



EVENT REPORT

POWER PLANT INSTRUMENTATION

Organized By:

ISA Student Chapter 2024, Instrumentation & Control Eng. Dept.

GEC-Gandhinagar

DATE: October 1, 2024

FACULTY ADVISOR

Dr. S. A. Rankawat

DEPT. COORDINATOR

Prof. Ketan Archarya




An Overview

The ISA (International Society of Automation) Student Chapter at Government Engineering College, Gandhinagar organized an event on **Power Plant Instrumentation** aimed at providing students with in-depth knowledge of control systems, instrumentation, and automation used in modern power plants. The event took place on October 01, 2024, with a large turnout of Instrumentation & Control engineering students, professors, and industry professionals.

Experts from MASIBUS automation were called to share their knowledge with the students. MASIBUS was kind enough to send their Project Engineers **Mr. Amar Parmar & Mr. Jagdish Simariya**.

With an enthusiastic response there were approximate 60 participants.

With the great expertise of keynote speaker all the enthusiastic participants found the technical session informative and worthwhile. The huge participation of the students and the efforts of the expert session team made the event a huge success.

	GOVERNMENT ENGINEERING COLLEGE, SECTOR-28, GANDHINAGAR INSTRUMENTATION & CONTROL DEPARTMENT		
 ISA Students Chapter Organizes			
An Expert Session On Power Plant Instrumentation By Project Engineer: Mr. Amar Parmar & Mr. Jagdish Simariya [MASIBUS Automation]			
Date: 1 st OCT 2024	Time: 03:15 PM Onwards	Venue: Room No. 2202-A	
Registration Link: https://forms.gle/C5WKshuPpC3AK7EH8			
PATRON Dr S. P. Dave Principal	CONVENER Dr N.K. Arora HOD	ISA FACULTY ADVISER Dr S.A. Rankawat	DEPT COORDINATOR Prof. K.K.Acharya

About ISA

ISA (International Society of Automation) is a non-profit professional association that sets the standard for those who apply engineering and technology to improve the management, safety and cyber security of modern automation and control systems used across industry and critical infrastructure.

It was officially established as instrument society of America on 28th April, 1945 in Pittsburgh, Pennsylvania, it's formerly known as Instrumentation, Systems and Automation Society which is a nonprofit technical society for engineers, businessmen, educators, and students who collectively work, study or are interested in field of automation.

Few students who were keen to establish a society or a club focused on industrial automation and professional Instrumentation got an idea to have a chapter being established under the aegis of International Society of Automation. So, after lots of planning and acknowledging students of Instrumentation and control Department of Government Engineering College, Gandhinagar finally established a student's chapter with the name 'ISA Students' Chapter GEC-Gandhinagar' in 2019. There are 25 student section of ISA, which are focusing on overall development of student's skills. GEC-Gandhinagar ISA Section focuses on accomplishing these tasks.

Session Summary

The session commenced with an enthusiastic speech by our esteemed professor, Dr. S. A. Rankawat. Followed by words of enlightenment by professor Prof. K. K. Acharya. The session was then handed over to the students of ISA student Chapter coordinators.



The primary objective of the event was to familiarize students with the critical aspects of instrumentation and automation that are vital to the operation of power plants. Topics included process monitoring, control systems, safety instrumentation, and the role of technology in improving power generation efficiency and safety.



In this session we discussed the types of power plants (thermal, hydroelectric, nuclear) and the role of instrumentation in ensuring their safe and efficient operation. The session also focused on Distributed Control Systems (DCS) and Programmable Logic Controllers (PLCs), which are integral for process control in power plants. The session emphasized safety protocols, alarms, and emergency shutdown systems that ensure smooth functioning of power plants. Real-life case studies of power plant operations were presented, offering students insight into problem-solving and the challenges faced in the field of instrumentation.









Conclusion

The ISA Student Chapter's event on Power Plant Instrumentation was an informative and practical experience that enhanced the participants' understanding of the role of instrumentation and automation in the power industry. It provided a platform for students to connect with industry experts, learn about modern advancements, and explore career opportunities in this specialized field.

The participants provided overwhelmingly positive feedback, with many expressing their appreciation for the depth of knowledge shared. Several students mentioned their increased interest in pursuing careers in power plant automation and instrumentation as a result of the event.

- The event was a resounding success, with key takeaways including:
 - A comprehensive understanding of how instrumentation and control systems contribute to the efficiency and safety of power plants.
 - Insights into the latest technological advancements in power plant automation.
 - Networking opportunities with professionals in the field of power plant instrumentation and control.