

4th Annual Meeting of **DWRP** 10 January 28-29 2010

VENUE:

**The Geological Survey of Denmark and Greenland
(GEUS),**

Øster Voldgade 10, 1350 København K. Auditorium Theodor Sorgenfrei.

Selected current Danish R&D projects covering different water areas will be presented. Besides the oral programme, a poster session will also take place, and researchers are therefore invited to submit posters presenting relevant projects before January 22.

Participation is free for members of DWF (member list, see www.danishwaterforum.dk/members) and the fee for non-members is **200 DDK** per person to cover meals and refreshments.

Registration by email to DWF at dwf@danishwaterforum.dk with subject: "DWRP10". before January 25, 2010.

For paying members, please provide billing information, including EAN number.

PROGRAMME

Thursday January 28, 2010

8:30 *Registration and coffee*

Opening session

9:00 Bjørn Jensen, *GEUS*, Chairman of DWRP.
Welcome and introductory remarks

Session 1: GROUNDWATER

- 9.15 Henrik Madsen, *DHI*. Optimisation of groundwater well field management.
- 9.35 Florian Einsiedl, *DTU Environment*. The impacts of microbial processes and hydrogeological parameters on chemical gradients in porous groundwater systems.
- 9.55 Paul Thorn, *Roskilde University*. Groundwater salinity in Greve, Denmark – Modeling and management of the municipality's groundwater resource.
- 10.15 Peter Scharling, *GEUS*. 3D regional scale hydrostratigraphic modeling based on sequence stratigraphic methods: a case study of the Miocene succession in Denmark.

10:35 - 11:00 *Coffee break*

Session 2: Water and Climate

- 11.00 Quinqu Zhou, *DTU Environment, et. al.* Design practice for urban drainage including climate change impacts.
- 11.20 Torben Sonnenborg, *GEUS*. Impact of alternative bias corrections on climate projections and predicted pesticide leaching.
- 11.40 Chiara Fratini, *DTU Environment, et. al.* Three Point Approaches for urban flood risk management: adapting to climate change through transdisciplinarity and multi-functionality.
- 12.00 Discussion.

12:15 - 13:00 *Lunch break*

Session 3: Water resources

- 13.00 Martin Olsen, *Roskilde University, et al.* How to assess groundwater extraction impact on instream physical habitat conditions in small lowland streams.
- 13.20 Jørgen Windolf, *NERI, University of Aarhus, et. al.* Freshwater discharge, 1990 – 2008. Assessment of freshwater discharge to coastal waters round Denmark using a meta DKQ-model combining measured and DK-model estimated discharge.
- 13.40 Berit Hasler, *NERI, Department of Policy Analysis, University of Aarhus, et. al.* Valuation of water quality improvements in the Water Framework Directive: Valuation results, benefit transfers and the practical use in WFD implementation.
- 14.00 Britt Christensen and Jens Christian Refsgaard, *GEUS*. Nitrate reduction in geologically heterogeneous catchments.

14:20 - 14:50 *Coffee break*

Session 4: Urban Water

- 13.00 Jan Jeppesen, *Alectia* and Steen Christensen, *University of Aarhus*. The hydrological possibilities and consequences of using Sustainable Urban Drainage Systems (SUDS) in Copenhagen.
- 13.20 Laure Lopato, *DTU Environment, et. al.* Monitoring of gas bubbles in rapid sand filters.
- 13.40 Luca Vezzaro, *DTU Environment, et. al.* Model based prediction of micropollutant fluxes in stormwater treatment systems.
- 14.00 Ole Fryd and Antje Backhaus, *Forest and Landscape, University of Copenhagen*. Confronting the problem of implementing sustainable urban drainage systems – An interdisciplinary case study project in Copenhagen.

The Danish Water Research Platform (DWRP)

was founded in 2005 within the framework of Danish Water Forum (DWF). The purpose of the platform is to be the R&D network of Danish R&D institutions and scientists within the water sector, and the forum where all other stakeholders in the sector with an interest in R&D products can get in contact with the research communities.

DWRP is governed by a steering group, and the scope of activities covers different aspects of water research, such as water resources, urban water (water supply and wastewater), water and climate, management and decision support, water and health, water pollution and protection.

For more information, please refer to www.forskningsplatformen-vand.dk/ or contact Jesper Dannisøe (jda@dhigroup.com)

Danish Water Forum (DWF) is a network of Danish water organisations aimed at highlighting Danish expertise and knowledge in Denmark and internationally and facilitating partnerships and concerted actions across the sector. The competences and high standards of its members make DWF an excellent entry point to the Danish water sector and its services within all aspects of water industry, technology, science and management. DWF represents:

- Manufacturers and suppliers
- Water companies
- Contractors and consultants
- Research institutions
- Funding agencies and donors
- Governmental authorities
- NGO's

DWF is open to all Danish organisations within water and related sectors, such as environment, climate, agriculture, and health.

For further information, please refer to www.danishwaterforum.dk or contact Miriam Feilberg (mfe@dhigroup.com)



Session 5: Detection and sensor systems

- 14.50 Michael Bache, *DTU Nanotech*. Characterization of a cantilever based detection system for a BAM pesticide assay.
- 15.10 Basil Uthuppu and Mogens Havsteen Jakobsen, *DTU Nanotech*. Immunoassay based electrochemical sensor for quantitative detection of BAM in ground water.
- 15.30 Michael R. Rasmussen and Søren Thorndahl, *Aalborg university*. Application of X-band and C-band weather radar technology for forecasting precipitation over urban areas.
- 15.50 Helle Marcussen, *KU Life, et al.* Taste of drinking water as a function of aquifer geochemistry and land use.

Session 6: Water and agriculture

- 14.50 Line Fredslund, *GEUS, et al.* Leaching of pathogens from manure to drainage water – assayed using classic and DNA/mRNA based methods.
- 15.10 Christian R. Jensen, *KU Life, et al.* New water saving deficit irrigation guidelines for potatoes and tomatoes based on root signalling.
- 15.30 Fulai Liu, *KU Life, et al.* Alternate partial root-zone drying irrigation – a novel irrigation strategy improves resources use efficiency and product quality.

Poster session

16.10 – 17.00 Poster session

Friday January 29, 2010

Session 7: Public- private RTD cooperation

- 9.00 Karsten Arnbjerg, *DTU Miljø*. Nyt RTI finansieret centersamarbejde på Vand i Byer.
- 9.15 Jørn Rasmussen, *DHI*. The European Water Technology Platform (WSSTP). Muligheder for danske virksomheder og forskningsinstitutioner.
- 9.35 Hans Engrob, *DHI*. Erfaringer med vandpartnerskaber.

RTI Innovationskonsortier

- 9.55 Per Elberg Jørgensen, *DHI*. Dansk Membran Bioreaktor-teknologi MEM-BIO.
- 10.15 Aaron Saunders, *Teknologisk Institut*. Bakterier i vand.

10.40 – 11.00 *Coffee break*

Miljøstyrelsens Miljøteknologiske handlingsplan

- 11.00 Jes Vollertsen, *AAU*. Opgradering af våde regnvandsbassiner for videregående rensning
- 11.20 Erik Arvin, *DTU Miljø*. Aqua fingerprint
- 11.40 Jes Clauson-Kaas, *COWI Consult*. Sundhedsaspekter ved regnbaseret rekreativt vand i større byer

Direkte brugersamarbejde

- 12.00 Hans-Jørgen Albrechtsen, *DTU Miljø*. Fremtidens urbane vandforsyning når grundvandsressourcen er under pres Samarbejde mellem Københavns Energi og DTU Miljø
- 12.20 Jesper Lorenzen, *Grundfos/New business*. Samarbejdet mellem Infarm og Universitetsverdenen

Closing session

12.40 – 12.50 Bjørn K. Jensen. Afsluttende bemærkninger