

# ICALEPCS 2017 Workshop: PLC based control systems



**Saturday 7 October 2017 - Saturday 7 October 2017**

**Barcelona (Spain)**

## **Scientific Programme**

Tracks illustrate the life-cycle of a PLC based application, from the requirements phase to the deployment and maintenance periods.

## **(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  
static analysis  
Verification: formal methods

## **(4) Application management**

Versioning  
Deployment  
Online changes  
Management of changes  
Reverse Engineering