



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

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YEAR 2021-2022 | ISSUE NO. 2

ISA(D) NEWSLETTER





INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

From the Desk of President:-

I am glad to present before the members, the Year 2021-2022, Issue-II of this Newsletter of ISA Delhi Section after a grand success of Automation Virtual Mega event, TOTAL-2021, Two day virtual Conference and virtual Exhibition on 3rd and 4th September, 2021. Our various leaders of ISA (D) executive committee team had worked very hard to bring before you such big events. It had been our continuous endeavor to provide value to our members.

I once again thank all the dignitaries, participants, High Power Technical Committee members, executive committee members and all others who supported ISA Delhi to make this Virtual mega event a grand success.

On behalf of executive committee, I would like to thank all sponsors, exhibitors, speakers and also compliment them for sharing their valuable technical knowhow with all our participants from various Oil & Gas Industries and Power sectors, Water and Pharmaceutical Industries.

I certainly wish that with the support of our active members, we can organize many more Technical Events in up-coming months.



A handwritten signature in black ink that reads 'Sushil Kumar'.

SUSHIL KUMAR
(Hon President - ISA Delhi Section)

From the Desk of Secretary:-

It gives me immense pleasure to present before the members this 2nd Issue of our Quarterly Newsletter for the period July-September, 2021.

As you all know the highlight of this period was our mega virtual event TOTAL-2021, through which we brought together the End Users, Consultants, Licensors, EPCs, OEM's together from whole gamut of industry segments this year. We will continuously endeavor to add more industry segments to our ISA fold. I am also happy to convey that we have covered the horizon of Industry in terms of participants from more than 100 companies. On behalf of our executive committee, I thank all our dignitaries, paper presenters, participants, and sponsors for supporting and contributing in the success of TOTAL-2021.

We are also actively engaged in student section activities and we have also included a special section in the newsletter to bring out the details for the same.

As part of our exercise to engage members and their families we had organized special family fun games.

The overwhelming support and response received overall, has given us a lot of encouragement and we will continue to build on the same as we move forward.



A handwritten signature in black ink that reads 'Sarvesh'.

Sarvesh Kumar Sharma
(Hon Secretary - ISA Delhi Section)



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Glimpses of TOTAL – 2021 – Tomorrow’s Opportunities with Today’s Automation Leaders, Virtual Conference cum Exhibition

The Automation Virtual Mega event, “TOTAL-2021 – Tomorrow’s Opportunities with Today’s Automation Leaders”, two days Virtual Conference cum Virtual Exhibition was organized by ISA Delhi Section on 3rd and 4th September, 2021.

Inaugural Ceremony

The Virtual event began with Welcome of participants by **Dr. Ashish Manchanda, Treasurer, ISA Delhi**, followed by Inaugural ceremony activities led by **Shri. Prasenjit Pal, Patron, ISA Delhi**.

Dr. Ashish Manchanda Welcoming Participants



Shri. Prasenjit Pal in Inaugural Ceremony activity



Shri Sushil Kumar, President, ISA Delhi section, delivered Welcome Address for the event. In his welcome address, he thanked all Guest of Honour, all dignitaries, delegates, ISA members and guests from various industries for being part of this event and sparing their precious time from their busy schedule. In his speech, he called upon everyone to actively participate in various events and fully utilize the sessions to learn latest technological developments such as AI, Machine Learning, Cybersecurity, etc.

Shri Prasenjit Pal, invited all for the E-lamp lighting, to invoke the blessing of almighty, marking the auspicious beginning of the show.

Shri, Sushil Kumar during Welcome address



The event was graced by our **Guest of honour, Smt. Vartika Shukla, C&MD, Engineers India Ltd., Shri Ujjwal Kanti Bhattacharya, Director (Projects), NTPC, Shri. E S Ranganathan, Director (Marketing), GAIL, Shri V K Raizada, Executive Director (M&I), IOCL, Shri. Neeraj Agarwal, Executive Director (C&I), NPCIL, Smt. Aika Tuteja, Executive Director, PEM, BHEL and Shri. Vivek Malhotra, Chief of Engineering, RIL, ISA members and esteemed guests from various industries.**



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Key Note address by Guest of Honour

Smt. Vartika Shukla, C&MD, Engineers India Ltd., in her key note address, appreciated ISA Delhi section activities since inception, which plays as a platform for knowledge sharing. Further, she was excited to know the aptly coining of the theme for the event TOTAL-2021, Tomorrow's Opportunities with Today's Automation Leaders. She also emphasized that Automation is the key contributor to cater the rapidly changing industry demand not only in Oil and Gas sector, but in all other sectors too. She thanked ISA-Delhi for organizing this virtual event which will benefit all participants and stakeholders and expressed her happiness and wishes for the success of the event TOTAL-2021.

Key Note address by Dignitaries

Smt. Vartika Shukla, C&MD, EIL



Shri. Ujjwal Kanti Bhattacharya, Director (Projects), NTPC



Shri Ujjwal Kanti Bhattacharya, Director (projects), NTPC, expressed his gladness in his speech for being part of this mega event. He discussed about the fundamental aspect "CHANGE", by remembering the 40's movies of Charlie Chaplin, which were silent movies. He realized that those days have changed by remembering the surrounding gadgets. He emphasized that Change has established itself as the only constant. He remembered the beginning of ISA since 1945, as Instrument Society of America to transition to International society of Automation being its relevance and wider perspective into the world of Automation.

Shri. V K Raizada, Executive Director (M&I) IOCL



Shri. Vinod Babu, Additional Director, CPCB



Shri. E S Ranganathan, Director (Marketing), GAIL, has given his message for the event and it was delivered by Dr. Ashish Manchanda, Treasurer, ISA Delhi. Our other dignitaries, **Shri V K Raizada, Executive Director (M&I), IOCL**, in his speech expressed his pleasure about this virtual event. He discussed about how Unicorns, startups, Internet based companies have come up in India because of Digital transformations that is taking place. **Shri Vinod Babu, Additional Director, CPCB**, explained the various automation activities being carried out at CPCB including data collection and Networking. He thanked ISA-Delhi for organizing this virtual event which will benefit all participants.



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Shri. Neeraj Agarwal, Executive Director (C&I), NPCIL



Smt. Alka Tuteja, Executive Director, PEM, BHEL



Shri. Neeraj Agarwal, Executive Director (C&I), NPCIL, expressed his happiness for being part of inaugural session of the event. He began his speech remembering his association with ISA Delhi and appreciated the ISA Delhi for organizing Virtual event even in these difficult times. Smt. Alka Tuteja, Executive Director, PEM, BHEL, in her speech emphasized that automation is here to stay and help us in business continuity, productivity and efficiency. She expressed her happiness for being part of this virtual event.

Shri. Vivek Malhotra, Chief of Engineering, RIL



Shri. Vivek Malhotra, Chief of Engineering, RIL, in his speech expressed his pleasure about this virtual event and accentuated the development of Automation that is happening at rapid pace and in the next 5 years the change that is happening leading to disruptive landscape in Data science, Machine Learning, Digital Technologies, Predicatives. He thanked ISA-Delhi for organizing this virtual event and expressed his happiness and wishes for the success of the event TOTAL-2021.

Release of E-Souvenir and Inauguration of Exhibition (Virtual Stall)

Shri. Mainak Nandi, Convener, TOTAL-2021, releasing e-Souvenir



Shri Prasenjit Pal, invited Convener of TOTAL-2021, Shri. Mainak Nandi, for Note of Gratitude and way forward. Shri Mainak Nandi, welcomed all Dignitaries, Delegates, Session Chairs, Paper presenters, sponsors, senior members of ISA, participants and all others who supported to make this Virtual mega event a happening from beginning. He declared the start of the event, TOTAL-2021, by inaugurating the Exhibition (Virtual stalls) and releasing E-Souvenir.



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Technical Sessions

Technical Session -1 began with address by **session Chair, Shri. Saikat Bhowal, Sr. GM – Instrumentation, Engineers India Limited**. The Papers covered in the session were “Simulation and Digital Twin in the Process Industry”, “Unleashing the Power of Artificial Intelligence at the Industrial Edge”, “IIoT and Digital Technology”, “Digital Twins NOA” and “IIoT in Vibration Monitoring” under the session title **IIOT and DIGITAL TRANSFORMATION**.

Shri. Saikat Bhowal, Sr. GM (Instrumentation), EIL
Session Chair delivering opening address



Shri. Suresh Jan, from Phoenix Contact
Presenting paper



Technical Session -2 began with address by **session Chair, Shri. S. K. Dutta (GM- PE-C&I), NTPC**. The Papers covered in the session were “Latest Trend in Stack Emission”, “Green Hydrogen - for Greening the Grid”, “Achieving automated operations and data driven insights from water/wastewater reuse”, “Applicable emission Guidelines and regulation for different types of Industrial stacks” and “Exploring Analytics Potential in Artificial Intelligence” under the session title **INNOVATIVE ENERGY SOLUTION**.

Shri. S. K. Dutta (GM- PE-C&I), NTPC
Session Chair delivering opening address



Shri. Anil Kumar from Royal Haskoning
Presenting paper



Technical Session - 3 began with address by **session Chair, Shri. Jagdish Mitra (CSO and Head of Growth), Tech Mahindra**. The Papers covered in the session were “Overview of ISA/ IEC standards for security of Industrial Automation and Control Systems (IACS)”, “Industrial Network Security Architecture”, “Boost your Cyber Resilience for Automotive & Medical IIoT Devices”, “Making Digitalization Work for you! Approach for Implementation”, “Latest Technology in Testing & Calibration Presenter”, along with ISA Delhi Student Session papers under title “Nursebot: Automating The Healthcare Industry”, and Auto Attendance System with Face Recognition Using MATLAB” under the session title **CYBER SECURITY-SURVEILLANCE IN AUTOMATION**.



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Shri. Jagdish Mitra (CSO & Head), Tech Mahindra
Session Chair delivering opening address



Shri. Vivek Roy, from Siemens Digital
Presenting paper



Quiz Master, Shri. Manish Kumar conducted Smart Quiz after each session with questions from various papers presented during the session.

Ms. Anuja Thukral, Compering Support



Ms. Mudita Grover, Compering Support



Shri. Dharmender Singhal, Sr. Advisor, ISA Delhi section, announced the Prize winners for the Quiz contest held on day one.

Session - 1 Results	
VINAY GUPTA	UOP INDIA PVT. LTD.(A HONEYWELL COMPANY)
JUSTIN PINTO	ROYAL HASKONINGDHV
SANTHOSH A K	VATECH WABAG
ARUN KUMAR	ARMTel
RAJESH ZAVERI	BUREAU VERITAS INDIA



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Technical Session - 4 began with address by **session Chair, Shri. N Vinod (GM-Instrumentation), IOCL-Haldia**. The Papers covered in the session were “Unlocking the value of industrial AI”, “Emerging Process Automation technologies of Ethernet APL and HART-IP”, “Digitizing Process Plants using AI and ML Technologies to Enhance Sustainability”, “Comprehensive Early Warning System in Hydro Power Projects located very close to glaciers in Himalayas” and “Safe & Optimized Closed Loop Sampling Solution” under the session title **AI POTENTIAL IN ANALYTICS**.

Shri. N Vinod (GM-Inst),IOCL-Haldia
Session Chair delivering address



Shri. Sumit Kumar Halдар, NTPC
Presenting paper



Shri. Sachin Joshi, ISA Delhi section, announced Delegate contest winners for day one.

FLUENTGRID **ISA** **Awer Solutions**

Delegate Contest Winners Day-1

PRATEEK SINGH	INDIAN OIL CORPORATION LIMITED
GAURAV JAIN	INDIAN OIL CORPORATION LIMITED
GAURAV SHARMA	INDIAN OIL CORPORATION LIMITED
JEGDEESH TR	ENGINEERS INDIA LIMITED
SANUP KUMAR	INDIAN OIL CORPORATION LIMITED
SUSHIL YADAV	ABES ENGINEERING COLLEGE
V V V PRAKASH	BECHTEL INDIA PVT LTD
CHELLAPANDIAN M	ENGINEERS INDIA LTD
PRITAM BISWAS	ENGINEERS INDIA LTD
SUDARSHAN P	ENGINEERS INDIA LTD

TOTAL-2021

Technical Session - 5 began with address by **session Chair, Shri. P.K. Gupta (AGM-PE C&I), NTPC**. The Papers covered in the session were “Ethernet APL for Process Automation”, “Significance of 5G on Industrial Automation in the Era of Industry 4.0 and Beyond”, “Operational excellence at Numaligarh Refinery Limited by implementing Web-Based, Database-Driven Digital Logbook and Shift-handover”, “Are We ready to transform your workforce into a digital worker” and “Evolving robust enterprise level in safety instrumented system using “IIoT” under the session title **IT SYNERGY IN INDUSTRIAL AUTOMATION**.



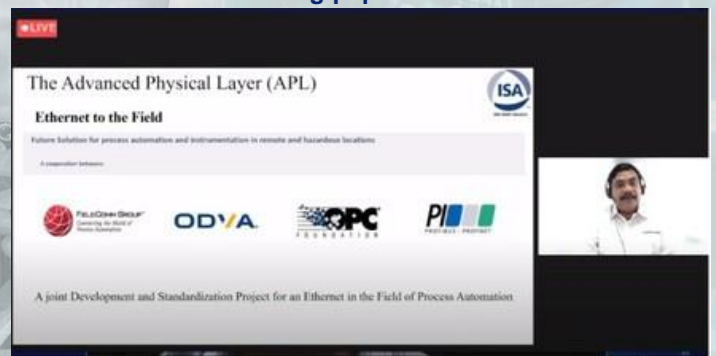
INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Technical Session - 6 began with address by session Chair, **Shri. Vivek Gupta (Joint Vice President Inst.), DCM Sriram Fertilizers**. The Papers covered in the session were "Latest Technology adopted in Pharma Industry", "Smart Logistics & Infrastructure", "Smart Solutions for Sustainable Smart Infrastructure", "RELAYability – Technology Concepts of Relays in Automation", "Accurate measurement - an essential element of controlling and improving offshore operations" and "Water Quality Analyzers" under the session title **TRENDS IN AUTOMATION-INNOVATION**.

Shri. P.K. Gupta (AGM-PE C&I), NTPC Session Chair delivering opening address

Shri. R. Unnikrishnan from Pepperl+Fuchs Presenting paper



Shri. Arupjyoti Saikia from EIL Presenting Paper

Mr. Brag Cralberg, Vice President (Industry & Science), ISA, USA



Shri. Vivek Gupta (Joint VP Inst.), DCM Sriram Fertilizers Session Chair delivering opening address

Mr. Ramesh Walia from CentrientPharmaceuticals Presenting Paper





INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Virtual Panel Discussion

At the end of each session, the e-Certificates were presented to all paper presenters. After two day session of technology knowledge sharing, Panel Discussion Session on most popular topic of our country "TOMORROW'S OPPORTUNITIES – A step towards Indigenization and Local Manufacturing in Measurement and Automation Segment" moderated by **Shri. Manish Kumar, DGM (Instrumentation), Engineers India Limited**. Eminent Dignitaries from various industries **Shri. Rajiv Gupta, Executive Director (Technical), EIL**, **Shri. M K Srivastava, Executive Director (Engineering), NTPC**, **Shri. G Chakraborty, Executive Director (CGD), GAIL**, **Shri. Sanjay Raizada, CGM (Projects), IOCL**, **Shri. Anil Bhatia, Vice President & MD, Emerson Automation Solution** enlightened the audience with numerous developments and opportunities for Automation Industry in this "Make in India" drive by Indian Government. **Shri. Madhusudan D Bichu, MD & CEO, Pyroelectric Instruments**, also shared his views during the discussion. This session was very useful for all enthusiastic entrepreneurs in Automation industry.

Virtual Panel Discussion



Honours and Awards

After two days long power pack technical sessions, winners for various contests were announced. It began with announcement of **ISA Delhi Honors and Awards for 2021** by **Shri. S Mahesh Kumar, Honours & Awards Chair, ISA Delhi section**. It included various categories as follows

Shri. S Mahesh Kumar announced Honors & Awards for 2021





INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

S no.	Award Category /	Name of the Winner	Organization
1	Customer Experience Excellence	Mr. Nanda Kumar	Chemtrols
2	Manpower/Employee Leadership through Automation	Mr. MD Bichu	Pyro
3	Manpower/Employee Leadership through Automation	Mr. Thamby Mathew	P&F
4	Supply Chain & Logistics Excellence	Mr. Bijal Sanghvi	Axis
5	Leadership in Best Practices	Mr. Alok Agarwal	McDermott
6	Innovations in Product Design	Mr. VK Bassi	
7	Innovations in Product Design	Mr. Prem Anand	Bliss Anand
8	Excellence in Managing Technology Life cycle	Mr. Saikat Bhowal	Engineers India Limited
9	Excellence in Managing Technology Life cycle	Mr. Sameer Sharma	NTPC
10	Long term membership	Mr. Vishnu Prakash	Rockwin Flowmeters India
11	Emerging Leader	Mr. N Rajesh	IOCL
12	Emerging Leader	Mr. PK Gupta	NTPC
13	Best Student Section	-	Bharatiya Vidyapeeth.

Shri. Sandeep Gupta, ISA Delhi, announcing Delegate contest winners for Day Two

Delegate Contest Winners Day-2

SUSHIL YADAV	AEC ENGINEERING COLLEGE
JAGA SARMAATA	ENGINEERS INDIA LIMITED
VARSHA SHERMA	MINISTRY OF DEFENCE
RAHUL MITTAL	INDIAN OIL CORPORATION LIMITED, REFINERIES HEAD OFFICE, NEW DELHI
ANISH KARE	TATA STEEL
KAMR ALI	ANALYSER INSTRUMENT CO. PVT. LTD
NEELAMA MUNGALI	METRAM INSTRUMENTS CO. LP
SANDY P KUMAR MITTAL	DESEM PVT LTD
GAURAV MITTAL	IOCL
NAVIN CHOPRA	SCHNEIDER ELECTRIC

Shri. Mainak Nandi, Convener, TOTAL-2021, announced the best papers of each session and thanked all Session chairs, paper presenters and delegates for such wonderful sessions.

President Choice Awards were announced by Shri. Sushil Kumar, President, ISA Delhi to appreciate the efforts of Executive Board members who took active participation from planning till successful completion of the event. The following members were recognized for their outstanding contribution under various areas.



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

President Choice Awards announced by President, ISA Delhi Section, Shri. Sushil Kumar

President Choice Awards

The entire team of EB Chair Holders was roped by the President to play their part this event:
And Everyone responded wholeheartedly for taking the event forward

Kaladhar Narayan – Marketing Support	Sachin Joshi – Coining TOTAL-2021
Radheyshyam – All round coordination	Mahesh Kumar– Honors & Awards
Prateek Singh – Program Support	H Kalsi– Brochure Creation
Amit Singh- Vendor Development	TR Jegdeesh– E-Souvenir
Rajat Goyal – Brochure Support	Mudita – Compering Support
Sandeep Gupta– Marketing	Anupam Shrivastav – Delegate Support

Name of the Awardee	Award Category
Mr. Sachin Agrawal	Outstanding Contribution Behind the Scene
Mr. Sumit Halder	Outstanding Contribution Behind the Scene
Ms. Anuja Thukral	Engagement of Student Sections
Mr. Aman Sagar	New Segment Introduction
Ms. Pritika Khirwal	Technical Support
Mr. Manish Kumar	All round Technical Support

Finally, Two day Technical events of TOTAL-202, concluded with the vote of thanks by **Shri. Sarvesh Kumar Sharma, Secretary, ISA Delhi Section.**

Shri. Sarvesh Kumar Sharma, Secretary, ISA Delhi Section delivering Vote of Thanks



Facts and Figures about the event

No. of Registrations – 1250

No. of Live Participants - Day One-731, Day Two - 500

Total No. of footprints of delegates at stall – approx. 5000

The entire recorded event can be viewed in YouTube from ISA Delhi section channel. The link is <https://www.youtube.com/channel/UC6BLX8gizD-pjBBgQk9BBUA>



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Winner List under various categories

Name of the Winner	Organisation	Category
Mr. Suresh Jan	Phoenix Contact India Pvt. Ltd.	Technical Paper Session-1
Mr. Anil Kumar	Royal Haskoning Dhv	Technical Paper Session-2
Mr. Vivek Roy	Siemens Digital Industries	Technical Paper Session-3
Mr. Sumit Kumar Halder, Ms. Gunjan Tandon, Mr. Praveen Kumar Gupta	NTPC Ltd.	Technical Paper Session-4
Mr. Unnikrishnan R	Pepperl+Fuchs (India) Pvt. Ltd.	Technical Paper Session-5
Mr. Arupjyoti Saikia	Engineers India Limited	Technical Paper Session-5
Mr. Ramesh Walia	Centrient Pharmaceuticals	Technical Paper Session-6
Mr. Vinay Gupta	UOP India Pvt. Ltd.(A Honeywell Company)	Quiz contest winner for Session-1
Mr. Justin Pinto	Royal Haskoningdhv	Quiz contest winner for Session-1
Mr. Santhosh A K	Vatech Wabag	Quiz contest winner for Session-1
Mr. Arun Kumar	Armtel	Quiz contest winner for Session-1
Mr. Rajesh Zaveri	Bureau Veritas India	Quiz contest winner for Session-1
Mr. Sourav Mukherjee	Engineers India Limited	Quiz contest winner for Session-2
Mr. Lokendra Atri	HMEL	Quiz contest winner for Session-2
Mr. Mayur Ghormade	Comfit & Valves Pvt. Ltd.	Quiz contest winner for Session-2
Mr. Prabhjeet Singh	CNA	Quiz contest winner for Session-2
Mr. Gaurav Mittal	IOCL	Quiz contest winner for Session-2
Mr. Ashish Garg	Tata Steel	Quiz contest winner for Session-3
Mr. Subhransu Pani	HMEL	Quiz contest winner for Session-3
Mr. Navin Chopra	Schneider Electric	Quiz contest winner for Session-3
Mr. Alok Kumar Tripathi	NTPC Limited	Quiz contest winner for Session-3
Mr. Sachin Chadha	Baker Hughes	Quiz contest winner for Session-3
Mr. Amit Aglave	Fluor	Quiz contest winner for Session-4
Mr. Chellapandian M	Engineers India Ltd	Quiz contest winner for Session-4
Ms. Jahnvi V	HPCL Visakh Refinery	Quiz contest winner for Session-4
Mr. DP Biswajit	Aarti Industries Limited	Quiz contest winner for Session-4
Mr. Roshan Krishna	Neural Integrated Systems Pvt Ltd	Quiz contest winner for Session-4
Mr. Saurabh Agarwala	Engineers India Limited	Quiz contest winner for Session-5
Mr. Satya Prakash Jain	Bechtel	Quiz contest winner for Session-5
Mr. Hemant Singh	Yokogawa	Quiz contest winner for Session-5
Mr. Sanjay Kumar	Vibration Monitoring System	Quiz contest winner for Session-5
Mr. Naveen Neeraj	Woodward India Pvt Ltd	Quiz contest winner for Session-5



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Feedbacks

It is simply excellent

The virtual platform of ISA TOTAL-2021 along with exhibitor stalls are commendable

Very nice. We have to plan next time onwards physical along with live streaming

The whole get up is excellent. It gives feelings that I am physically present in the event. Great applause for whole ISA team.

Designation and Company name should be there in chat to identify people better.

Really an awesome event virtually. Got the real feel of physical event that we used to have every year.

Congratulations to ISA-D for organizing this virtual event. It is excellent.

Session Bucketing should be improved to gain maximum benefit 5 min gap between session to digest knowledge

Excellent arrangements and flawless execution virtual environment. Timing can be little better as we overshot on both the days. 1 paper by student in each session can be thought of to encourage students. Once again, congratulations to entire ISA Delhi section for a very successful organization of the event once again. You all are really doing it in an awesome way.



दो दिवसीय 'टोटल 2021' कार्यक्रम, “एक यादगार, प्रेरणास्पद, रुचिकर, शानदार सफल आयोजन”

ISA(D) द्वारा दो दिवसीय 'टोटल 2021' कार्यक्रम वर्चुअल-स्वरूप आयोजित किया गया, जिसमें इंडस्ट्री के विभिन्न क्षेत्रों के दुनियाँ भर के उत्पादकों, विक्रेताओं, क्लाइट्स, कंसल्टेंट्स व विशेष अतिथिगण ने भारी मात्रा में उत्साहपूर्वक शामिल होकर कार्यक्रम में चार-चाँद लगाये और कार्यक्रम सफल व यादगार बनाया।

इतने कम समय में, इतना कुछ समायोजित किया गया था, जैसे 'गागर में सागर भर दिया हो'. निश्चय ही कार्यक्रम के ब्लू-प्रिंट रचने वाले महानुभाव, अद्वितीय हैं, जिन्होंने इतना विस्तृत-कार्यक्रम, सफलतापूर्वक तटस्थता व व्यवस्थित स्वरूप सम्पन्न कर, वर्चुअल-दुनियाँ में स्वर्णिम इतिहास ही रच दिया। कार्यक्रम के उल्लेखनीय विवरणों को संक्षेप में अभिव्यक्त करने का प्रयास निम्नानुसार प्रस्तुत है:

1. प्रेसेंटर/एंकर:

शानदार, रुचिकर, जोशपूर्ण प्रस्तुतिकरण, लाजबाब!

सभी एंकर्स ने स्पष्ट, दृढ़ व रुचिकर वाकपटुता का परिचय दिया, जिसने कार्यक्रम में लयबद्धता बनाये रखी व कार्यक्रम से सभी को बाँधे रखा. सभी ने यह अनुभव किया कि थोड़ा सा भी कार्यक्रम छूट न जाये. वक्ताओं व श्रोताओं को आदर-सम्मानपूर्वक संबोधित कर, कार्यक्रम सफल बनाने में अद्भुत प्रसंशनीय भूमिका निभाई.

2. स्पीकर्स व विशिष्ट अतिथिगण:

इंडस्ट्री के विभिन्न क्षेत्रों के गणमान्य, ज्ञानी, अनुभवी वक्ताओं को सुनकर कृतार्थ अनुभव हुआ. वक्ताओं की लयता, निरंतरता, समयबद्धता व तकनीकी ज्ञान का अभूतपूर्ण समावेश, अति प्रसंशनीय व प्रभावपूर्ण रहा. वक्तागण, एक प्रबुद्ध प्रोफेसर की तरह प्रभावपूर्ण, रुचिकर व नवीनतम जानकारी द्वारा वातावरण में अमिट प्रभाव छोड़ रहे थे. एक ही प्लेटफार्म पर, विविधताभरा अनूठा समावेश व प्रस्तुतिकरण के 'आधारभूत महानुभावों' के अटूट प्रयत्नों का अनन्य आभार, जिन्होंने इतने अल्प समय में, इतनी सारगर्भित व विशिष्ट प्रेजेंटेशन प्रस्तुत की व कार्यक्रम को सफल बनाया.

छात्रों द्वारा प्रस्तुतिकरण भी ज्ञानवर्धक व उल्लेखनीय रहे, जिनमें उन्होंने बहुत ही रुचि व जोश के साथ अपनी उपलब्धियों व प्रोजेक्ट्स का वर्णन किया।

3. पैनल चर्चा:

बेहतरीन, सारगर्भित, विस्तृत विजनयुक्त, भारतीयता को और प्रभावपूर्ण बनाने हेतु, बेहतरीन सुझाव प्राप्त हुये, जिसमें कल्याणकारी योजनाएँ व राष्ट्रव्यापीहित का अभिन्न संकल्प था, अनन्य आभार!

4. कार्यक्रम की उपलब्धता:

मोबाइल, लैपटॉप व कंप्यूटर पर सुगम उपलब्धता ने, ज्यादातर समय पर कार्यक्रम में, अधिक से अधिक लोगों की उपलब्धता बढ़ाई व आसानी से शामिल हो सके, यहाँ तक कि भोजन के समय पर भी लोग, बाएँ हाथ से माउस ऑपरेट कर, स्टाल्स का आनंद ले रहे थे. वाह!

5. सुअवसर:

छोटे से छोटे और बड़े से बड़े उत्पादकों का अभूतपूर्व वर्चुअल सम्मेलन व उन्हें स्टेज पर आने व प्रस्तुतिकरण का सुअवसर:

निश्चय ही समस्त उत्पादकों, विक्रेताओं, क्लाइट्स व कंसल्टेंट्स के लिए यह प्लेटफार्म अत्यंत ही कल्याणकारी, प्रेरणास्पद रहा, जो आगामी समय में बेहतर समन्वय, पारस्परिक सहयोग व नवीन स्वर्णिम अवसर स्रजित करेगा.

6. किंग व अवार्ड:

रोमांच उत्तपन्न करने वाला व प्रोत्साहन बढ़ाने वाला था. प्रतिभागियों में जबर्दस्त जोश व उमंग का समावेश था और जीतने का जस्बा ज्यादा से ज्यादा प्रतिभागियों को शामिल कर रहा था. अवार्ड्स के लिए सभी विजयीगणों को बधाइयाँ, बेहतरीन अनाउंसमेंट व रुचिकर प्रस्तुति.

7. विकल्प:

कार्यक्रम, झँकी या फिर स्टाल, हर जगह जाने की आसान सुविधा का सरलता से उपयोग करने की सुनिश्चितता उपलब्ध कराई गई, जिसे सभी लाभान्वित हुये.

8. स्टाल्स पर कैटेलाॅग व वीडियो की उपलब्धता:

चाहे गए उत्पादों के कैटेलाॅग व वीडियो सरलतापूर्वक उपलब्ध किए गए व सेव करने में सरल.

9. सामरिक दृश्यता:

बेहतरीन सुगठित, अद्भुत, आकर्षक साजसज्जा.

10. टीम की सराहना व विशेष आभार

वे समस्त कर्तव्यनिष्ठ, कर्मठ, अथक प्रयत्नों के कर्णधार जिन्होंने रातदिन लगकर, ISA(D) के इस कार्यक्रम को सफलतम-स्वरूप सिद्ध करने में, अपना अमूल्य योगदान कर, सभी के दिलों में स्वर्ण अक्षरों में अपना स्थान सुनिश्चित किया है. प्रबंधन, साजसज्जा आयोजकों, वक्ताओं, उत्पादकों, विक्रेताओं, प्रस्तुतिकरण/ किंग विश्लेषक, विशेष अतिथिगण व क्लाइटों में शामिल समस्त गणमान्य व सम्पूर्ण ISA(D) टीम बधाइयों की विशिष्ट पात्र है, विशेष आभार, अभिनंदन व बधाइयाँ.

कार्यक्रम की संरचना, अनुसूची, आमंत्रण, निमंत्रण, अनुक्रम, समयसीमा, विश्लेषण, चयन व पुरुस्कार सभी का सूक्ष्मता से समायोजित करना, वाकई अद्भुत, सराहनीय, प्रसंशनीय व अविस्मरणीय है.

आयोजनकर्ताओं का शत-शत अभिनंदन व अनन्य आभार!

विशिष्ट आभार व शुभकामनाओं सहित

जय हिंद, जय भारत.

ISA दिल्ली-सेक्शन लिखे, फिर, एक नई इबारत



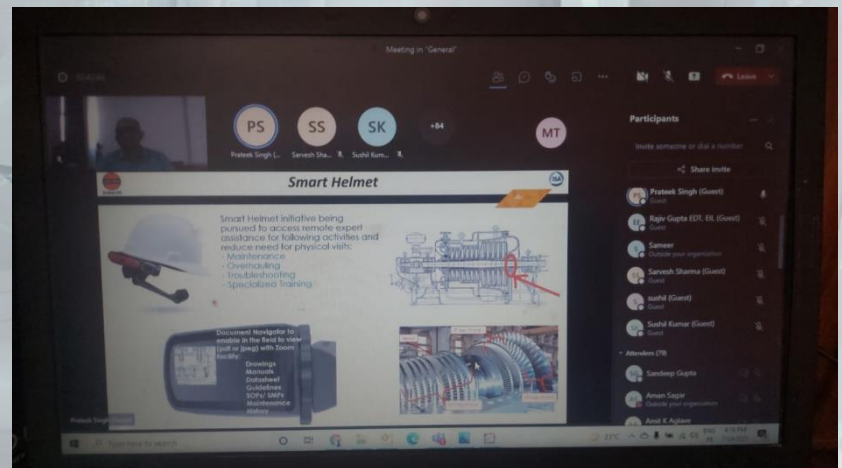
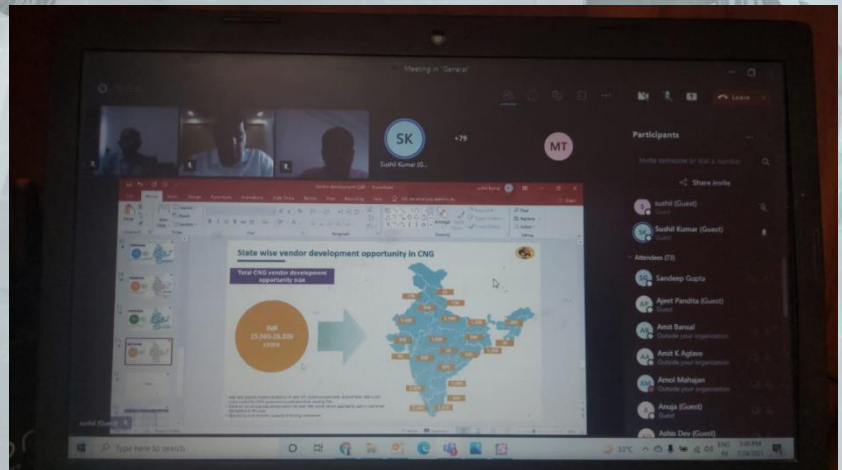
VIRTUAL TECHINICAL MEET ON LATEST PRACTICES IN INDIAN OIL & GAS INDUSTRIES - JULY' 21

A Virtual Technical Meet on “*Latest Practices in Indian Oil & Gas Industries*” was organized by ISA Delhi Section on 24th July, 2021 through Microsoft Teams.

Webinar speaker **Mr. Sushil Kumar, Dy. General Manager (CCD), GAIL**, in his topic “**Vendor Development of City Gas Distribution (CGD) Business**” explained about the City Gas distribution networks and the vendor development opportunities through Make in India. He enlightened the audience with facts and figures about the expected growth pattern in D-PNG connections and CNG stations, large potential market for all stakeholders across PNG and CNG ancillary markets, State wise vendor development opportunity in CNG Compressors, Dispensers, Cascades, etc.

Other Speaker **Mr. Prateek Singh, Chief Manager, IOCL**, in his topic “**Smart Maintenance – Best Practices**” briefed about the RFID-based Digital Maintenance System for Operator Driven Reliability and shared current practices and problems faced in Maintenance activities, continued with Workflow of Digitization of Maintenance Practices. He shared implementation experience of Pilot project at FCCU of Mathura Refinery and use of Drones for Stack inspection.

First Photo: Enthusiastic participants during the presentation, Second Photo: Shri. Sushil Kumar Presenting his presentation and Third Photo: Shri. Prateek Singh presenting his presentation.





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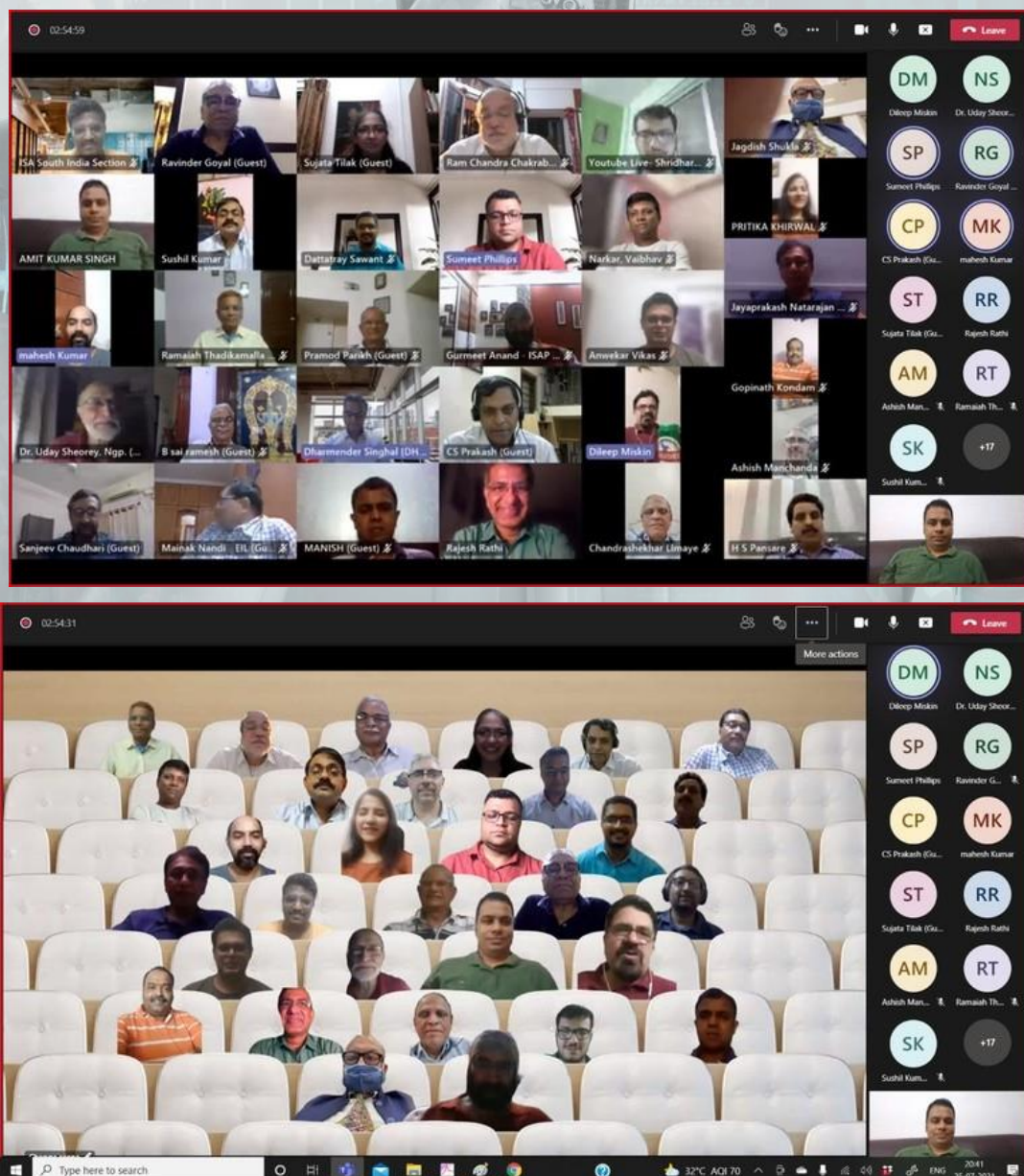
ISA DELHI SECTION

VIRTUAL DISTRICT -14 DLC MEET HOSTED BY ISA DELHI SECTION ON 25TH JULY, 2021

Welcome address was delivered by **Shri. Dharmender Singhal** and **Shri. Amit Singh** followed by DVP opening remarks by **Ms. Sujata Tilak**. Section presentation with SWOT analysis was done by each of 11 section followed by Leadership session by invited speaker **Shri. Vishweshwar Hedge**, under the title “**Mindful Leadership – Managing Outside by Mastering Inside**”. In the evening, Appreciation of celebrating Excellence award winners by **Shri . Jagdish Shukla** was carried out followed by Enchanting Member value session and Vibrant Student sections were presented by various leaders. ISA strategic objectives session was delivered by **Mr. Steve Mustard**, **ISA HQ**, followed by section Health (Vibrant Leadership session).

The event ended with Vote of Thanks by **ISA Delhi President, Shri Sushil Kumar** followed by Fun games.

Snap shots of the Event





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ISA DELHI SECTION

FUN GAMES ON 5TH SEPTEMBER, 2021

Virtual Fun games were conducted on 5th September, 2021. ISA Delhi section members along with their family actively participated in the various games and won many prizes. Three fun games were conducted such as **Wizzy Fizzy**, **Shopping List** and **Escape the TOMB**.



Winners List

Name	Category	Name	Category
Ashwini Tiwari	Escape the TOMB	Vidushee	Wizzy Fizzy
Shreya Srivastava	Escape the TOMB	Nishtha	Wizzy Fizzy
Varsha	Escape the TOMB	Aasritha	Wizzy Fizzy
Shashwati Roy	Escape the TOMB	Kaladhar Narayan	Wizzy Fizzy
Ashish Manchanda	Escape the TOMB	Mainak Nandi	Wizzy Fizzy
V V V Prakash	Escape the TOMB	Ritika Nandi	Wizzy Fizzy
Indranath	Escape the TOMB	Ashish	Wizzy Fizzy
Rahul Mittal	Escape the TOMB	Akshit	Wizzy Fizzy
Yajat Team	Escape the TOMB	Prakash	Wizzy Fizzy
CKS Tarun	Escape the TOMB	Rajat Goyal	Wizzy Fizzy
Vidushee Manchanda	Shopping List	Mainak Nandi	Shopping List
Gaurav	Shopping List	Sandeep Kumar Mittal	Shopping List
Nishtha	Shopping List	Prakash Valluri	Shopping List
Roy Family	Shopping List	Varsha	Shopping List
Ashish	Shopping List	Roy	Shopping List



Early Modernization of Turbine Hydraulic Control & Protection System Less Maintenance Cost, Ensures Availability & Prevents Mechanical Problems

- Harpreet Singh, Technical Analyst, Siemens Ltd.

Why?

Sooner or later, existing mechanical/hydraulic turbine control and protection devices reach the end of their service life due to following problems:

- Mechanical wear and tear, mechanical/hydraulic protection and control system devices often cause malfunctions
- Oil quality and control accuracy can also decrease after years of operation
- Obsolescence of old design mechanical/hydraulic devices
- Aging of mechanical parts and complex mechanical installations lead to costly and time-consuming repairs and services
- Expert know-how for maintenance work is becoming increasingly scarce
- Furthermore, turbine stress is extremely high when physical over speed tests need to be performed on the old 1 or 2 channel mechanical/hydraulic protection system

Therefore, a modernization solution is required that perfectly fits the existing situation in the plant and ensures reliable and secure operation based on state-of-the-art technology. There is a need for minimizing turbine stress, lower maintenance costs, reduced spare part costs and state-of-the-art sensors with high availability and a reduced number of devices.

Benefits

Modernization of Turbine Hydraulic Governing Control System

- Fail safe design with faster precise control, increased monitoring, and diagnostics capabilities
- Improved load flexibility due to improved dynamics & meet higher frequency support requirements like FGMO/RGMO
- Steam mass flow linearization by software parameters
- Flexible adaptation of valve control sequencing and valve characteristics to meet special requirements with individual valve controls
- High availability through online testing during operation and disposability of standard parts
- Designed for standard electrical signals on 24VDC and 4-20mA level
- High availability through spare parts available from stock

Modernization of Turbine Hydraulic Protection System

- High levels of safety (upto SIL3) and availability / reliability with a continuous 2oo3 structure of I&C sensors and to the interface to the hydraulic system with the 2oo3 trip block for the replaced mechanical protection circuits
- No load restrictions required for testing of trip channels for 2-out-of-3 trip unit during turbine operation
- Non-contacting, wear-free speed acquisition with electronic 2oo3 over speed protection system thus avoiding overspeed trip malfunction of mechanical over speed bolt plunger due to build-up of oil varnishes
- Precise & reproducible setting of trip limits with digital turbine controls
- Periodic, automatic self-testing of electronic 2oo3 overspeed protection system. Live 110% overspeed trip testing won't be necessary. No operating restrictions are required when testing overspeed trip values
- Fully electronic turbine protection system inclusive overspeed protection, axial shaft displacement protection & vacuum protection
- No limitation of protection status through test routines at any time as per operator action Sensors are self-testing and monitored
- Reduction in mechanical components, resulting in reduced service costs & get rid of obsolete & costly mechanical devices



Modernization of KWU Design Steam Turbine Hydraulic Governing Control & Protection System

Group control of HP / IP valves



Individual single valve control of HP / IP valves

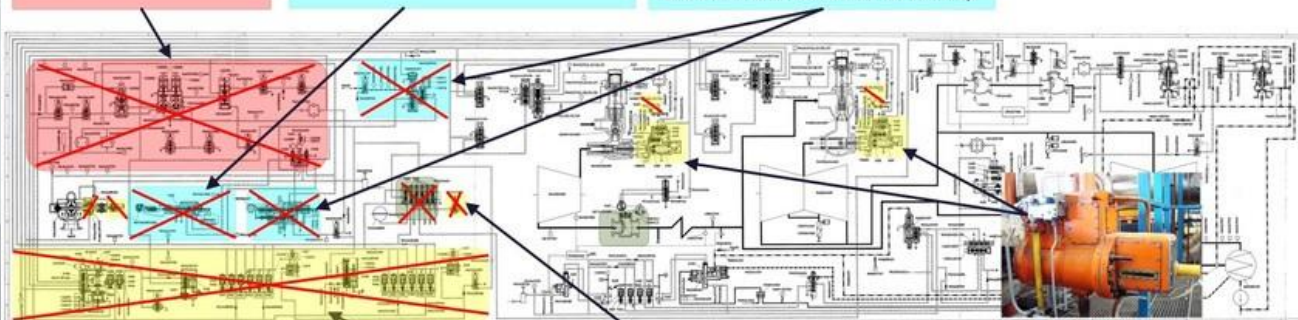
What had to be done?

- Dismantling of mechanical hydraulic speed governor, electro-hydraulic converter, starting device, speeder gear motor, follow-up pistons, trimming device, trip solenoid valves etc.
- Dismantling of mechanical protection like overspeed bolt, axial thrust & condenser vacuum & replaced with electronic protections
- Implementation of individual single valve control HP/IP valves & state-of-the-art 2oo3 protection system with SIL compliant turbine 2oo3 trip block (TTB) as central tripping interface

Turbine Protection Circuit
-Replace with 2oo3 Trip Block

Hydraulic Overspeed Bolt replace with
-Electronic 2oo3 Overseed Trip

Hydraulic Protections replace with
-Electronic 2oo3 Thrust Bearing Trip
-Electronic 2oo3 Condenser Vacuum Trip



-Replace with Individual Single Valve Turbine Governing Control (Electro-Hydraulic Converter for each HP/IP control valves)

- Red "Crossed" existing components shall be dismantled and replaced with new electronic components

Before



Result



Electro-hydraulic converter mounted on each HP/IP control valves allowing much higher control accuracy & performance



2oo3 turbine trip block (TTB) for tripping of HP/IP stop valves for higher availability, better maintenance, easier troubleshooting.



INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

SECURING ICS

- **Nikhil Kapoor, Bechtel India Pvt. Ltd.**

Most critical infrastructure and manufacturing organizations have some level of cybersecurity today. However there is still a good portion of organizations, which have legacy technologies which are inadequate at addressing modern day ICS cybersecurity challenges.

From a network security standpoint, legacy solutions are often based on stateful inspection firewalls which do not provide the layer-7 visibility and user-based access controls required to effectively detect anomalies and minimize exposure. Organizations try to fill the gap by deploying multiple disjointed solutions such as Intrusion Prevention Systems (IPS) and Antivirus appliances & Whitelisting, but this typically results in increased risk of misconfiguration, silos of uncorrelated information, performance degradation and increased costs in terms of capital and operational expenditures. To add to the difficulties, existing endpoint security products operate separately from the network security, but more concerning is how they are only able to address threats which have known signatures, strings, and behaviors. They are unable to prevent attacks which use never-before-seen exploits and malware. Given the high risks involved in protecting ICSs, security solutions must be able to prevent attacks, even Zero Day attacks. Furthermore, the proliferation of point solutions has increased the load on organizations and made the job of securing ICS very complex.

Organizations can no longer rely on disjointed and ineffective legacy point solutions to defend critical infrastructure. The stakes are just too high. They need up to date cybersecurity platform that has the complete and tightly-coupled set of capabilities to prevent threats and reduce the burden on organizations in deploying and maintaining security.

When selecting a platform, one must look for the following nine must-have capabilities:

- Integrates network and endpoint security with a threat intelligence core.
- Classifies traffic based on applications and users, not ports and IP.
- Supports granular network segmentation including role-based access.
- Natively blocks known threats.
- Detects and prevents attacks by unknown malware.
- Stops Zero Day attacks to the endpoints.
- Provides central management and reporting
- Secure use of mobility and virtualization technologies
- Powerful API and industry-standard management interfaces

So the threat landscape to Industrial Control Systems has escalated to a point where legacy technologies are no longer effective in stopping the different types of cyberthreats. A new kind security platform is required to effectively combat cyberthreats and achieve the all-important goal of keeping the process available. The platform must combine the benefits of network security and endpoint security while leveraging a threat intelligence cloud to ensure attacks are prevented wherever they originate.

Furthermore it must provide granular visibility and control at the application and user levels to allow for network segmentation that better aligns with the business needs. The platform must do more than just detect threats and attacks; it must prevent them, even attacks never before seen in the wild. The risks involved in securing critical infrastructure and manufacturing assets are just too high to allow anything but prevention as far as treatment of cyber-attacks. Finally, the platform must be easy to deploy and maintain and should be able to interoperate with other security products. With all these in place, organizations will have the right set of capabilities required to secure modern day ICS while keep uptime and operational efficiency high.



ISA DELHI SECTION

INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI STUDENT CHAPTER EVENTS

New Chapter Introduction

ISA Delhi Section family is happy to announce the new student chapter of **JSS Academy of Technical Education, Noida**. Inaugural ceremony was done on **21st September, 2021** which was attended by more than **125** participants. **Shri. Rajiv Gupta (Executive Director – Technical, Engineers India Limited)** inaugurated the session as **Chief Guest**.

ISA Delhi Section President Shri Sushil Kumar (DGM – GAIL India Ltd, Delhi), was **Guest of Honour** and motivated and congratulated the students. **Presence of Chief Patron, Shri Rohit Bhardwaj** and other **senior leader of ISA Delhi section, Shri Prasanjit Pal**, made the Inauguration very special.

Event Photos



Another feather in cap by ISA Delhi Student section team, led by students from UPES College of Engineering has achieved success by developing OXY-ALL Ventilator.

OXY-ALL Ventilator is a Non-invasive Positive Pressure Ventilator. It is compact and could be used in emergency situation when no other option is available as per the patient requirement. They have made it an Open Source Project and licensed under a Creative Commons Attribution - Non Commercial - Share Alike 4.0 International License.

<https://www.instructables.com/OXY-ALL-Emergency-Ventilator/>



Other Events

- International Society of Automation (ISA) MUJ Chapter, in collaboration with Dept. of Mechatronics Engineering carried out "Online Quiz on Robotics for Class XI & XII Students" on 14th July, 2021.
- International Society of Automation (ISA) MUJ Chapter, in collaboration with the Dept. of Mechatronics Engineering organized a National Webinar on "Career Prospects on Industrial Automation". The entire webinar was focused on sharing and making the students aware about the automation that is going on and how ISA will help and guide them become industry ready. Many insights were shared by the speakers which enlightened students.
- International Society of Automation (ISA) MUJ Chapter, in collaboration with Manipal Institute of Technology ISA Student Section, organized a Tech Workshop on "IoT and Robotics" on 25th April, 2021 on MS Teams. There were over 150 registrations and participation from various Indian Universities.
- ISA UPES student Chapter, Dehradun organized an event "Kalakriti" to celebrate the day of Indian Independence by cherishing a feeling of Patriotism amongst students via embracing their talent in the field of performing arts.
- Two best student papers under the title, "Nursebot: Automating the Healthcare Industry" and "Auto Attendance system with Face Recognition using MATLAB" were selected from Manipal University (Jaipur), and Bhartiya Vidyapeeth, respectively and the same was presented in The automation Virtual Mega Event, TOTAL-2021, conducted by ISA Delhi Section on 3rd and 4th September, 2021.



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ISA DELHI SECTION

ISA DELHI STUDENT CHAPTER EVENTS

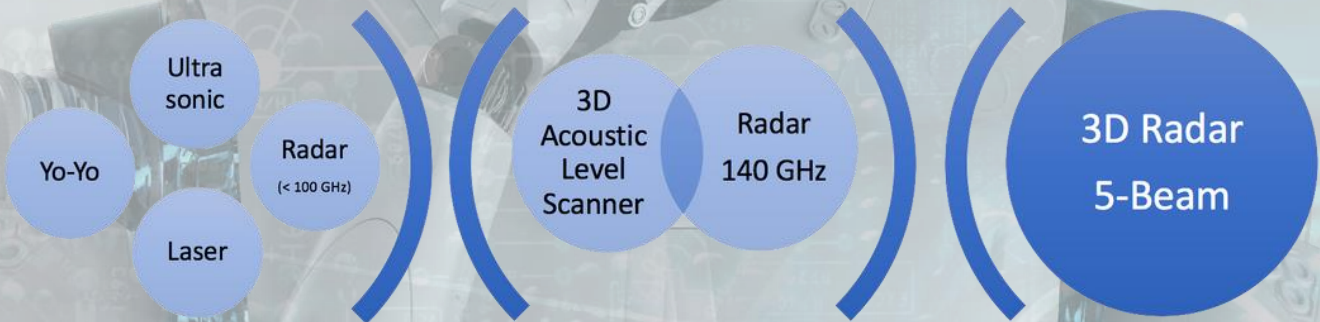
Students presenting Paper in TOTAL-2021



ISA District-14 and ISA Delhi section together organized a webinar on "fast paced innovation - solid level measurement technology" presented by Dr. Abhishek Goyal and Rajat Goyal from EIP Technologies Pvt. Ltd on 18th September, 2021 for all ISA D-14 Student chapters.

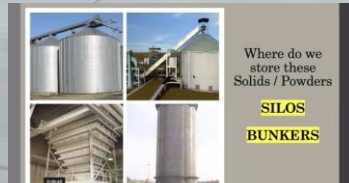
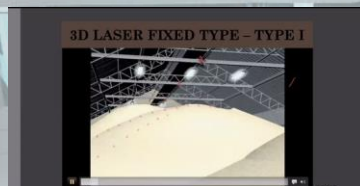
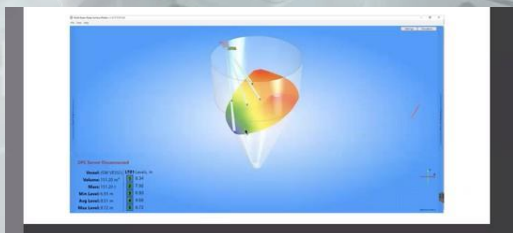
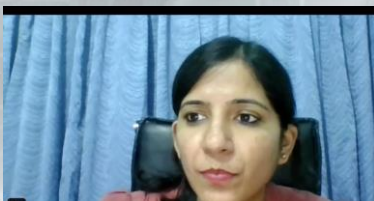
This event was coordinated and moderated by Ms. Pritika Khirwal, NTPC (Student Program Chair, D-14) and provided a brief introduction about bridging the gap between academic education to industry process measurement.

TIMELINE FOR CONTINUOUS LEVEL TRANSMITTER IN BULK SOLIDS AND POWDERS



Team from EIP provided detailed insight about industrial process measurement specifically level, with the changes in technology from Ultrasonic to high frequency radar based to very advanced 3D Level measurement specific to Solid level measurement in industries. Quiz was conducted at the end of the event and Prize winners were honored.

GLIMPSES OF THE EVENT





INTERNATIONAL SOCIETY OF AUTOMATION

ISA DELHI SECTION

Last Edition Quiz Winners:

- 1) D. Narayana dass
- 2) Tushar Garg
- 3) Suresh Jan

QUIZ

- 1) If an increasing signal to positioner causes valve stem to extend, decreasing the flow, the valve is
 - A. Direct Acting
 - B. Indirect Acting
 - C. Reverse Acting
 - D. Forward Acting

- 2) While selecting Cybersecurity platform, which of the following capabilities needs to be taken care of
 - A. Integrates network and endpoint security with a threat intelligence core.
 - B. Classifies traffic based on ports and IP and not applications and users
 - C. Natively unblocks known threats
 - D. Detects and prevents attacks by known malware
 - E. All of the above

Please send your Answers along with Name & Organization Name to:

tr.jegdeesh@eil.co.in and rajatgoyal06@gmail.com

Prizes to be won at the end of the year

**ISA-D REQUEST ALL TECHNOCRATS AND PROFESSIONALS TO JOIN
ISA TO SHARE EXPERIENCE AND KNOWLEDGE**



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