



Intensive Course:

# Process Modeling with SUMO

August 6-7, 2019

University of California, Irvine | Engineering Hall | Barsamian Colloquia Room 2430

**Lecturers:**

**Prof. Diego Rosso (UCI)**

**Dr. Imre Takács (Dynamita)**

**Ferenc Házi (Dynamita)**

This short course aims at introducing the basics of process modeling with a dynamic simulator, with hands-on exercises. A field visit to a local plant can be arranged on the day following the course (attendance is optional).

Day 1: Introduction and hands-on exercises on process design and nutrient removal.

Day 2: In-depth topics, including aeration, settling, digestion, high-rate processes, anammox.

**Registration (deadline extended to July 14):**

**One day: \$600 / person (before 6/30/2019) - \$650 / person (after 6/30/2019)**

**Two days: \$900 / person (before 6/30/2019) - \$950 / person (after 6/30/2019)**

Registration includes lunch. Dinners, travel, and accommodation are not included.



**Diego Rosso** is Professor of Civil and Environmental Engineering and of Chemical Engineering and Material Science at the University of California, Irvine, where he is also Director of the Water-Energy Nexus Center. Since 2000, he has been investigating aeration systems and the water-energy-carbon nexus of water reclamation and reuse processes. He holds degrees from the University of Padua from the University of California, Los Angeles.



**Imre Takács** is CEO of Dynamita. He completed his education in Budapest, Hungary, followed by Hamilton, Ontario, Canada and received his PhD in Environmental Technology from Ghent University in Belgium in 2008. Imre has 37 years of experience in wastewater process engineering using advanced tools such as dynamic modelling. His area of expertise covers many aspects of advanced wastewater treatment.



**Ferenc Házi** is a senior process engineer and project manager at Dynamita. Ferenc holds an MSc in environmental engineering from the Faculty of Chemical Engineering at the Budapest Technical University. Before joining Dynamita, Ferenc gained considerable experience as an environmental consultant in water, wastewater, soil remediation and waste-processing projects. He specializes in dynamic computer modelling of environmental and biological processes focusing for 5 years on biofilm technology development. He spent the last year on the gas transfer model development for Sumo models.

*Dynamita is an environmental process modelling company, makers of the Sumo simulator, with extensive experience in wastewater process engineering. Dynamita's expertise covers many aspects of advanced wastewater treatment such as nutrient removal, including nutrient removal to very low limits, sedimentation, chemical treatment, chemical phosphorus removal, anaerobic digestion, sidestream treatment, as well as industrial wastewater treatment. Dynamita developed advanced aeration models that will be used in the course.*

**Registration/Questions:  
Prof. Diego Rosso  
(bidui@uci.edu)**



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