



International Society of Automation
Delhi Section

ISA (D) NEWSLETTER

YEAR 2023-2024, ISSUE NO.3



IN THIS ISSUE

- From President's Desk
- Fertilizer, Food & Pharmaceutical (FFPS), Dec 2023
- SIL Certification- Jan, 2024
- Monthly Meet - Nov, 2023
- Student's Section Activities
- Welcoming New Members (Oct- Dec 2023)
- The Silent Killer of Control system - Temp. & Moist.
- New Year Get together by ISA Delhi Members



✍ From the desk of President ...

I am glad to present before the members, the Year 2023-2024, Issue-III of this Newsletter of ISA Delhi Section after a grand success of Third Technical event in this year, “Fertilizer, Food & Pharmaceutical Symposium, FFPS-2023”, One-day Conference and Exhibition at Scope Convention Centre, Scope Complex, New Delhi on 16th December, 2023.

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, executive committee members and all others who supported ISA Delhi to make this 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 Industries.

I take this opportunity to congratulate the participants for successful completion of SIL Certification conducted in January, 2024, by ISA Delhi team.

I certainly wish that with the support of our active members, our next mega event Power, Petroleum & Power Automation meet PPAM-2024 on 26th & 27th April, 2024 at Hotel Eros, Nehru Place, New Delhi, will also be a grand success.

I would like to complement Newsletter team for their sincere efforts in bringing this issue III of ISA-Newsletter for the members.

M.K. SRIVASTAVA
(Hon President - ISA Delhi Section)



GLIMPSES OF FERTILIZER, FOOD & PHARMACEUTICAL SYMPOSIUM- FFPS 2023 – 16TH DEC 2023

A Technical event, “Fertilizer, Food & Pharmaceutical Symposium – 2023”, One day Conference and Exhibition was organized by ISA- Delhi Section at Scope Convention Centre, Scope Complex, New Delhi on 16th December, 2023. The event was graced by various dignitaries from across industries, ISA members and esteemed guests from various industries.

The One Day conference cum Exhibition was held with a focus to deliberate on the theme Unlocking Growth Potential through Advanced Automation. The event provided opportunities to explore the generic Technology Trends; the Specific Case Studies on best practices; the Transformative Digitalization among the Batch Processing and Continuous Processing Industries to update themselves with the evolving Information Technology, Control and Instrumentation advancements and create a sustainable future.

This event started with welcome greeting of our esteemed dignitaries and lighting of lamps.

Shri M. K. Srivastava, President, ISA-Delhi in his welcome address thanked all the dignitaries for being part of this event and sparing their precious time from their busy schedule. He also thanked all senior advisors, paper presenters, High Power Technical Committee members, sponsors, participants, exhibitors and all others who supported to make this event a happening from beginning. This was followed by address of Guest of Honours. Later Exhibition was inaugurated by chief guest.

Post Tea session, Paper Presentation session was started and great Appreciation was received by the Moderator for making such a wonderful thought-provoking event of the day. Quizzes were conducted by Shri. Manish Kumar, post each session and overwhelming responses were received from audience. ISA Delhi Section acknowledged the active participation of all veterans from industries for being the Chairperson and Co-Chairperson for various Technical sessions by presenting a token of appreciation. ISA Delhi Section also arranged lucky draw for all the esteemed audience, delegates who visited the exhibition and stalls in FFPS-2023, winner was presented with prizes.

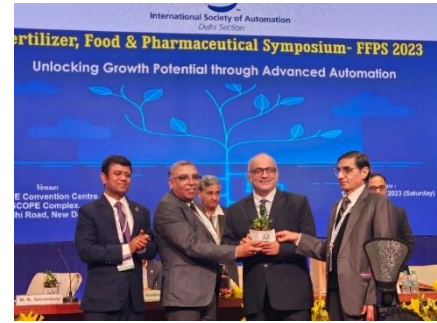
Event inauguration by Dignitaries



Enthusiastic Audience enjoying the event



Glimpses of the event



The Team behind the event



Efforts of all the participants, sponsors, exhibitors, speakers were rewarded with token memento by ISA – D. ISA Delhi Section acknowledged the active participation of all experts from industries for various panel discussions. This mega event concluded with vote of thanks by Shri. Sachin Kumar Agrawal, to all esteemed guests and members and heartfelt memorable moments.

SIL CERTIFICATION – 8TH TO 11TH JAN 2024

ISA Delhi Section once again facilitated its 8th Batch of “Training & Certification Program on Functional Safety (SIL)” a Four-day training cum certification program on Safety Integrity Level from 21st Aug to 24th Aug, 2023 (Monday ~ Thursday) by TUV certified experienced instructors in accordance with the Latest IEC 61508 / IEC 61511 standards at Scope Convention Centre, Scope Complex, Lodhi Road, New Delhi.

ISA Delhi Section once again facilitated its 9th Batch of “Training & Certification Program on Functional Safety (SIL)” a Four-day training cum certification program on Safety Integrity Level from 8th January to 11th January, 2024 (Monday ~ Thursday) by TUV certified experienced instructors in accordance with the Latest IEC 61508 / IEC 61511 standards at Scope Convention Centre, Scope Complex, Lodhi Road, New Delhi.

The program was inaugurated by Mr. Rajiv Gupta - Past President, ISA Delhi Section, Mr. Sanjeev Sharma -IOCL, Mr. N Vinod – IOCL, Mr. Ravinder Goyal - Sr. Advisor and Mr. Gaurav Mittal - Standards & Practices, ISA Delhi Section.

Total 30 participants from various Industrial sectors like NTPC, IOCL, TPL, BPCL MRPL& NFL participated in the SIL Certification course.

It is happy to note that all the participants passed the examination and are now SIL certified, adding a feather to their achievements.

All participants appreciated the program and provided highly valuable feedback.

Glimpses of the event



MONTHLY MEET BY M/S PROTEGO – 24TH NOV 2023

ISA Delhi Section Monthly Meet was conducted at Mirza Ghalib Chamber, Scope Convention Centre, on 24th November 2023, on the topic In Tank Emergency Shutdown valves for Double Walled Tanks (Cryogenic / Hazardous) by Mr Axel Sommer – CSO-Global.

The Speaker briefed and explained operating principle of In tank Emergency shutdown valves, its varies types & sizes. The presenter showed video on it operation, testing of the valves. A demo piece was also display to have real feel of the valve .

The esteemed speakers shared their expertise, sparking thought-provoking conversations that left the audience inspired.

Appreciation Memento was presented to the presenters on behalf of ISA-D team. Monthly Meet was followed by Networking Dinner.

Glimpses of the event



ISA DELHI STUDENT CHAPTER EVENTS

ISA Faculty Advisor Meet 2023

ISA Faculty Advisor Meet 2023 and VVDN - NI Academic Conclave was organized by ISA MPSTME in association with ISA Maharashtra at Mumbai on 22nd, December 2023, by the Faculty Advisors of the International Society of Automation (ISA), which provided a platform for knowledge exchange, collaboration, and strategic planning.

The event commenced with Introduction and the representatives from ISA Maharashtra provided overviews of the latest initiatives, programs, and resources available to students. The best practices in promoting student involvement, organizing events, and integrating industry perspectives into academic activities were also discussed. A dedicated networking session allowed faculty advisors to connect with their counterparts, fostering new relationships and strengthening existing ones and the exchange of initial insights among attendees. This ISA Faculty Advisor Meeting provided a valuable platform for faculty members to connect, share experiences, and explore collaborative opportunities. The event aimed to strengthen the ties between academic institutions and ISA, ultimately contributing to the advancement of automation education and research.

The VVDN - NI Academic Conclave

The VVDN - NI Academic Conclave was organized by ISA MPSTME in association with ISA Maharashtra at Mumbai on 22nd, December 2023, which brought together academia and industry experts in the field of engineering and technology for a collaborative and insightful event. Co-hosted by VVDN Technologies and National Instruments (NI), the conclave aimed to bridge the gap between academic knowledge and industry requirements, fostering innovation and excellence in engineering education.



The various topics covered in the session were “Engineer Ambitiously - The Next Generation Research and Teaching for EV, ADAS, Healthcare “, “5G/6G Teaching and Research with SDR-USRPS and MATLAB”, “LabVIEW Academy Revived: Engineering Innovation Labs”, “Success Stories: Unlock 5G excellence with NI SDR and Mantiswave Solutions”, “Revolutionizing Education: Integrating USRP Platforms into the Curriculum for Advanced”. The focus of the session was on the practical aspects of teaching and conducting research in the rapidly evolving fields of 5G and 6G, utilizing Software-Defined Radio (SDR), Universal Software Radio Peripheral (USRPS), and MATLAB, integration of LabVIEW in practical labs. Experts shared insights into effective curriculum design strategies, illustrating how educators can seamlessly integrate USRP platforms into existing coursework. Emphasis was placed on aligning the curriculum with industry trends and preparing students for real-world challenges.



Fertilizer, Food and Pharmaceutical Symposium-FFPS 2023

Students of JSS Mahavidyapeetha, JSS Academy for Technical Education, Noida participated in the Fertilizer, Food and Pharmaceutical Symposium-FFPS 2023 on 16th December 2023, organised by ISA Delhi Chapter.

The India Automation Games (IAG) 2023

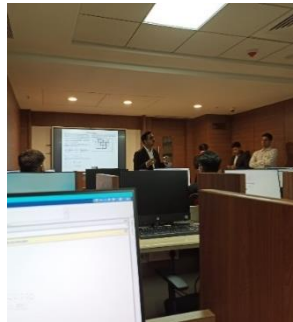
Students of JSS Mahavidyapeetha, JSS Academy for Technical Education, Noida participated in The India Automation Games 2023 on 8th & 9th September, 2023, at the NMIMS Mukesh Patel School of Technology Management & Engineering (MPSTME) in Mumbai. The event organized by the ISA (International Society of Automation) Chapter of MPSTME.

The objective was to promote innovation and collaboration among students and professionals, and to showcase the latest developments in automation technology. In the India Automation Games 2023 (IAG 2023), participants engaged in five exciting challenges such as PLC and Sensorics Challenge, Robotics Challenge, MATLAB Challenge, Pneumatics Challenge & Instrumentation and Control Challenge.

Robotics challenge



MATLAB Challenge



Pneumatics Challenge



Instrumentation & control



Participants' performance is evaluated, and marks are awarded based on their ability to successfully address all challenges. Participated Students were Mr. Abhimanyu Singh Naruka, Mr. Rishabh Kumar, Mr. Shivam Kumar Tiwari.

Seminar on Automation and Augmented Reality under International Society of automation (ISA) student section, JSSATEN.

Seminar on Automation and Augmented Reality was organised under International Society of automation (ISA) student section, JSSATEN in association with ISA Delhi section on 12.09.2023. About 43 students attended the talk. The speaker for the session was Mr. Anand Iyer, Principal Consultant at ICI, Mumbai.

Mr. Anand Iyer gave brief introduction about the need of automation today's world. He said the automation is making lot of tedious and risky manual work to be carried out in easier way. He has also shown some projects that are being carried out under him by different colleges under ISA south and Mumbai regions. Some of the projects are as below.

Invitation



Autonomous moving robot



Under water data acquisition robot



Valve position controller





ISA DELHI WELCOMES OUR NEWEST MEMBERS

It is with great pleasure that we extend a warm welcome to the newest members of our ISA Delhi Section. Your presence enriches our association, and we are excited to see the unique perspectives and contributions you will bring to our Section.

To help you get started and make the most of your membership, here are a few tips:

1. Explore Our Resources: Take some time to browse through ISA Delhi website and familiarize yourself with the various resources available.
2. Connect with Fellow Members: Join ISA Connect where you connect with fellow members, engage in discussions, and forge new professional relationships.
3. Attend Events and Meetings: Keep an eye on our upcoming events and meetings. These are excellent opportunities to network, learn, and collaborate with other members who share your interests.
4. Reach Out for Support: Don't hesitate to contact our ISA Delhi members if you have any questions, need assistance, or have suggestions to share.

Once again, a heartfelt welcome to each of you. We are eager to witness the positive impact you'll make within our association. Together, we can achieve extraordinary things!

New Members for the period Oct to Dec 2023

1	Mr. Shantanu Biswas	16	Mr. Praveen Kumar Singh
2	Mr. Arun Kumar	17	Mr. Surajit Bhattacharjee
3	Mr. Anuj Kumar Gupta	18	Mr. Sandeep Jain
4	Mr. Satyawan Gupta	19	Mr. Pradeep Khatri
5	Mr. Surendra Dungawat	20	Mr. M P Rajesh
6	Mr. Laxmikant Shinde	21	Mr. Jasbir Singh Khurana
7	Mr. Bidita Barman	22	Mr. Vinod Kumar Kalia
8	Mr. Ranjit Roy	23	MR. Vijay Kumar Mahawar
9	Mr. Manmahendra Singh	24	Mr. Navneet Kumar Nagar
10	Mr. Mahesh Kumar Ghindode	25	Mr. Vikas Jain
11	Mr. Viral B Shah	26	MR. Nitesh Raina
12	Mr. Sachin	27	Mr. Vijay Baryana
13	Mr. Enish Bahl	28	Mr. James Arokia Nirmal
14	Mr. Rahul	29	Ms. Tanu Arora
15	Mr. Neeraj Naveen Kumar	30	Mr. Kapil Batra

THE SILENT KILLER OF CONTROL SYSTEMS – TEMPERATURE & MOISTURE

- DR. ASHISH MANCHANDA

With the increase of electronics inside the Control Systems and Electrical Panels in industries, they need a special attention to their operating conditions i.e. Temperature, Moisture, Dust etc in order to ensure the SERVICE LIFE of the Control Panels and Electrical Cabinet in your industry.

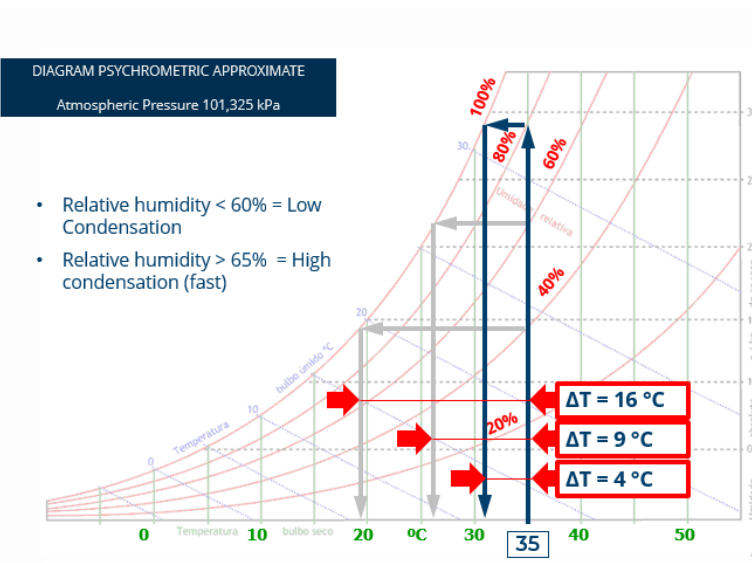
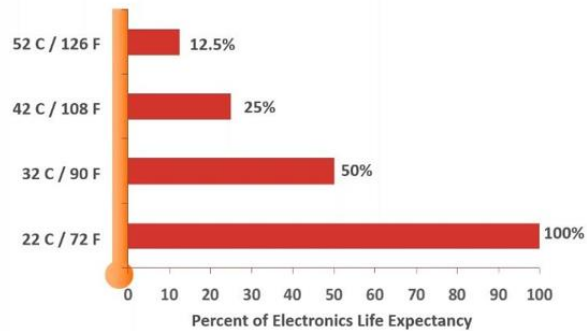


To elaborate, PLC Control Units, DCS IO Cards, SMPS, Drives, MCC and Inverters i.e. the electronic hardware have become very compact physically and energy efficient, but in the bargain, they demand better ambient conditions to keep their service life intact.

The IEC 61439-1 standards, comes to our rescue in specifying the monitoring of both Humidity and Temperature parameters both indoor and outdoor Electrical and Control Panels to drive reliable performance.

Every 10 C / 18 F over room temperature cuts electronics life in half.

A proven fact is that with every 10 deg. Rise in temperature inside the panel, the expected life of the electronics cuts down to half.



The second culprit is humidity, which in combination with temperature causes condensation which is a big enemy for both the electrical as well as electronics systems. The same is described under the IEC 61439-1 Standards for electrical and control panels i.e. both temperature & humidity needs to be monitored simultaneously to avoid the inside panel temp reaching the dew point.

Monitoring the control room humidity is not good enough. See the graph – which clearly depicts an example that at a mere temperature drop of 4 Deg C i.e. from 35 to 31 Deg C i.e. the conditions when condensation can happen if the

Humidity Vs Temperature goes uncontrolled inside the cabinet.

The IEC 61439-1 standard – a replicated part as below highlights the need to manage both Humidity and Temperature

7.1.2 Atmospheric conditions

7.1.2.1 Atmospheric conditions for indoor installations

The air shall be clean and its relative humidity not exceed 50 % at a maximum temperature of +40 °C. Higher relative humidity may be permitted at lower temperatures, for example 90 % at +20 °C. Moderate condensation should be borne in mind which may occasionally occur due to variations in temperature.

7.1.2.2 Atmospheric conditions for outdoor installations

The relative humidity may temporarily be as high as 100 % at a maximum temperature of +25 °C.

If these two parameters exist unmonitored the repercussions are way too many, ranging from alteration in mechanical & electrical properties of the hardware, slow corrosion, reduction in dielectric strength, spark-overs, nuisance tripping, short-circuits etc. that creates premature downtime and related expenditures.

NEW 7T.51



- Thermo-Hygrostatic control

Based on this scope of technology, now innovative yet simple to adopt solutions are available to address this particular problem through a tailor-made solution for these Indian conditions which is a Thermo-Hygrostat. This device allows the user to set levels of both temperature & humidity at different modes keeping the overall ambient conditions under check.

With this kind of a monitoring device, the Panel Cooling Fans and Panel Heaters can also be automatically controlled, consume least energy and deliver much higher service life. This eventually secures a long service run and reduced down time for the components inside the panel by minimizing the exact stresses highlighted above.

NEW YEAR GET-TOGETHER MEET

ISA Delhi organized a New Year Get-together Meet on 6th January, 2024 with all the members and the families. The agenda of the meeting was to Welcome, Meet and Greet the Old and New members of the section and their spouses along with their children. It was an informal gathering with interactive activities followed by dinner.

Glimpses of the event





Appeal from ISA Delhi Section

All members, sponsors, technical experts are invited to contribute in making this quarterly newsletter more informative by sharing their technical expertise in the form of technical literature on latest Technology for the next quarter newsletter.

Ask the Editor

For Technical queries to be answered by experts and/or any suggestions for improvement, Please contact our editorial board comprising:-

1) H.S.Kalsi
hskalsi18@gmail.com

2) T.R.Jegdeesh
tr.jegdeesh@eil.co.in

3) Radheyshyam Tiwari
isadelhi.org@gmail.com

UPCOMING EVENTS OF ISA DELHI SECTION

- ≡ Petroleum & Power Automation Meet - 2024, at Hotel Eros Nehru Place, New Delhi on 26th & 27th April, 2024 (Friday and Saturday).
Link for the event: www.isadelhi.org/upcoming-events.html
- ≡ Monthly meet in Feb, 2024.

All members are cordially invited for the upcoming events and mark the dates in their calendar to make their presence and upskill themselves.

*Excited to learn more and not a member yet?
Why wait, just Scan and join*



DOWNLOAD ISA MEMBERSHIP FORM USING QR CODE
AND MAIL TO INFO@ISADELHI.ORG
FOR PAYMENT PLEASE CONTACT -
MR. RADHEYSHYAM TIWARI+919313384543

For Further Information:

Web-site: www.isadelhi.org **Ph. No:** +919313384543

LinkedIn: www.linkedin.com/in/isadelhisection