PBCS: PLC based control systems Workshop

Friday, 15 October 2021 - Friday, 15 October 2021

Shanghai (China) [Virtual]

Scientific Programme

Introduction

Workshop introduction and goals

Technology trends in industry

Follow up industry trends

Institutes presentations

Workshop participants institutes activities and challenges

(1) Specifications

Best practices
Trace requirements
Documents and tools: Design, Implementation, User manual

(2) Project development

Standards and/or Frameworks.
Language choice, coding conventions
Novel paradigms: e.g. Automatic code generation, object orientation, external engineering tools, domain specific languages

(3) Testing and verification

Methodologies and tests (FAT, SAT)
Simulation, virtual commissioning
Automated testing
static analysis
Verification: formal methods

(4) Application management

Versioning
Deployment
Online changes, management of changes
Reverse Engineering
Continuous integration