

PBCS: PLC based control systems Workshop



Saturday 7 October 2023 - Saturday 7 October 2023

Cape Town (South Africa)

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