

CONFERENCE PROGRAMME

24 – 25 November 2010
Karlsruhe Convention Center | Stadthalle

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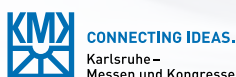
IWRM

Integrated Water Resources Management

Karlsruhe 2010



Organiser:



Patronage:



Wednesday 24 November 2010

8.30 a.m.	Registration	
9.30 a.m.	Opening	Prof. Dr. Hartwig Steusloff, Fraunhofer IOSB Heinz Fenrich, Lord Mayor, City of Karlsruhe n.n., Federal Ministry for Economic Cooperation and Development
10.00 a.m.	Keynote 1 Integrated Water Resources Management in developing nations – Getting groundwater into the dialogue	Prof. Dr. Stephen Foster, World Bank (GW-MATE)
10.30 a.m.	Keynote 2 How to develop capacity for IWRM: Examples from UNW-DPC	Dr. Reza Ardakanian, UN-Water Decade Programme on Capacity Development (UNW-DPC)

Session 1.1. Water Utilization

Track .1 Utilization	11.30 a.m. - 1.00 p.m.	Development and application of a catchment surveillance methodology, employing an interaction matrix, for water resources vulnerability assessment and management	Prof. Barry Lloyd, DelAgua Ltd., United Kingdom
		Watershed management under terms of depletive water balance and high vulnerability in Wadi Fuqeen: West Bank-Palestine	Ph.D. Jawad Hasan, Al-Quds University, Jerusalem, Palestine
		Success in IWRM in Germany and in the arid Arabic countries – is it possible to transfer german strategies and solutions to these countries? Practical insights	Dipl. Ing. Wolfgang Korthals, Consultant IWRM, Germany
		Methods to evaluate and improve water allocation processes in a semi-arid watershed with given physical, environmental and social constraints and hydrological extreme conditions – possibilities and limitations	M.Sc. Nicole Kretschmer, Centro de Estudios Avanzadas en Zonas Aridas (CEAZA), Chile

Session 1.2. Water Harvesting

Track .2 Processes	11.30 a.m. - 1.00 p.m.	The state-of-the-art in the cost-efficiency use of water harvesting techniques in agriculture	M.Sc. Rodolfo Nobrega, Federal University of Campina Grande, Brazil
		Developing a soil map in a semi-arid region using remote sensing-based approaches for hydrological modelling- Wadi Kafrein / Jordan	M.Sc. William Alkhoury, University of Göttingen, Geoscience Center, Department of Applied Geology, Germany
		Integrating remote sensing and point data to estimate the spatial and temporal variability of the water balance parameters soil moisture and evapotranspiration for modeling approaches	Dipl.-Geogr. Yvonne Dernelde, Justus Liebig University Giessen, Center for international Development and Environmental Research (ZEU), Germany
		Evaluation and ranking of alternatives for the use of water of different qualities in semi-arid areas by means of a multi-criteria decision making framework.	D.Sc. Jacob Bensabat, Environmental & Water Resources Engineering Ltd. (EWRE), Israel

Session 1.3. Modeling of Water Resources

Track .3 Methods	11.30 a.m. - 1.00 p.m.	Handling of uncertain information in modeling complex water management systems	Prof. Dr. habil. Michael Birkle, Fraunhofer Institute of Optronics, System Technologies and Image Exploitation IOSB, Germany
		Integrated Water Resources Management in South Africa – Maximizing water efficiency by interlinking hydrological and economic modeling	Prof. Dr. Dr. Karl-Ulrich Rudolph, University of Witten / Herdecke gGmbH, Institute of Environmental Engineering and Management (IEEM), Germany
		A systematic approach for multi-scale Integrated Water Resources Management	Dr. Jens Tränckner, TU Dresden, Institute for Urban Water Mangement, Germany
		Overall-effective measures for Integrated Water Resources Management in the coastal area of Shandong Province, China	Bertram Monnikhoff, DHI- WASY GmbH, Germany

1.00 - 2.30 p.m. Lunch & Exhibition

Session 2.1. Water Resource Management & Treatment

Track .1 Utilization	2.30 - 4.00 p.m.	Drinking water supply in a rural area of Indonesia: Lessons from the optimization of ground water and river water treatment plants	Dr. Stefan Stauder, DVGW – Water Technology Center (TZW), Germany
		Concept of appropriate water and waste water treatment in the karst region Gunung Kidul, Southern Java Indonesia	Dipl.-Ing. Kerstin Matthies, Karlsruhe Institute of Technology (KIT), Institute of Functional Interfaces, Germany
		Problems with cyanobacteria in a water supply river: case study of River Velhas, Brazil	Dr. Eduardo von Sperling, Federal University of Minas Gerais, Brazil
		Water quality and aquifer recharge: Studies on emerging pollutants and viruses in the Jordan Valley	Dr. Andreas Tiehm, DVGW – Water Technology Center (TZW), Germany

Session 2.2. Waste Water Reuse

Track .2 Processes	2.30 - 4.00 p.m.	Circular economy and closed water cycles: Sustainable utilization of waste water in arid areas	Prof. Dr. Peter Heck, Trier University of Applied Sciences, Institute for Applied Material Flow Management (IfaS), Germany
		Study on reclaimed water irrigation in Beijing suburban area	Prof. Qingyi Meng, Beijing Hydraulic Research Institute, China
		Dynamics of soil organic carbon and microbial activity in treated wastewater irrigated agricultural soils along soil profiles	Dr. Elisabeth Jüschke, Ruhr University Bochum, Geography Department, Germany
		Material flow management as an approach for reuse of waste water in agriculture in arid and semi arid areas	Dr. Michael C. Birkle, G.M.F. mbH, Germany

Session 2.3. Decision Support Strategies

Track .3 Methods	2.30 - 4.00 p.m.	The challenges of integrated urban water management – Case study of San Luis Potosí, Central Mexico	M.Sc. Stefanie Kralisch, Karlsruhe Institute of Technology (KIT), Institute of Applied Geosciences, Germany
		Institutional prerequisites for decentralized wastewater treatment and reuse – a case study of Jordan	Dr. Ines Dombrowsky, German Development Institute, Germany
		Community based approach towards water quality restoration and pollution prevention of the Flores Creek (Uruguay)	M.Sc. Cecilia Tamara Avellan, Ludwig Maximilian University, Department for Geography & Remote Sensing, Germany
		Optimal water allocation in the Middle Olifants Sub-Basin of South Africa: How can water markets increase water use efficiencies?	M.Sc. Teresa Linz, UN-Water Decade Programme on Capacity Development (UNW-DPC), Germany

4.00 - 4.30 p.m. Coffee & Exhibition

Session 3.1. Quality Management

4.30 - 6.00 p.m.

Track .1 Utilization

Development and optimization of measures against the contamination of the food chain by arsenic from polluted groundwater resources in rural areas of the Red Rive Plain in Vietnam	PD Dr. Stefan Norra, Karlsruhe Institute of Technology (KIT), Institute of Geography and Geoecology, Germany
Modelling network for analysing diffuse nitrogen leaching reduction in agriculture to meet the targets of the water framework directive in the Weser River Basin of Germany	Dr. Claudia Heidecke, Johann Heinrich von Thünen-Institute (vTI), Germany
Grey water treatment and reuse experience in the Palestinian rural areas	M.Sc. Abdalrazzaq Aburahma, Palestinian Hydrology Group (PHG), Palestine
Forecasting the effects of EU policy measures on the nitrate pollution of groundwater and surface waters	Dr. Ralf Kunkel, Forschungszentrum Jülich GmbH, Institute of Chemistry and Dynamics of the Geosphere (ICG), Germany

Session 3.2. Groundwater Recharge

4.30 - 6.00 p.m.

Track .2 Processes

Relevance and importance of groundwater artificial recharge in the Jordan Valley Area	Prof. Dr. Elias Salameh, The University of Jordan, Jordan
Development of water resources in Oman Mountains by capturing storm water runoff and underground storage in artificial galleries	M.Sc. Dr. Günter Hahn, Karlsruhe Institute of Technology (KIT), Institute of Applied Geosciences, Germany
Hydrogeologic preconditions for a reasonable application of artificial aquifer recharge measures	Prof. Dr. Heinz Hötzl, Karlsruhe Institute of Technology (KIT), Institute of Applied Geosciences, Germany
Supplying high purity recycled water for groundwater banking in rural areas – Approaches for the integrated management of common pool resources.	Dr. Leif Wolf, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Session 3.3. Water Distribution Management

4.30 - 6.00 p.m.

Track .3 Methods

Comparison of methods for isolation of Natural Organic Matter (NOM) from loose deposits of drinking water distribution systems	M.Sc. Kamila Gruskevica, Riga Technical University, Latvia
Framework masterplan on sustainable and ecological water resources management for the city of Changde	Dr. Lothar Fuchs, Institute for Technical and Scientific Hydrology GmbH (ITWH), Germany
The price to pay for treated wastewater: an evaluation of water pricing scenarios in the Jordan Valley	Dr. Amani Alfarra, Ministry of Water and Irrigation (MWI), Jordan
A simulation based integrated water management system for sustainable arid zone water resources management	Dr. Jens Grundmann, TU Dresden, Department of Hydrology, Germany

7.00 p.m.

Dinner and European Well Foundation

Further information and registration: www.iwrm-karlsruhe.com



9.00 a.m.	Keynote 3 The scientific and practice-oriented focus of IWRM	Prof. Dr.-Ing. Franz Nestmann, Karlsruhe Institute of Technology (KIT)
9.30 - 11.00 a.m.	Postersession & Business Forum	

11.00 - 11.30 a.m.	Coffee & Exhibition	
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Session 4.1. Water Protection

Track .1 Utilization	11.30 a.m. - 1.00 p.m.	Upcoming water quantity and quality problems in arid and semi-arid climatic zones	Prof. Dr. Fritz Frimmel, Karlsruhe Institute of Technology (KIT), Chair for Water Chemistry, Germany
		Appropriate water supply techniques for semi-arid regions - The Cuvelai-Etoshia-Basin in Namibia	Dipl. Wirtsch.-Ing. Martin Zimmermann, TU Darmstadt, Institute IWAR, Germany
		Estimating resource costs of meeting WFD ecological status requirements	Niels Riegels, Technical University of Denmark, Denmark
		Adaptive water resources management under extreme climatic and hydrogeological conditions - Interdisciplinary research activities in Karst Regions of South East Asia	Prof. Dr.-Ing. Franz Nestmann, Karlsruhe Institute of Technology (KIT), Institute for Water and River Basin Management, Germany

Session 4.2. Irrigation, Salination, Erosion

Track .2 Processes	11.30 a.m. - 1.00 p.m.	Influencing smallholder farmers to apply water reuse in irrigation	M.Sc. Nagwa Elnwishi, Suez Canal University, Biotechnology Research Center, Egypt
		Assessment of Phreatic evaporation in irrigated lands of Fergana Valley by using stable isotopes	Ph.D. Student Gulomjon Umirzakov, Justus Liebig University Giessen, Center for international Development and Environmental Research (ZEU), Germany
		Prediction of erosion and sedimentation by runoff in Kurukavak Creek Basin by the WEPP Model	Assoc. Prof. Dr. Mustafa Tombul, Anadolu University, Faculty of Engineering and Architecture, Turkey
		Land evaluation for irrigation with treated wastewater	Dipl.-Lök. Karsten Schacht, Ruhr University Bochum, Geography Department, Germany

Session 4.3. Flood Water Management

Track .3 Methods	11.30 a.m. - 1.00 p.m.	Alternatives for a sustainable management of storm-water in megacities of emerging countries - the case of Santiago de Chile	Dr. Helmut Lehn, Karlsruhe Institute of Technology (KIT), Institute for Technology Assessment and Systems Analysis (ITAS), Germany
		Estimating water retention potentials for Saxony. Catchment wide implementation of agricultural measures with an innovative method	Dr. Harald Sommer, Ingenieurgesellschaft Prof. Dr. Sieker mbH, Germany
		Requirements for rainfall retention and storage in cold climate	M.Sc. Laura Inha, Ramboll Finland Oy, Finland
		Infiltration and surface runoff in urban areas: hydrological characteristics and parameter recommendations	Dr. Marc Illgen, Dahlem-Consulting Engineers GmbH & Co. Water Management KG, Germany

1.00 - 2.00 p.m.	Lunch & Exhibition	
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Session 5.1. Water, Energy, Food

Track .1 Utilization	2.00 - 3.30 p.m.	Multi-criteria framework for performance benchmarking of the water sectors in the Nile Basin	Dr. Ahmed Mohammed El-Zayat, Environmental Engineering Group (EMG), Egypt
		Making global water resources sustainable: Virtual water trade	Dr. Nico Grove, Munich School of Management, Institute for Information, Organisation and Management, Germany
		Energy efficiency as the limiting constraint for water supply - Case study Bribin Water Distribution System, Java, Indonesia	Dipl.-Ing. Philipp Klingel, Karlsruhe Institute of Technology (KIT), Institute for Water and River Basin Management, Germany
		The water footprint of cut flowers in the Lake Naivasha Basin, Kenya - involving the consumers, retailers and traders overseas	M.Sc. Mesfin Mergia Mekonnen, University of Twente, The Netherlands

Session 5.2. Capacity Building			
Track .2 Processes	2.00 - 3.30 p.m.	Capacity development for Integrated Water Resources Management (IWRM) in a transition country - Improving river basin management in the Western Bug Basin, Ukraine	M.Sc. Marco Leidel, TU Dresden, Chair of Meteorology, Germany
		Capacity building activities of SMART Research Program as an important tool for an Integrated Water Resource Management strategy for the Jordan River Valley (JRV)	Associate Prof. Dr. Wasim Ali, Karlsruhe Institute of Technology (KIT), Institute of Applied Geosciences, Germany
		Using the SAS (Story And Simulation) – approach to support the development of sustainable water management strategies under climate change in the Jordan River region	Dr. Janina Onigkeit, University of Kassel, Center for Environmental Systems Research (CESR), Germany
		WEAP – a tool for Integrated Water Resources planning in the Jordan River Basin	Christopher Bonzi, University of Tübingen, Department of Plant Ecology, Germany
Session 5.3. Climate Change			
Track .3 Methods	2.00 - 3.30 p.m.	Water Resources Management in the arid and semi-arid zones of India: Issues under a changing climate and environment	Dr. Shadananan Nair, Nansen Environmental Research Centre, India
		Earth System Crises – challenges for IWRM between climate engineering and sustainability	Ministerialdirigent Dr.-Ing. Martin Grambow, Bavarian State Ministry of the Environment and Public Health, Department Water Management, Germany
		Dynamic downscaling of global climate projections for modelling the future regional water balance and water quality in Ukraine	Dr. Dirk Pavlik, TU Dresden, Chair of Meteorology, Germany
		Continuous simulation of climate change effects on the porsuk watershed hydrological processes	Prof. Dr. Erdem Ahmet Albek, Anadolu University, Faculty of Engineering and Architecture, Turkey
3.30 - 4.00 p.m.	Coffee & Exhibition		
4.00 p.m.	Keynote 4	Stefan Kraus, Siemens AG	
4.30 p.m.	Closing	Prof. Dr. Steusloff, Fraunhofer IOSB	

Further information and registration: www.iwrm-karlsruhe.com

At a glance:

Dates: 24 – 25 November 2010
Location: Karlsruhe Convention Center | Stadthalle

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