

IISc Industry 4.0 Workshops

Title of the workshop: "OPC UA –Platform enabler for Smart Manufacturing for MSMEs"

Date: 18th January 2019 (Friday)

I4.0India@IISc Smart-Factory Platform (under the SAMARTH Udyog Bharat 4.0 Programme of the Department of Heavy Industries, Government of India) at the Centre for Product Design and Manufacturing (CPDM), Indian Institute of Science (IISc), Bangalore and German Engineering Federation (VDMA India) have jointly conducted a workshop on OPC-UA for Industry 4.0, on 18th Jan 2019. This workshop discussed various aspects of Industry 4.0 and associated technologies, in particular the OPC-UA. The participants came from various manufacturing MSMEs and large organisations in urban sectors.

The total number of participants was around seventy, who actively participated in this one day workshop held at CPDM, IISc, Bangalore.

An introductory talk on “Industry 4.0: An IISc Perspective” was delivered by Professor Amaresh Chakrabarti, Chairman, Centre for Product Design and Manufacturing, IISc, Bangalore. Mr. S. Manohar, Regional Head - South, VDMA India delivered a talk on “OPC-UA Adaptability for Smart Manufacturing”. Mr. Hitesh Prajapati, Technical Manager and Product Specialist - TwinCAT, Beckhoff Automation Pvt Ltd, India conducted an awareness session on “PC based automation for Smart Factory”. Mr. Sanjay Shanbhag, Sub-Segment Head responsible for Motion controls portfolio under Digital Factory, Siemens talked on “SINUMERIK Access MyMachine/OPC UA”. Ms. Smitha Rao, Co-Founder, Utthunga Technologies India conducted an awareness session on “OPC UA – Technical Deep Dive”.

All the participants visited the I4.0India@IISc smart factory platform being developed at IISc and witnessed live project demonstrations e.g. smart resource bin, smart inspection tool, smart dashboard, smart PCB assembly, etc. The participants were also actively involved in hands on sessions on “OPC UA: Technical Introductions” by Beckhoff, Siemens & Utthunga Technologies India.

Objectives of the Workshop

- ✓ What is really behind Smart Factory & what are its existing technologies?
- ✓ Understanding Industry 4.0 and OPC-UA
- ✓ Relevance of OPC-UA to Industry 4.0 and implementation in MSMEs
- ✓ Need of Industry 4.0 in MSMEs to become smart manufacturers
- ✓ Products and solutions required for smart manufacturing
- ✓ Hands on sessions on Smart Manufacturing solutions