

PROCESS CONTROL FOR METALLURGISTS

INSTRUCTOR: DR. MOHSEN YAHYAE

Date: August 3-4, 2023

Schedule: 2:00 p.m. to 8:30 p.m.(peruvian time)

Online: Zoom platform and InterMet virtual campus

ABSTRACT

The short course will cover process control basics, focusing on developing applied knowledge for mineral processing engineers. The short course is designed in four modules that can be tailored to the need and the level of knowledge of the participants. Module one focuses on the fundamentals and basic components of control systems. Module two focuses on tuning PID controllers and reviews applied methods common in the industry for tuning different control loops. Module three is an activity-based module for the participants to use Loop Pro simulation software and gain practical experience working with PID controllers and conducting tuning of PID controllers. Module four reviews common control strategies for different operating units in mineral processing plants, their pros and cons, as well as common problems observed in practice. Also, in this module, instrumentation and key factors in selecting instrumentation for process control will be discussed.

TARGET AUDIENCE

Because of this short course flexibility, where attendants chose which days to attend, this short course is then aimed to both junior and senior metallurgists and students at various levels. The short course will provide metallurgists and plant managers with a basic understanding of what process control is and the key aspects of designing and operating process control loops. This will allow metallurgists and plant managers to design and evaluate different process control systems actively .

A practical approach is taken when covering all the topics in the short course, with real-life case studies and best practises. The prerequisites for attendees are engineering degrees and experience in metallurgical processes (comminution, flotation, dewatering, etc).

COURSE CONTENTS

The short course is organised into 4 modules, as shown in the table below. The course is offered online.

SESSION	DAY 1	DAY 2
	MODULE 1 <i>Introduction</i>	MODULE 3 <i>Practical</i>
1	What is process control	Loop Pro Introduction
2	Stabilising process control	Loop Pro Activities
3	PID Controllers	Loop Pro Activities
	COFFEE BREAK	
	MODULE 2 <i>Tuning of PID controllers</i>	MODULE 4 <i>Application</i>
4	PID Controllers	Common issues in the control of mineral processing plants
5	Tuning of PID controllers	Common issues in the control of mineral processing plants
6	Tuning of PID controllers	Common issues in the control of mineral processing plants

INCLUDES LOOP PRO SOFTWARE

One-year license



INSTRUCTOR



DR. MOHSEN YAHYAEI

COMMINUTION TECHNICAL SOLUTIONS
UNIVERSITY OF QUEENSLAND, SMI, JKMR

<http://researchers.uq.edu.au/researcher/2653>

Mohsen Yahyaei is an expert in modelling, optimisation, and control of comminution circuits using novel approaches and tools at the Julius Kruttschnitt Mineral Research Centre (JKMRC) at the University of Queensland, Australia. Mohsen has extensive experience in conducting applied research, industry surveys and process optimisation. Mohsen works with major mining companies and equipment suppliers. He has successfully led large research projects funded by the industry. Mohsen has extensive experience working with mining companies and their operations for operational diagnosis and identifying performance improvement opportunities in particular.

His interests include: process autonomy; dynamic modeling for process optimization and control; study of rock particle surface fracture; mechanistic approach to mill liner wear modeling.

INVESTMENT: USD 1,200

PAYMENT METHODS

- Bank transfers (commissions are not included)
- Payment link
- Western Union (request data)
- Money Gram ((request data)

TRANSFER

- **Deposit at Bank:**
BANCO DE CRÉDITO DEL PERU
- **Beneficiary:**
INTERNATIONAL METALLURGICAL CONSULTANTS S.A.C.
- **Account Number in Dollars :**
193-1872625-1-12
- **SWIFT code :**
BCPLPEPL
- **Inter- bankcode:**
00219300187262511219
- **Bank Address :**
Jr. Lampa 499. Lima , Peru



PAYMENT LINK

<https://pagolink.niubiz.com.pe/pagoseguro/INTERMET/1764161>

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