in India. Over and above, it also necessitates the continuous engagements of leaders and stalwarts, not only from the fields of Automation and IT but also from diversified disciplines like Project Management, Finance, Power Generation, Transmission, Distribution, Administration, Macro Planning, Manufacturing, Environment Planning/Engineering, Government, Quality Management and host of other domains, sectors and divisions. This is meant to be a continuing endeavor for pushing the power industry to the forefront of technology and performance leadership.



**D GUHA**

EXEC. VICE PRESIDENT &  
Chief of Corporate Engineering,  
TATA POWER  
PATRON ISA(D)-POWAT

This power packed, two days program with event theme as **“Automation – For Sustainable Development”** is being planned to satiate the ever-increasing demand of knowledge sharing among automation professionals of Power industry.

## PROGRAMME COVERAGE

The ISA(D) POWAT-2013 shall include the following opportunities for interaction among experts & peers in the field of Power Sector automation:

- User forums in term of problem discussions
- Power plant systems /sub systems suppliers' forum for showcasing New & Emerging Technologies
- Presentation of selected invited papers from luminaries across India
- Panel discussions



**SHREESHA CHANDRA**

SR. VICE PRESIDENT,  
Yokogawa India Ltd.  
PATRON ISA(D)-POWAT

# Programme Outline

**DAY-1**

**12-Apr-13**

	Time From	Time to
<b>Registration</b>	8:30 AM	9:15 AM
<b>Inauguration Session</b>	9:30 AM	10.30 AM
Chief Guest <b>Sh. Arup Roy Choudhury</b> CMD NTPC		
Guest of Honour & Key Note Speaker <b>Sh. P Sudhakar</b> , CMD, ECIL		
Guest of Honour & Chief Patron <b>Sh. A K Jha</b> , Director-Techincal, NTPC Limited		
Guest of Honour <b>Sh. N Murugesan</b> , DG, CPRI, Bangalore		

<b>Tea Break</b>	<b>10.30 AM</b>	<b>11.00 AM</b>
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<b>Session-1</b> <b>"Invited Papers - Power Spectrum"</b>	<b>11.30 AM</b>	<b>12.45 PM</b>
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Session Chair: Mr. N Murugesan, Director General, CPRI	Session Co-Chair: Mr. D K Jain, CEO, NSL Power
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Invited Paper on Automation in Power Generation (Thermal)	Mr. D Guha, Sr. Execuitive Vice President & Head of Engg	Tata Power
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Invited Paper on Automation in Solar Power Generation	Mr. Sidharth Ghoshal, Director Business Development	Areva Solar
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Invited Paper on Automation in Nuclear Power Generation	"Mr. M Bharath Kumar, Associate Director (C&I,R&D and Simulator)"	NPCIL
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Invited Paper on Solar Power generation	Dr. Tariq Alam,CEO	PL Delta Technologies
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<b>Networking Lunch Break</b>	<b>12.45 PM</b>	<b>1.45 PM</b>
<b>Session-2</b> <b>"Innovative Technologies across Power Industries"</b>	<b>2.00 PM</b>	<b>3.30 PM</b>
Session Chair: Mrs. Arundhati Bhattacharya, GM & HOD PE C&I, NTPC	Session Co-Chair: Mr. S Bhatnagar, GM & HOD C&I, BHEL PEM	
A New Technology for Bunker/Silo USA Inc.,Storage Weight and Level Measurement – <sup>TM</sup>	Kennan M. Yilmaz Ravinder Goyal	Strain Systems (EIP Enviro India)
Temperature imbalance and fluctuations due to difficult fuels - Diagnosis, Counter Measures -	Prof. Dr. Hans Paul Drescher	Bonnenberg + Drescher, Aldenhoven, Germany
Innovation in Generator Condition Monitoring	Mr. Yvan Jacquat	MC-Monitoring
Real Time Process Improvement and Diagnostic for a Thermal Power Plant with Optimization & Expert Systems	Mr. Abhishek Kumar, Mr. Himanshu Pant, Mr. J S Chandhok	NTPC NETRA
Remote Monitoring & Diagnostics Solutions	Mr. Ramji Vasudevan/ Mr. Prashant Kapadia	GE
<b>Networking Tea Break</b>	<b>3.30 PM</b>	<b>4.00 PM</b>
<b>Session-3</b> <b>"Technical Solutions to Power Sector Challenges"</b>	<b>4.15 PM</b>	<b>5.45 PM</b>
Session Chair: Mr. Ajit Kumar, ED (BD), NTPC	Session Co-Chair: Dr. Tariq Alam, CEO, PL Delta Technologies	
Solar Simulator (Plant Optimisation)	Mr. V S Sharma	Steag India
Intelligent combustion optimisation as reaction to changing pulverised fuel properties - A case study	Dr. Peter Deescow	Steag Germany
Substation Automation System Essentials India Pvt. Ltd.	Mr. Vaibhav Tare	FLUOR Daniel
Analysis of Power System failure at IFFCO-Aonla and subsequent measures to enhance reliability–A Case Study	Mr. A K Bhaduri	IFFCO

New Technology in Vibration Monitoring  
- A case study

Mr. Mukesh Vyas

FORBES  
MARSHALL

**Networking Dinner**

**7.00 PM**

**Day-2**

**13-Apr-13**

**Session-4 - "Automation /Technologies  
in Nuclear Power Plants"**

**9:30 AM**

**11:00 AM**

Session Chair: Mr. M Bharath Kumar,  
Associate Director (C&I,R&D and Simulator)

Session Co-Chair:  
Mr. Rajiv Gupta, DGM Instrumentation,  
Engineers India Limited

Design of an Electromagnetically Shielded  
Electronics cabinet for Indian NPPS

Mr. Virendrakumar Wankhede, NPCIL, Mumbai  
Mr. Neeraj Agrawal,  
Mr. Anand Behre

Environmental Qualification of  
Instruments for use in Nuclear Power Plant

Mr. Neeraj Agrawal, NPCIL, Mumbai  
Mr. Anand Behre

Independent Verification and  
Validation of Pre-Developed Computer  
Based Digital I&C Systems

Mr. Harish Rajput NPCIL, Mumbai

Operating Experiences with  
Programmable Logic Controller (PLC)  
Systems in Indian Nuclear Power Plants.

Mr. Vinay Soni, A.V Ughade, NPCIL, Mumbai  
Mr. K K Chandra,  
Mr. C P Shrivastwa

System Reliability Estimation and Updation

Mr. Lalit Kumar Singh, NPCIL, Mumbai  
Mr. Ajita Srivastava,  
Mr. S K Goswami,  
Mr. Agilandaeswari K.,  
Mr. M Bharath Kumar.

**Networking Tea Break**

**11:00 AM**

**11:30 AM**

**Session-5  
"Automation in Thermal Power Plants "**

**11:45 AM**

**1:15 PM**

Session Chair:  
Mr. Pankaj Bhartiya, GM-CENPEEP, NTPC

Session Co-Chair:  
Mr. V P Raman, DVP, ISA District-14

Unifying Security and Safety  
communication over IP Infrastructure

Mr. Tom-Andre Tarlebo Zenitel

Small, High-sensitivity simpler single beam, New Series, Infrared Gas Analyzers for wide range of applications

Mr. Sanjeev Kumar Gupta

Analyser Instrument Co. Pvt. Ltd., Kota

Real Time Measurement of Carbon in Fly Ash for Coal Fired Boilers in Power Plants.

Mr. Anup Shukla

ABB Limited

Predictive Emissions Monitoring Systems (PEMS): A Novel and Cost-Effective Method for Continuous Compliance Monitoring of Source Emissions

Mr. Thomas Eisenmann

DURAG, Germany

Defence in Depth: A multilayered approach to cyber security of IACS(Industrial Automation and Control System)

Mr. R Sarangapani

NTPC NOIDA

### **Networking Lunch Break**

**1:15 PM**

**2:15 PM**

### **Panel Discussion on Cyber-Security In the context of Plant DCS Controls**

**2:40 PM**

**4:00 PM**

Panel Chairman: Mr. S. C. Pandey, ED (NC), NTPC

Panel Co-Chairman: Mr. Nandkumar, MD, Chemtrol

Cyber Security for Automation Systems in the Power Industry and Global Best Practices

Mr. Sarosh Muncherji, Sr. Security Consultant Industrial IT Solutions,

Honeywell Process Solutions

Mr. Amitava Biswas  
Country Head – Honeywell Process Solutions

Mr. Shreesha Chandra  
Sr. VP, Yokogawa Limited

Panel Facilitator:  
Mr. R Sarangapani, NTPC

### **Honours and Awards**

**4:00 PM**

**4:30 PM**

### **Networking Tea Break**

**4:30 PM**

**5:00 PM**

## PARTIAL LIST OF PARTICIPANTS .....

ABB LIMITED  
ANALYSER INSTRUMENT CO.- FUJI ELEC.  
ALSTOM INDIA LTD.  
ANITA AUTOMATIONS  
BARCO ELECTRONICS SYSTEM PVT. LTD.  
BHARAT HEAVY ELECTRICALS LTD.  
BSL ENGINEERING  
CADTECH CONSULTANTS PRIVATE LIMITED  
CPRI  
CMC SOLUTIONS L. L. C  
DESEIN INDURE  
DURAG INDIA INST. PVT. LTD  
DOOSAN  
ECIL  
EIP ENVIRO LEVEL CONTROLS PVT. LTD.  
ELCON SYSTEMS NOIDA  
ENGINEERS INDIA LIMITED  
FORBES MARSHALL PVT. LTD.  
GE INTELLIGENT PLATFORMS PVT. LTD.  
HACH COMPANY  
HARSH INFOTECH  
HITACHI - HIREL POWER ELECTRONICS P LTD.  
HI-TECH SYSTEMS & SERVICES LTD.  
HONEYWELL  
HOPPECKE  
INFINOVA  
ISOTHERMAL TECHNOLOGY PRIVATE LIMITED  
IOCL  
JP POWER  
LANCO INFRATECH  
MEGGITT INDIA PVT. LTD.  
NPCIL  
NTPC LIMITED  
NSL POWER  
PGCIL  
PIPE HANGERS & SUPPORTS PRIVATE LIMITED  
POWER MACHINES  
PROVIBTECH INC.  
PROTECH MONITORING PVT. LTD.  
PHOENIX CONTACT (INDIA) PVT. LTD.  
PYROTECH ELECTRONICS PVT. LTD.  
POLIXEL SECURITY SYSTEMS PVT. LTD.  
PUNJ LLOYD  
RELIANCE INFRATECH  
ROTEX AUTOMATION LIMITED  
RITTAL INDIA PVT. LTD.  
STEAG  
STEAM EQUIPMENTS PVT. LTD.  
STEEL STRONG VALVES (I) PVT. LTD.  
THERMO SCIENTIFIC  
TATA POWER  
TOSHIBA INDIA PVT. LTD.  
TRICON CONTROLS  
UNITECH MACHINES LIMITED  
V. AUTOMAT & INSTRUMENTS  
WISSEN AUTOMATION  
YOKOGAWA INDIA LIMITED  
ZENITEL  
*And many more.....*

## **ISA (D) –POWAT – 2013**

**12th &13th April 2013 (Fri & Sat)**

**Hotel Hyatt Regency,**

**Bhikaji Cama Place, New Delhi.**

For more information about ISA, ISA-Delhi & POWAT Please visit [www.isadelhi.in](http://www.isadelhi.in), email: [isadelhi.org@gmail.com](mailto:isadelhi.org@gmail.com)

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