

**THE SIXTH ENVIRONMENTAL SYMPOSIUM OF GERMAN-ARAB SCIENTIFIC FORUM FOR
ENVIRONMENTAL STUDIES**

**AACHEN, GERMANY
OCTOBER, 1 and 2, 2012**

**Environmental Protection in the Middle East and North Africa
- Water Resources, Air and Soils -**



Program

Organized by

**GERMAN-ARAB SCIENTIFIC FORUM FOR ENVIRONMENTAL STUDIES
And
DEPARTMENT OF ENGINEERING GEOLOGY AND HYDROLOGY, RWTH
AACHEN UNIVERSITY, AACHEN, GERMANY**

Organizers:

German-Arab Scientific Forum for Environmental Studies, Frankfurt am Main, Germany
(Prof. Dr. Fathi Zereini, Dr. Awni Sarrar).

Department of Engineering Geology and Hydrology, RWTH Aachen University, Aachen, Germany
(Prof. Dr. Rafiq Azzam, Prof. Dr. Thomas Rude)

Monday, October 1.2012

13:30 – 14:15 Registration
14:15 – 14:30 Opening and welcome

Session 1: Water Resources, Protection and Management (Chairman: Mr. Martin Rother)

14:30 – 14:55 **Rother, M., Schlote, A., Bluemel, M., Helms, F.:** Facing Water Scarcity in Arid Regions: From Monitoring to Water Balancing in the Aleppo Basin, Syria

14:55 – 15:20 **Steinel, A., Hamdan, I., Schelkes, K., Subah, A.:** On the Designation of Areas for Managed Aquifer Recharge in the Amman-Zarqa and Azraq Basins, Jordan

15:20 – 15:45 **Andreas Renck, Carol Chouchani Cherfane:** Shared Water Resources in Western Asia: Contributions by the ESCWA-BGR Cooperation

15:45 – 16:10 **Maßmann, J., Huber, M., Hennings, V., Schelkes, K., Droubi, A.:** Dissemination and Development of the WEAP-MODFLOW DSS - Lessons Learnt from 5 Years of Experience -

16:10 – 16:40 **Break and Poster Presentation**

16:40 – 17:05 **Heike Neukum (née WERZ), Maren Rapp, Leif Wolf, Wasim Ali, Heinz Hötzl:** Artificial recharge in NW-Jordan: Existing Studies and Identification of potential sites

17:05 – 17:30 **Harald Kirsch, Mahmoud Abu-Rumman:** The Royal Department for Environment Protection / Rangers in Jordan: Tasks and Specific Roles in Water Resource Protection

19:00 Conference Dinner

Tuesday, October 2.2012

Session 2: Air Pollution and Protection (Chairman: Prof. Dr. Boris Bonn)

- 9:00 – 9:25 **Boris Bonn:** Effect of air pollution on the emission of plants and local aerosol particle
- 9.25 – 9:50 **Eberhard Reimer:** Long Term Transports of PM10 over Tehran Province and Northern Iran
- 9:50 – 10:15 **Sahar Sodoudi, Eberhard Reimer, Ines Langer:** Micro climate Simulation in new Town ‘Hashtgerd’ / Iran

Session 3: Water conflicts (Chairman: Dr. Fawzy Naji)

- 10:15 – 10:40 **Victoria van der Land, Diana Hummel:** Climate change, Land Degradation, and Mobility in Mali and Senegal: Examining the Social-Ecological Conditions of Migration
- 10:40 – 11:05 **Fawzy Naji:** Water Conflicts in the Middle East: The Jordan River Basin
- 11:05 – 11:30 **Break and Poster Presentation**

Session 4: Environmental Protection (Chairman: Dr. Heike Neukum)

- 11:30 – 11:55 **Ahmad Salem Jumah, Qasem Abu-Haija, Mahmud Aburoman, Raed Abusamen:** The Experience of Jordan Police in the Field of Environment Protection
- 11:55 – 12:20 **Kurt Heinrichs:** Investigation of salt weathering on stone monuments by use of a modern wireless sensor network exemplified for the rock-cut monuments in Petra / Jordan
- 12:20 – 12:45 **Anika Braun, Christoph Neukum, Rafiq Azzam:** Transport of engineered silver nanoparticles through saturated porous media
- 12:45 – 13:10 **Shahrazad Abu Ghazleh, Stephan Kempe:** Shrinkage of the Dead Sea, Jordan: Problems and Alternative Solutions.
- 13:10 – 14:30 **Lunch Break**

Session 4: Environmental Protection (Chairman: Dr. Kurt Heinrichs)

- 14.30 – 14:55 **Achite Mohammed:** Drought Analysis in the lower cheliff – Mina area (Northwest Algeria): Using the PCA method
- 14:55 – 15:20 **Melegy, A.A., Shaban, A.M., Hassan, M.M., Salman, S.A.:** Distribution of heavy metals in groundwater of Sohag Governorate, Egypt
- 15:20 – 15:45 **Ykhlef Laidani, Salah Hanini, Ghania Henini:** Adsorption of phenolic compounds from wastewater using vegetal cords
- 15:45 – 16:10 **Kabri Fatima Zahra, Zatout Ahlam, Imane Yahia Samet, Ouagued Abdallah, Djafer lahcène:** Water treatment by plasticized organic membrane

Poster

ZATOUT Ahlam, KABRI Fatima Zahra, Imane Yahia Samet & OUAGUED Abdallah: Effect of chemical fertilizers on the underground water in EL-AMRA State Ain Defla. Algeria

Ahmed Melegy, Ismael S. Ismael: Paleoenvironmental implications of Messinian Gypsum deposits from the Northern Coast Egypt

Paul Miessner, Thomas R. Rude: The influence of anthropogenically affected water types on the solubility of Moroccan Jurassic dolomites (Sefrou; Middle Atlas)

Ghania HENINI, Ykhlef LAIDANI, Salah HANINI, Fatiha SOUABI: A New material for the removal of heavy metals in Aqueous waste

S. ROCHDANE, A. EL MANDOUR, M. JAFFAL, M. HIMI, M. Amrhar, A. Casas: Contribution of the gravimetry to the hydrogeological study of the eastern Haouz plain and Tassaout, Western Morocco

Bessedik Amina, Allam R, Abdallah-Bouamrane K, Bekkouche-Benziane N.: Characterization and antimicrobial activity of essential oil of *Nigella sativa*

Fathi Elost: Proposed study in the environmental geological to explore for oil shale valley Tanezzuft Murzuq basin for use in power generating in Libya

F. Guitarni, A. Djafer , S. Kouadri Moustefai: BIODEGRADATION OF RED BIMACID DYE BY IMMOBILIZED CELLS ON POUZZOLANA FIXED BED

Naïma BETTAHAR, Soumia KOUADRI MOUSTEFAI: - The factors of nitrate leaching in semi-arid zones - Case of the valley of the Middle Western Cheliff (North Algeria)

Wahiba Mahouche, Soumia Kouadri Moustefai, Mustapha Douani: Numerical modeling of atmospheric pollutants dispersion

Imane Yahia Samet, ZATOUT Ahlam, KABRI Fatima Zahra & OUAGUED Abdallah: Physical-chemical analysis of leachate from domestic waste to the town of Chlef (Discharge Mknassa)

BEN MESSAOUD Btissam, ABOUMERIEME Imane, LAHRACH Zakaria, ISMAILI Mohammed, IBIJBIJEN Jamal & NASSIRI Laila: BIOFERTILIZERS: A way to fight against soil pollution