

## Modelling Activated Sludge Plants

organised by the Good Modelling Practices Task Group

8+9 October 2016

Pre-conference training to  
the IWA WWCE 2016

Brisbane, QLD, Australia

### How to use Activated Sludge Models in Practice?

There is an ample need for hands on practice of mathematical modelling of Activated Sludge plants.

The two day modelling course provides detailed instruction on mathematical models, their structure and use in practice such as design, operation and control in activated sludge plants, and ample hands-on opportunity to use these models in a class-room setting. The learner will gain an understanding of structure of the IWA Activated Sludge Models (ASMs) and get a hands-on opportunity to use these models.

### Target Audience:

The modelling course is limited to a participation of max 25-30 persons, related to the number of computers available in the class room.

The following audiences interested in modelling wastewater treatment

- Consultants,
- Plant managers or operators,
- Water boards and
- Academics

### Registration:

This training comes at extra cost and is separately accessible to non-delegates of the congress also.

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|-----------------------------|---------------|
| • Delegate category         | Training fee* |
| • IWA member                | €350          |
| • Non IWA member            | €400          |
| • IWA LIC member + Students | €200          |
| • Non IWA LIC + Students    | €250          |

\*The Fee includes morning coffee/ tea, lunch and materials. Participants are requested to bring their laptops.

For details on registration please visit <http://www.iwa-network.org/event/world-water-congress-exhibition-2016/trainings/>.

If you have further questions about the content of the training, please contact Günter Langergraber at [guenter.langergraber@boku.ac.at](mailto:guenter.langergraber@boku.ac.at).

## Content:

The content of the training is based on the work of the GMP TG, i.e. the IWA Scientific and Technical Report No.22 on "Guidelines for Using Activated Sludge Models" released in 2012.

Participants of the course will have opportunity to purchase the STR at a special rate.

The goal of the GMP TG was to set up an internationally accepted framework to deal with the ASM type models in practice. This framework makes modelling more straightforward and systematic to use especially for practitioners and consultants. Additionally, it helps to define quality levels for simulation results and provides a procedure to assess this quality and assists in the proper use of the models.

The framework describes a methodology for goal-oriented application of activated sludge models demonstrated by means of a concise guideline about the procedure of a simulation study and some illustrative case studies. The case studies give examples for the required data quality and quantity and the effort for calibration/validation with respect to a defined goal.

## Trainers:



**Günter Langergraber** is a senior scientist at the Institute for Sanitary Engineering and Water Pollution Control at the University of Natural Resources and Life Sciences, Vienna, Austria (BOKU University). He is IWA Fellow and active in several IWA Specialist Groups and Task Groups including the IWA GMP TG, and co-author of the GMP STR.



**John B. Copp** is a Principal at Primodal Inc. and has over 20 years applied wastewater treatment process modelling experience. John specialises in custom model development and the development of nutrient removal process models for clients around the globe. John has co-authored several books on online model-based control, as well as a chapter in WEF's MOP31. He is an active member of several IWA and WEF specialty groups including IWA's Benchmarking Task Group and Vice-Chair of WEF's MEGA group.

