Wednesday, 14.03.2012

10:00 **Registration and Poster-mounting**

13:30 **Welcome Addresses and Opening**  
Conference hall

14:00 **Keynote Lecture**  
25 min + 5 min discussion  
Conference hall

*Integrated Groundwater Management in the Kingdom of Saudi Arabia*  
Al Saud, M., Ministry of Water & Electricity, Riyadh, Kingdom of Saudi Arabia  
Co-Author: Rausch, R.

14:30 **Session - IWRM**  
all 15 min + 5 min discussion  
Conference hall

- **How Much Water is Left? – An Economic Approach to the Quantification of Non-Renewable Groundwater Resources**  
Dirks, H., GIZ Dornier Consulting, Riyadh, Kingdom of Saudi Arabia  
Co-Authors: Holtkemper, S., Al-Saud, M., Rausch, R.

- **Moving Well Solution to Optimal, Multi-Objective Groundwater Use – Method and Application**  
Siegfried, H., hydrosolutions Ltd., Zurich, Switzerland  
Co-Author: Kinzelbach, W.

- **Demand Management as a Potential Unconventional Source of Water, The West Bank Governorates**  
Abusaada, M., Palestinian Hydrology Group, Ramallah, West Bank - Palestinian Authority  
Co-Authors: Tamimi, A., Sauter, M.

- **Water Balance for the Aleppo Basin, Syria – Implications of Land Use on Simulated Groundwater Abstraction and Recharge**  
Schlote, A., Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany  
Co-Authors: Hennings, V., Schäffer, U.

15:50 **Coffee Break**  
Foyer & gallery

16:20 **Keynote Lecture**  
25 min + 5 min discussion  
Conference hall

*Parameterization of Large-scale Groundwater Models in Arid Regions*  
Teutsch, G., Helmholtz Centre for Environmental Research (UFZ), Leipzig, Germany

16:50 **Session - IWRM (continued)**  
all 15 min + 5 min discussion  
Conference hall

- **Water Resources Protection for the Water Supply of Beirut**  
Margane, A., Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany  
Co-Author: Makki, I.

- **Linkage of WEAP and MODFLOW Models for the Azraq Basin**  
Reuß, R., Technical University of Munich (TUM), Munich, Germany  
Co-Authors: Zoßeder, K., Maßmann, J.
Historical Background of Water Resources and Current Management Initiatives in the Semi-Arid Plain of Souss-Chtouka (Morocco)
Fakir, Y., University Cadi Ayyad of Marrakech (UCAM), Marrakech, Morocco
Co-Authors: Le Page, M., Aslikh, A., Fanzi, A., Huber, M.

Case Study of Groundwater Resources Usage for a Coastal Arid Region in the Al Batinah, Oman
Walther, M., Technical University of Dresden, Dresden, Germany
Co-Authors: Delfs, J.-O., Graf, T., Al-Saidi, A., Grundmann, J., Kolditz, O., Liedl, R.

Thursday, 15.03.2012

08:30 Registration

09:00 Keynote Lecture
Agricultural Irrigation – A Critical Nexus for Groundwater Resources in More Arid Climates
Foster, S., Global Water Partnership, Goring, United Kingdom

09:30 Session - Groundwater recharge
Groundwater Recharge in the Lake Chad Basin
Vassolo, S., Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany

Integrated Remote and in situ Assessment of a Playa Lake Groundwater System in Northern Chile
Markovich, K., The University of Texas, Austin, USA
Co-Author: Pierce, S. A.

Stable Isotope Studies in Semiarid, Karstic Environments Reveal Information for Sustainable Management of Water Resources in Damascus, Syria
Königer, P., Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany
Co-Authors: Toll, M., Himmelsbach, T., Shalak, K., Hadaya, A., Rajab, R.

10:30 Coffee Break

10:50 Poster Session

11:40 Session - Groundwater recharge (continued)
Investigations of Recharge to an Arid Zone Freshwater Lens
Fadlelmawla, A., Kuwait Institute for Scientific Research, Safat, Kuwait
Co-Authors: Hadi, K., Zouari, K.

Groundwater Recharges in Dryland Alluvial Megafans: Geomorphology versus Lithofacies Controls, Examples from Central Iran
Arzani, N., University of Payame Noor, Tehran, Iran

Identification of Potential Groundwater Recharge Using 3D-Spatial Soil Moisture Observations in the Ad-Dahna Desert, Kingdom of Saudi Arabia
Rudiger, T., Helmholtz Centre for Environmental Research (UFZ), Halle/Saale, Germany
Co-Authors: Meier, A., Siebert, C., Koning, F., Kallioras, A., Forestier, P., Fuest, T., Schuth, C., Rausch, R., Al-Saud, M., Dietrich, P.

Combining Field Measurements and Modeling of Soil Water Dynamics to Quantify Groundwater Recharge in Dryland Savanna, Namibia
Grongrtoft, A., University of Hamburg, Hamburg, Germany
Co-Authors: Landschreiber, L., Classen, N., Duijnsveld, W., Eschenbach, A.

BGR

TECHNISCHE UNIVERSITAT DARMSTADT

FH-DGG
13:00  Lunch  

14:00  **Keynote Lecture**  
*Climatic Caused Variations of Groundwater Recharge in the Middle East and its Consequences for the Future Water Management*  
Hötzl, H., Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany  

14:30  **Session - Case studies**  
*Application of Thermal Data for Groundwater Studies in Arid Regions at the Example of the Dead Sea*  
Mallast, U., Helmholtz Centre for Environmental Research (UFZ), Halle/Saale, Germany  
Co-Authors: Siebert, C., Schwonke, F., Wagner, B., Rödiger, T., Geyer, S., Gloaguen, R., Sauter, M., Kühn, F., Merz, R.  

*Saltwater Intrusion Balances in the Nubian Aquifer System*  
Gossel, W., Martin Luther University Halle, Halle, Germany  
Co-Authors: Sefelnasr, A., Wycisk, P.  

*Assessment of Natural Radioactivity Occurring in Saudi Arabian Sandstone Aquifers*  
Michelsen, N., Technical University of Darmstadt, Darmstadt, Germany  
Co-Authors: Schubert, M., Schüth, C., Rausch, R., Al Saud, M.  

*Wadi System Components Under Arid Climate to Estimate Transmission Losses and Groundwater Recharge through Analytic/Numeric Solutions*  
Sorman, A. U., Middle East Technical University, Ankara, Turkey  

15:50  **Coffee Break**  

16:20  **Session - Case studies & monitoring network**  
*Hydrological and Hydrochemical Process of the Sebkha Oum El Khialette, South East of Tunisia*  
Nesrine, N., National School of Engineering of Tunisia, Tunis, Tunisia  
Co-Author: Rachida, B.  

*Integrated Examinations of Hydraulic Conductivity, Apparent Resistivity and Hydrochemical Characteristics of Aquifers in a View to Minimize Failure Rates of Wells in Weybo River Catchment, Southern Ethiopia, East Africa*  
Damtew, A. D., Ruhr University of Bochum, Bochum, Germany  

*Mitigating the Current and Future Challenges for the Drinking Water Supply of Damascus, Syria*  
Toll, M., Federal Institute for Geosciences and Natural Resources (BGR), Hannover, Germany  
Co-Authors: Shalak, K., Al-Safadi, M., Hadaya, A., Abdullah, A., Rajab, R., Houben, G., Himmelsbach, T.  

*The Upper Mega Aquifer System on the Arabian Peninsula – Delineation of Sub-Aquifer Interaction using Hydrochemical and REE+Y Patterns*  
Siebert, C., Helmholtz Centre for Environmental Research (UFZ), Halle/Saale, Germany  
Co-Authors: Rödiger, T., Rausch, R., Döhler, J., Michelsen, N., Al-Saud, M.  

*Monitoring of Water Resources in Arid Regions*  
Vogel, K., SEBA Hydrometrie GmbH & Co. KG, Kaufbeuren, Germany  
Co-Author: Döhler, J.  

*Design and Setup of a High Resolution Hydrometric Monitoring Network in a Semi-Arid Karst Environment – West Bank*  
Schmidt, S., Georg-August-University Göttingen, Göttingen, Germany  
Co-Authors: Fischer, S., Toll, M., Ries, F., Zayed, O., Guttman, J., Marei, A., Weiss, M., Geyer, T., Sauter, M.
18:30  **Conference Dinner**  
BGR Restaurant

20:00  **Multimedia Presentation**  
“*Deserts of the Earth*” by Michael Martin

**Friday, 16.03.2012**

08:30  **Registration**

09:00  **Keynote Lecture**  
*Modelling of the Hydrology and Hydraulics of the Okavango Delta*  
Kinzelbach, W., ETH Zurich, Zurich, Switzerland

09:30  **Session - Modelling**  
*Modeling Ecological Water Releases to the Lower Tarim River*  
Wang, H., ETH Zurich, Zurich, Switzerland  
Co-Authors: Yang, P., Kinzelbach, W.

*Groundwater Modeling in Al Malih Basin, Jordan Valley*  
Sabri, R., Technical University of Freiberg, Freiberg, Germany  
Co-Authors: Ghanem, M., Abu Madi, M., Merkel, B.

*Large Scale Groundwater Recharge Estimation with Hydrological Models in Arid Environments – Case Study Arabian Peninsula*  
Keim, B., Ingenieuresgesellschaft Prof. Kobus und Partner GmbH, Stuttgart, Germany  
Co-Authors: Rausch, R., Al-Saud, M., Pfafflin, H., Bárđossy, A., Bendel, D., Lorenz, M.

10:30  **Coffee Break**  
Foyer & gallery

10:50  **Poster Session**  
Gallery

11:40  **Session - Modelling (continued)**  
*The Water Resources of the Eastern Mediterranean: Present and Future Conditions*  
Menzel, L., Heidelberg University, Heidelberg, Germany  
Co-Author: Törnros, T.

*Evaluating Uncertainty Introduced to MABIA-WEAP-FAO56 Soil Water Balance Simulation Model by Using Limited Meteorological Data*  
Sahli, A., National Institute of Agronomy of Tunisia (INAT), Tunis, Tunisia  
Co-Authors: Jabloun, M., Hennings, V., Müller, H.-W., Sieber, J., Purkey, D.

*Modeling of Seawater Intrusion Due to Climate Change Impacts in North Gaza Coastal Aquifer Using SEAWAT*  
Sarsak, R. F., Environmental Health Department, UNRWA, Nablus, Palestine  
Co-Author: Almasri, M. N.

*Development of a 3D Groundwater Flow Model in Semi-Arid to Arid Region: The Western Drainage Basin of the Dead Sea (Israel and West Bank)*  
Gräbe, A., Helmholtz Centre for Environmental Research (UFZ), Halle/Saale, Germany  
Co-Authors: Rödiger, T., Kolditz, O., Rink, K., Fischer, T., Sun, F.; Wang, W.

13:00  **Lunch**  
BGR Restaurant
14:00  **Session - Groundwater balance & artificial recharge**  
*all 15 min + 5 min discussion*

Groundwater Modelling Considering Climate Change and Significant Change in Recharge by Urban Development Along the Western Coast of Saudi Arabia  
Prein, A., *CDM Consult GmbH, Alsbach, Germany*  
Co-Authors: Weiß, J., Makhoul, R. S.

Characterization of Water Storage Dynamics in Arid Areas by Satellite Gravimetry  
Riegger, J., *University of Stuttgart, Stuttgart, Germany*  
Co-Author: Tourian, M. J.

Managed Aquifer Recharge of Reclaimed Water: Storage and Treatment Opportunities in Arid Lands  
Winslow, F., *Schlumberger Water Services, Riyadh, Kingdom of Saudi Arabia*  
Co-Authors: Maliva, R. G., Herrmann, R.,

The Khadin Water Harvesting System of Peru – An Ancient Example for Future Adaption to Climatic Change  
Mächtle, B., *Ruprecht-Karls-University Heidelberg, Heidelberg, Germany*  
Co-Authors: Ross, K., Eitel, B.

Preparatory Hydrogeological Investigations for the Large-Scale Strategic ASR-Project in the Liwa Desert of the Abu Dhabi Emirate  
Koziorowski, G., *German Agency for International Cooperation (GIZ), Abu Dhabi, United Arab Emirates*

15:40  **Closing Remarks**  

**Saturday, 17.03.2012**

08:30  **Excursion**  
*Departure and arrival (14:00) at Wastewater treatment plant, Braunschweig*  
BGR, Stilleweg 2, 30655 Hannover