



Date: March 22-23, 2012
Where: Indiana Convention Center. Indianapolis Downtown
Cost: US \$1,400/student
Register: www.optimogrp.com

Optimum Loop Tuning Course Description

This 2-day course/workshop (1.4 CEU's) teaches the methodology to optimally perform comprehensive process control loop tuning. There is much more to loop tuning than just applying tuning equations and calculating PID tuning parameters in a process control loop. In not few cases, control loop tuning by trial and error has become a case of "trial and horror". The as-left response of control loops may have a significant impact on the performance of a manufacturing plant. The ultimate goal when tuning control loops is to minimize process variability, thus optimizing the economic performance of a plant. Process variability costs money. Topics include the PID control fundamentals, self-regulated and integrating processes, loop tuning procedure, process dynamics, Lambda tuning and other tuning methods, process variability, stability, controllability, and control loop performance. The course includes labs and exercises that complement and enrich the learning and skills to perform optimum loop tuning from the process plant performance point of view.

Goals

- Learn the methodology to perform optimum control loop tuning in a plant comprehensive way
- Learn to perform loop tests to properly identify process dynamics
- Become skilled at quantifying process variability and the impact of control loops on plant performance
- Learn to apply Lambda tuning method and compare different loop tuning methods
- Work on interactive labs on simulated processes
- Learn the concepts of stability and controllability of process control loops

Who Should Attend

- Operations, plant, and automation managers
- Automation project engineers
- Process and control engineers
- Maintenance managers
- Instrument, control, and operation technicians

Course Topics

- Fundamentals of PID-based control
- Fundamental theory aspects of automatic process controls
- Process dynamics: self-regulated and integrating processes
- Process variability
- Comprehensive loop tuning
- Lambda tuning method
- Other control tuning methods
- Control loop performance

Instructor:

Fernando Otero is a Certified Automation Professional, CAP, from International Society of Automation and a senior consultant in the field of automatic process controls. Fernando Otero holds a Bachelor Degree, a Master of Science Degree, and is a PhD Candidate in Chemical Engineering. Both graduate studies were specialized in automatic process control of physical-chemical processes. He has 24 years of experience in both industry and education and training in the field of automatic process controls. Fernando is the president and founder of the consulting firm Optimo Group Inc. in Indiana, USA. Previously, he worked for the Colombian Oil Company for 9 years and then for Cornerstone Controls Inc. for 11 years in Indianapolis, USA, as a process controls consultant. Fernando's experience includes process control and automation strategy design, feasibility and implementation of advanced process controls, process variability optimization, optimum loop and plant tuning, and teaching courses and seminars in process controls.

www.optimogrp.com

Registration Form

Optimum Loop Tuning (March 22-23, 2012)

Course Name _____ Total: \$ 1,400 _____

Name _____

Phone _____

E-mail _____

Address _____

Method of Payment

Check Enclosed

PayPal (www.optimogrp.com)

Bill Me

Optimo Group Inc.
 Contact: 317-650-3029
 13641 Shore Cove Ct.
 Carmel, IN 46074. USA

Phone: 317-650-3029
 Fax: 317-873-3159
 E-mail: information@optimogrp.com

Signature _____

Registrants are responsible for their own hotel room reservation. There are plenty of hotel options connected to the Indiana Convention Center. The attendees need to register 3 weeks in advance to ensure that space and materials will be available. Optimo Group Inc. reserves the right to cancel the course based on a minimum number of registrants. The course is limited to 15 participants.

Pre-requirements:

- Process control theory fundamentals
- Experience in PID-based process control
- Basic mathematics



Optimo Group Inc. is an Indiana based process control optimization consulting firm that provides services in automatic process controls, including process control design and optimization, advanced process control and process automation.