

## Invited Speakers

Mr.Partho Pratim Ray  
Sr.Manager,  
Danieli Automation

Mr.Rabindranath Jana  
Dy.Gen.Manager,  
Danieli Automation

Prof.(Dr.) Subhasish Bhaumick,  
Associate Prof  
Dept of Aerospace Engg. And Applied Mechanics  
IEST,Shibpur

Mr. Pabitra Metya  
Siemens, Kolkata

Prof. (Dr.) Alok Kole  
HOD Department of Electrical Engineering  
Rcc Institute Of Information Technology

Mr. Kalyan Biswas  
HOD Department of Applied Electronics  
and Instrumentation Engineering  
Rcc Institute Of Information Technology

## Organizing Committee

**BRANCH COUNSELOR**  
Prof. (Dr.) Alok Kole

**FACULTY MENTOR**  
Prof. (Dr.) Debasis Mondal

**BRANCH CHAIR**  
Mr. Prantar Dutta

**BRANCH VICE-CHAIR**  
Mr. Subhrajyoti Talapatra

**SECRETARY**  
Ms. Mandira Das

**TREASURER**  
MD. Nasir

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Mr. Ushnish Kanti Chakraborty

**HOSPITALITY**  
Mr.Surjay Boral  
Ms. Ankita Banerjee

## HANDS-ON WORKSHOP ON MODERN INDUSTRIAL AUTIOMATION AND CONTROL

23<sup>RD</sup> APRIL TO 26<sup>TH</sup> APRIL 2018  
Venue: RCCIIT Campus



**Organized by:**

Department of

*Electrical Engineering*

&

*IEEE STUDENTS BRANCH*

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## RCC Institute of Information Technology (RCCIIT)

A Government aided Engineering College under an autonomous Society of the Dept. of Higher Education Govt. of West Bengal. It was setup in 1999 with an active support and collaboration of Ministry of Information Technology, Government of India and Department of Higher Education, Government of West Bengal. RCCIIT maintains the status of a leading engineering college in Eastern India, committed to continuous endeavor to comply with higher general & statutory standards set for technical institutions, to create employable professional engineers, responsible global citizens and technological problem solvers. We at RCCIIT undertake to impart knowledge and skill of the highest quality by applying technological innovations through the use of state-of-the art technological tools for generating technical manpower as required in industries, research organizations and academia and to inculcate the importance of inter-disciplinary research and development that directly impacts the social needs of our country.

### Workshop Objective

This workshop intends to focus on the introduction and basic understanding in the fields of PLC, DCS, HMI and AI, and familiarization with recent trends and technical advances in the world of automation.

Along with detailed explanation about related topics such as interfacing and working with PLC-SCADA, fundamentals of process control and smart sensor, AI based automation: its opportunities and future of learning, the workshop also includes hands on practical sessions for implementation of the knowledge gained in the above mentioned topics for application in real life as well.

## Workshop Tracks

### ➤ PLC

- Recent Trends in Industrial Automation & PLC-SCADA
- PLC I/Os Basics, Burning & Interfacing Concepts
- Hands on session on PLC Panel & development of ladder logic
- Automatic testing and trial run of PLC based Automatic controlled real time process

### ➤ DCS

- Fundamentals of Distributed Control Systems (DCS)
- Hardware Architecture of DCS
- Hands on session on DCS & development of DCS Programming
- Case studies and hands on session of DCS based real time process operation

### ➤ HMI

- Introduction to HMI
- Interfacing & Networking with PLC'
- Creating Screen
- Creating Tag Database
- User Input/Outputs Display
- Function Keys
- Uploading/downloading application
- Troubleshooting /Maint.

### ➤ PROCESS CONTROL AND SMART SENSOR

- Hands on session on Process Control
- Fundamentals of Valves, Actuators and smart sensors

### ➤ AI BASED AUTOMATION

- Artificial Intelligence: Opportunities, threats and the future of learning
- Fundamental of AI based Automation
- Hands on session and case studies of AI based control.

## Workshop Schedule

### DAY 1 (23<sup>RD</sup> APRIL 2018)

#### 1<sup>st</sup> Session

Fundamentals of Smart sensor, Process Control

#### 2<sup>nd</sup> Session

Hands on session of Smart sensor and Process Control

### DAY 2 (24<sup>th</sup> APRIL 2018)

#### 1<sup>st</sup> Session

Fundamentals , Hardware Architecture ,I/O s and interfacing of DCS

#### 2<sup>nd</sup> Session

Case studies and hands on session of DCS based real time process operation

### DAY 3 (25<sup>th</sup> APRIL 2018)

#### 1<sup>st</sup> Session

HMI, Interfacing & Networking with PLC's

#### 2<sup>nd</sup> Session

Fundamentals and Hands on session and case studies of AI based Automation

### DAY 4 (26<sup>th</sup> APRIL 2018)

#### 1<sup>st</sup> Session

Fundamentals and HARDWARE Configuration of PLC

#### 2<sup>nd</sup> Session

Hands on session on PLC, development of ladder logic and Automatic testing of PLC based Automatic controlled real time process

## Contact Persons

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