

Mallinnusseminaari 12.12.2016

Aalto University – The Stage, Design Factory, Betonimiehenkuja 5, Espoo

9:00 Foreword, Harri Koivusalo, Aalto University

9:10 Session I – Soil and Groundwater Processes

Chair: Harri Koivusalo, Aalto University

- 9:10 Estimations of unsaturated zone flow and groundwater recharge using a coupled UZF1 and MOFLOW approach
Samrit Luoma (GTK) & J. Okkonen
- 9:30 Modelling tools in managed aquifer recharge
Paula Niinikoski (HY), S. Saraperä, N. Hendriksson & J. Karhu
- 9:50 Role of connectivity on the formation of anomalous transport nearby pumping wells in heterogeneous aquifers
Daniele Pedretti (GTK)

10:10 Poster Pitching Session (1 min per poster)

Chair: Kersti Haahti, Aalto University

10:20 Coffee & Poster Session

10:50 Session II – Large-scale Coastal and River Systems

Chair: Timo Huttula, SYKE

- 10:50 Forecasting upwelling events on the Gulf of Bothnia with monthly ensembles
Petra Roiha (FMI), A. Westerlund & N. Haavisto
- 11:10 High-resolution 3D hydrodynamic model for the Finnish Archipelago Sea
Elina Miettunen (SYKE), L. Tuomi, J. Ropponen & R. Lignell
- 11:30 Assessment of river flow impacts of hydropower development in the Mekong River Basin
Timo A. Räsänen (Aalto), H. Lauri, J. Koponen, P. Someth, J. Sarkkula & M. Kummu
- 11:50 Trooppisten syklonien vaikutus Mekong-joen sedimenttikuormitukseen
S. E. Darby, C. R. Hackney, J. Leyland, M. Kummu, Hannu Lauri (YVA Oy), D. R. Parsons, J. L. Best, A. P. Nicholas & R. Aalto

12:10 Lunch break

13:10 Session III – Water Quality Management in Drained Fields and Forests

Chair: Leena Finér, Luke

- 13:10 Skenaariosimuloinnit glyfosaatin ympäristövaikutuksiin liittyvässä hankkeessa
Katri Siimes (SYKE)
- 13:30 Computational assessment of sediment balance and suspended sediment transport pathways in subsurface drained clayey soils
Mika Turunen (Aalto), L. Warsta, M. Paasonen-Kivekäs & H. Koivusalo
- 13:50 Simulating water flow in subsurface drained clay soil with 3D hydrological model
Heidi Salo (Aalto), L. Warsta, M. Turunen, M. Paasonen-Kivekäs, J. Nurminen, L. Alakukku, M. Myllys, H. Koivusalo

14:10 Model-based assessment of water protection methods in a drained peatland forest catchment
kersti Haahiti (Aalto), M. Nieminen, L. Finér, H. Marttila, T. Kokkonen & H. Koivusalo

14:30 Coffee & Poster Session

15:00 Session IV – Simulation Studies of Catchments and Lakes

Chair: Ari Jolma, SYKE

15:00 The impacts of water clarity to lake thermal stratification based on 1-D lake modeling
Jouni Heiskanen (HY), A. Nordbo, I. Mammarella, A. Ojala & T. Vesala

15:20 Raudan kulkeutumisen mallintamisen kehittäminen jatkuvatoimisen
alkuaineepitoisuusmonitoroinnin avulla
Markus Saari (Oulu), P. M. Rossi, K. Von der Geest, A. Mäkinen, H. Marttila & H. Postila

15:40 Radionuklidien purkautumisen mallinnus pohjasedimenttien läpi järviveteen – Case
Liponjärvi, Eurajoki
J. Pohjola, Jari Turunen (TUT) & T. Lipping

16:00 A process-based model for simulation of lake oxygen and dissolved inorganic carbon
Petri Kiuru (SYKE), A. Ojala, I. Mammarella, J. Heiskanen, T. Vesala & T. Huttula

16:20 The INCA-Pathogens model application to the Finnish river basin
Katri Rankinen (SYKE), P. Whitehead, D. Butterfield, H. Leckie, J. Uusi-Kämppä & T. Pitkänen

16:40 Closing of Seminar, Harri Koivusalo

Posters

- a. Floodplain vegetation controls on cohesive sediment transport: two-stage channel approach for improving water quality
Kaisa Västilä (Aalto) & J. Järvelä
- b. Modelling wetland-groundwater interactions in the boreal Kälvsvaara esker, Northern Finland
Anna Jaros (Oulu), P. M. Rossi, A.-K. Ronkanen & B. Kløve
- c. An exploration of water poverty in Lao PDR – Integrating hydrological modelling and demographic data for data mining purposes
Marko Kallio (Aalto)
- d. Comprehensive and systematic knowledge quality assessment as a tool for model qualification
Ari T. K. Ikonen (EnviroCase Oy) & V. Kangasniemi
- e. Open data and open tools in high-resolution urban rainfall-runoff modelling
Tero Niemi (Aalto), L. Warsta & T. Kokkonen
- f. Terrestrial laser scanning and pin meter measurements for erosion and roughness assessment in boreal peatland forest ditches
Leena Stenberg (Aalto), T. Tuukkanen, L. Finér, H. Marttila, S. Piirainen, B. Kløve, & H. Koivusalo