



सत्यमेव जयते

SUPPORTED BY
DEPTT. OF SCIENCE &
TECHNOLOGY,
GOVT. OF INDIA

The International Society of Automation

ISA Delhi Section



POWAT – 2012

Automation – Innovating for Evolving Challenges

POWER AUTOMATION TECHNOLOGY EVENT (Conference and Exhibition)



पातराजिड



एनपीसीआईएल
NPCIL



बी एच ई एल
BHEL



एनटीपीसी
NTPC
A Maharatna Company



पी डी आई एल
PDIL
ENGINEERING THE FUTURE



**13th & 14th
January 2012**

at

**The Grand
Vasant Kunj - Phase II,
Nelson Mandela Road, New Delhi**



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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 Engineers across Power, Oil & Gas, Consultants, Automation system & component 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 of Training seminars/workshops, webinars and Exhibitions like ISA-Expo held regularly in the USA for knowledge dissemination;
- 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
- Enabling Interaction with Student members, formation of student section and annual scholarships, competitions etc. are many interesting student programs of the ISA.

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 Group or POWAT and one for the Oil & Gas Industry called Petroleum & Natural Gas Industries Automation Domain or PNID. ISA(D) is also encouraging the formation of a systems Integrators forum, so as to share the vast scattered knowledge base resources of systems integrators community.



D K JAIN
DIR(TECH) NTPC Ltd.
CHIEF 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 users, power equipment suppliers, Automation system 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, consultants, equipment manufacturers, suppliers and academicians.



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



A K CHANDRA
ED, NPCIL
PATRON ISA(D)-POWAT

- Facilitate through integrated automation, the realisation of a 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 global solutions best adapted for India Specific conditions.
- Provide an interface for the automation fraternity with the policy markers and regulators

We believe that the engagement and involvement of various stake holders including technology providers and developers would certainly help in achieving the roadmap for implementing strategies for level-4 automation so essential for a world-class power utility.



G GANAPATHIRAMAN
ED, BHEL-EDN
PATRON ISA(D)-POWAT

POWAT-2012

After the successful conclusion of POWID-INDIA-2009 organized in Delhi on 24-25 April-2009 and POWID-INDIA 2010 organised in Mumbai on 28-29, ISA Delhi Section Proudly announces the largest focused Power Sector Automation Show POWAT-2012 on 13-14 January 2012, at the Grand Hotel, Nelson Mandela Road, Vasant Kunj, New Delhi.

The 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 Providers/manufacturers, system integrators, consultants, R&D Organisations, academicians and others for an invigorating exchange of knowledge. We attempt to bring on stage, the key technology issues before a well represented audience from the full spectrum of the Indian Power Sector.



Y K SEHGAL
ED, (Smart Grid) PGCIL
PATRON ISA(D)-POWAT

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 and host of other domains, sectors divisions.

This is meant to be a continuing endeavor ever pushing the power industry to the forefront of technology and performance leadership.

A power packed, two days program with event theme as **“Automation – Innovating for Evolving Challenges”** is being planned to satiate the ever-increasing demand of knowledge sharing among automation professionals of Power industry.

PROGRAMME COVERAGE

The ISA(D) POWAT-2012 shall include the following opportunities for interaction among experts & peers in the field of Power Sector automation:

- | | |
|---|--|
| User forums in term of problem discussions | Presentation of selected invited papers from luminaries across India |
| Power plant systems /sub systems suppliers' forum | Power Quiz professional/students |
| Case study presentation by user's suppliers | Panel discussions |
| New & Emerging Technologies | |

PROGRAMME OUT LINE

DAY-1	13-Jan-12	
	Time From	Time to
Registration	9:00 AM	9:45 AM
Inauguration Session		
Arrival of Chief Guest Sh. Arup Roy Choudhury	10:00 AM	
Welcome of Dignitaries with Bouquet	10:05 AM	
Lamp Lighting	10:10 AM	
Welcome address by ISA-D president	10:15 AM	
Key Note Address By Sh Ravi Kapoor Head EPC - Thermal, Lanco Infratech	10:25 AM	
Address by Patron, Sh. N. Murugesan, Dir.General CPRI, Bangalore	10:35 AM	
Adress By Chief Patron ISA(D) POWAT Sh D.K Jain Director(Technical) NTPC	10:45 AM	
Address by Guest of Honour, CMD PDIL Dr M Ravi Kanth	10:55 AM	
Address by Chief Guest, CMD NTPC Sh Arup Roy Choudhury	11:05 AM	
Release of Souvenir by Chief Guest	11:20 AM	
Vote of Thanks by Convener-ISA(D) POWAT-2012	11:25 AM	
Inauguration of Exhibition by Chief Guest and Dignitaries	11:30 AM	
Networking Tea Break	11:50 AM	12:20 PM
Session-1 "INVITED PAPERS - POWER SPECTRUM"	12:30 PM	1:30 PM
Session Chair : Sh Sharad Anand ED-Engg NTPC Limited*	Session Co Chair : Sh G Ganapatiraman, ED-BHEL-EDN	
Invited Paper on Automation in Nuclear Power Generation	Mr. A. K. Chandra ED (C&I, E, R&D-ES),	NPCIL, Mumbai
Invited Paper on Automation in T&D - Smart Grid	Y. K. Sehgal, ED(Smart Grid)	PGCIL, Gurgaon
Invited Paper on Automation in Power Generation(Thermal)	Mr. Sai Kumar, DGM	BHEL-EDN, Bangalore
*Requested		
Networking Lunch Break	1:30 PM	2:30 PM

Session-2 "Automation in Thermal Power plants"	3:00 PM	4:30 PM
Session Chair : Senior functionaries from Power Automation Domain	Session Co Chair : Mr. K R Bhardwaj AGM -HOD -C&I PEM BHEL	
Volume measurement using 3D technology	Motti Holler & Ravinder Goyal	APM Automation Solutions Ltd.,Tel Aviv, Israel
Microwave Blade Tip Sensing: Capabilities for Turbine Operators	Scott Billington, Michael Hafner, Tom Holst.	Meggitt Sensing Systems, Fribourg, Switzerland
Hazardous Area Classification and methods of preventing fire and explosion hazards in Gas & Coal based Thermal Power Plants.	Ashok Kumar Panda, Nikhilesh Kumar & Soumya.	Lanco Infratech Ltd, Gurgaon, India
Particulate Emission Monitoring by using Triboelectric Technology	Karl Ehrström; CEO Finland;Vikram Singh	Sintrol Oy; Helsinki; Sintrol Oy; New Delhi
Monitoring plant assets using optimum selection of "Technology & Methodology	Pankaj Kumar Sharma Sr. Services Manager, Machinery Diagnostics Services	GE India Industrial Private Ltd. (Div. Bently Nevada),
*Requested		
Tea Break	4:30 PM	5:00 PM
Session-3 "Automation Solution in Combined Cycle Power Plants"	5:15 PM	6:45 PM
Session Chair : Mrs Arundhati Bhattacharya, GM PE-C&I, N T P C limited	Session Co Chair : Sh Siddharth Ghoshal, Director GE Energy	
Remote Operations and Monitoring of Origin Power Station and Managing Security of control systems.	Ravi Malik, I & C Lead - Generation	Origin Energy, Australia
Output Loss Analysis – A tool to monitor Real time performance losses of a CCGT power station	Diwakar Kaushik & Vinay Pratap Singh	NTPC ERP
Reducing Uncertainty In Fuel Gas Measurement By Mass Spectrometry	Peter J Traynor Dr. Robert G Wright	Thermo Fisher Scientific, Sugar Land, TX; Thermo Fisher Scientific, Winsford, Cheshire, UK
Greenhouse Gas Emissions Reporting –Combined Cycle Power Plant	V V V Prakash, Kalluri Anjaneyulu	Bechtel India Pvt.Ltd, New Delhi
Power Quiz & LUCKY DIP	7:00 PM	8:00 PM
Quiz Masters : Prasenjit Pal & P. Sengupta		
Bon Fire -Lohri & Networking Dinner	8:00 PM	

Day-2	14-Jan-12	
Session-4 "Automation in Nuclear Power plants "	9:30 AM	11:00 AM
Session Chair: Sh A K Chandra - ED (C&I, E, R&D-ES), NPCIL, Mumbai	Session Co Chair- Sh Ajit Kumar - GM Nuclear NTPC	
Radiation Monitoring System in Indian Nuclear Power Plants	Vinayak B,N P Panchal, N S Kaintura	NPCIL
Fuel Handling Controls in Pressurised Heavy Water Reactors	Nitin Rimza, S Bandyopadhyay, Joe Peter K, P Nagabhushana, M Bharathkumar, K Agiladaeswari	NPCIL
Power Control Requirements, Instruments and Techniques for Indian PHWRs	S Thangapandi, Sujit Chattopadhyay R Balasubramanian,	NPCIL
Reactor Control and Protection System of VVER-1000	Kamlesh Nathani, Mrs Nabanita Pyne, S K Sen	NPCIL
Networking Tea Break	11:00 AM	11:30 AM
Session-5 "Automation advancement in Various Fields including Transmission and Distribution"	11:45 AM	1:15 PM
Session Chair:- Sh Y K Sehgal, ED Power Grid Corporation	Session Co Chair- Sh N K Kothari, GM NTPC Badarpur*	
Edifying the smart future of power utilities by analysing the concept of generation side virtual power	Saroj Chelluri DGM (PE-Elect) Amit Kulshreshtha DGM (Mech) Prasenjit Pal DGM & STA to D(T)	NTPC Ltd, India
Application of Foundation Field-bus and DART Technology in Power Plants	Arasu Thanigai Business Development Manager	Pepperl+Fuchs Pte Ltd Singapore
Power to control the process control	Ms Anuja Thukral	PHOENIX CONTACT (INDIA) PVT. LTD., Delhi
Implementation of BOP PLC Standardization and BOP Network at Rosa Power Plant.	Viswanathan Kumar	Reliance Infrastructure Limited, Noida.
* Requested		
Networking Lunch Break	1:15 PM	2:15 PM
Session-6 "Plant Asset Management "	2:15 PM	3:45 PM
Session Chair : Sh N K Shrivastava - GM R&M,NTPC Limited	Session Co Chair Sh Pankaj Bhartiya , GM Cen-PEEP,NTPC Limited	
Fleet Optimization through real-time enterprise integration	Mr. David Thomason	OSI soft

Effective Planning of Resources and Monitoring Overhaul Preparedness through ERP	Mr Anand Prakash & Mr Vinay Pratap Singh	NTPC ERP
Development of automation mechanism for inspection of power plant components in critical areas	Kishore Aggarwal, Badri Vishal Gupta and Rakesh Kumar Chakraborty	NTPC NETRA
Advance Vibration Analysis & Diagnosis System For Power Plant Rotary Machine – It Saves Cost And Increases Up Time	Mukesh Vyas Division Head – India	Forbes Marshall P Ltd Shinkawa VMS Systems
Networking Tea Break	3:45 PM	4:15 PM
Session-7 "Automation in Hydro power and renewable power solution "	4:15 PM	5:15 PM
Session Chair: Sh AK Gupta, GM (Buisness Development) NTPC Limited	Session Co Chair- Sh Ramani Iyer, Forbes Marshall Limited	
Latest Technologies of Field Instrumentation, Data Collection and Reporting for Dams and Related Structures	V K Rastogi	Encardio-rite Electronics Private Limited, Lucknow, India
Two axis Solar Tracking System	S.P.S. Pundir, Rakesh Swami, Vishal Singh	NTPC Netra, NOIDA India
Solar Thermal Power Plants – An Overview of Automation	N R Kamath	ABB India
Session-8: Panel Discussion on "Challenges of rapid obsolescence in Automation System" and Valedictory session.	5:30 PM	7:15 PM
Sh S.P Singh Dir(HR) NTPC limited session Chairman		
Sh Vinod Sharma, CEO Meja Urja Nigam Pvt limited*		
Sh Shirsh Chandra Yokogawa India Limited		
Sh Pankaj Bhartiya, GM CenPEEP NTPC Limited		
Mr. K R Bhardwaj AGM -HOD -C&I PEM BHEL		
Sh Rajeev Sharma, Alstom Power*		
Panel Secretary-Sh Soumitra Bhattachrya (Technical coordinator POW-AT-2012)		
*Requested		
Networking Dinner	7:15 PM	

PARTIAL LIST OF PARTICIPANTS

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V. AUTOMAT & INSTRUMENTS
WISSEN AUTOMATION
YOKOGAWA INDIA LIMITED

ISA (D) –POWAT – 2012

13th & 14th January 2012 (Fri & Sat)

Hotel Grand,

Nelson Mandela Road, Vasant Kunj, New Delhi

**For more information about ISA, ISA-Delhi & POWAT-2012 Please visit www.isadelhi.in, email: isadelhi.org@gmail.com
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