



Danmarks
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1 – 4 September 2019 | Copenhagen - Denmark

WATERMATEX 2019

10th IWA Symposium on Modelling and Integrated Assessment



Photo: Jacob Schjørring and Simone Lau, Copenhagen Media Center

August 31 until September 5 2019, the 11th IWA Symposium on Modelling and Integrated Assessment (Watermatex2019) was held in Copenhagen, Denmark. This international conference was organized by IEA (Lund University, Sweden) and PROSYS (Technical University of Denmark) under the leadership of Dr Ulf Jeppsson and professor Krist V. Gernaey and with full support of IWA and the IWA Specialist Group on Modelling and Integrated Assessment (MIA). More than 200 registered delegates participated, representing all parts of the world (all continents except South America were present), making it the largest Watermatex conference to date.

Watermatex2019 kicked off with a full-day workshop for Young Water Professionals on Saturday August 31. On Sunday there were six parallel workshops on the topics CFD modelling, digitalization of the water business, modelling of membrane systems, uncertainty analysis, integrated modelling of the urban water system and life-cycle analysis. Thereafter followed three days of more traditional sessions (3 tracks in parallel), covering most areas of water systems but of course with a special focus on modelling and assessment. Topics covered included machine-learning, control, resource recovery, decision-support systems, climate-water-energy-food nexus, CFD modelling, sensors, monitoring systems and much more. In total about 90 oral presentations. Moreover, there were almost 50 posters available during the entire conference and 20 of the poster presenters were given the opportunity to give a flash presentation for the entire auditorium. The organizers are very happy to see that the interest for using modelling and simulation as a standard tool in the water business is rapidly increasing. An open group meeting for all members of the IWA

Specialist Group MIA was also held on September 2 at which the outgoing chair prof. Ingmar Nopens (University of Ghent, Belgium) was heartfully acknowledged for all his services and the incoming chair, Dr Ulf Jeppsson, was inaugurated.

Four specially invited keynote speakers were also present to provide their views on specific hot topics – prof. Kala Vairavamoorthy (Executive Director IWA), prof. Peter Vanrolleghem (Université Laval, Canada), prof. Zhiguo Yuan (University of Queensland, Australia) and Dr Victoria Ruano García (University of Valencia, Spain). Another three plenary presentations were also given. The conference finished with a technical tour to the Lynetten WWTP in Copenhagen organized by BIOFOS and a special course on “Methods for validation of sensor data” organized by Dr Kris Villez (EAWAG, Switzerland).

All the above in combination with a wonderful venue location, a great reception on Sunday evening, an open-cocktail & poster session, delicious lunches and a wonderful gala dinner at the new Opera House in Copenhagen led to that all delegates returned home happy and satisfied – we hope.

Among the sponsors were VA-kluster Mälardalen, RISE – Research Institutes of Sweden, BIOFOS, IWA Publishing, Veolia and AM TEAM. The conference was also financially supported by IWA Sweden, COWIfonden and Otto Mønstedts Fond. All information regarding Watermatex2019 is available at the still fully active web site (watermatex2019.org). There you can also find the outcome of the official survey evaluation, conducted shortly after the conference. In 2020 a special issue of the IWA journal Water Science and Technology will be published, which will contain some 40 extended and updated papers from Watermatex2019. The next Watermatex conference will take place in Québec City, Canada in 2023 and will be organized by prof. Peter Vanrolleghem och Dr Elena Torfs (University of Ghent, Belgium).

Our sincere thanks to all of you who helped organize this great event as part of the local organizing or scientific committees or in some other capacity. A VERY special thanks to the core group of organizers of Watermatex2019 (alphabetically): Dr Xueming Chen (PROSYS, DTU), Dr Xavier Flores-Alsina (PROSYS, DTU), Ms Anja Ninette Jensen (PROSYS, DTU), Dr Elham Ramin (PROSYS, DTU), Dr Pedram Ramin (DHI) and Dr Ramesh Saagi (IEA, LU).

Happy Holidays,

Ulf Jeppsson & Krist V. Gernaey (co-chairs Watermatex2019)