



**enviroWater**

preliminary  
**Conference Programme**



**WATER FOR LIFE**  
2005-2015

## **Monday; 02 March 2009**

- 09:00-09:45      **Official Opening of the Conference by the Deputy Minister Environmental Affairs and Tourism Rejoice T. Mabudafhasi and the Ambassador of the Federal Republic of Germany Dieter W. Haller**  
*Master of Ceremony: Patrick Swartz, Mayor City of Stellenbosch (invited)*
- 09:50-10:10      Bärbel Höhn (Member of the German Federal Parliament)  
T.B.A.
- 10:10-10:30      Rivka Kfir (Director Water Research Commission, RSA)  
T.B.A.
- 10:30-11:00      Coffee Break

### **Session 2 "Climate Change"**

- 11:00-11:30      **(Keynote)** Hannes Rautenbach (Univ. Pretoria, RSA)  
Climate Change: Is it becoming a Reality in South Africa?
- 11:30-11:50      Mark Summerton (Umgeni Water, RSA)  
The Impact of a Changing Climate on Water Yield,
- 11:50-12:10      Sebastian Schmuck (Univ. Duisburg-Essen, GER)  
Benchmarking greenhouse gas emissions of wastewater treatment plants
- 12:10-12:30      Joseph Alcamo (Univ. Kassel, GER)  
Climate change and water resources
- 12:30-12:50      Siphso Dube and Herman Wiechers (Dube Ngeleza Wiechers, RSA)  
Addressing Climate Change challenges facing South Africa
- 12:50-14:00      Lunch

### **Session 3 "Socio-Economic Aspects"**

- 14:00-14:30      **(Keynote)** Hans-Curt Flemming (Univ. Duisburg-Essen, GER)  
Water, Religion and Culture
- 14:30-14:50      Alexandra Lux (Institute for Socio-Ecological Research, GER)  
Social-ecological reflection of water economics and Integrated Water Resource Management (IWRM)
- 14:50-15:10      DD Tewari (Univ. KwaZulu Natal, RSA)  
Water Markets In South Africa: How Successful They will be?
- 15:10-15:30      Nicole Kranz (FU Berlin, GER)  
What Drives Business Actors to Make a Contribution to Sustainable Water Management?

15:30-16:30 Poster Session

### Session 3 "Socio-Economic Aspects" (continued)

16:30-16:50 Konrad Soyez (Potsdam University, GER)  
Communal Water House

16:50-17:10 Friederike Arnold (Humboldt University Berlin, GER)  
Technology Mediation and its implications for a Communal Water House

#### ***Special Lecture:***

17:10-17:40 Eugene Cloete (Univ. Pretoria, RSA)  
Nanotechnology in water - current status and future perspectives

19:00-21:00 Reception by the German Ambassador

## Tuesday, 03 March 2009

### Session 4 "Water Quality"

09:00-09:30 **(Keynote)** Trevor Britz (Univ. Stellenbosch, RSA)  
Microbially Polluted Irrigation Water: Potential Impact on Food Safety

09:30-09:50 Jens Dahlmann (Applied Biosystems, GER)  
Different ways of enhancing productivity in trace analysis of pesticides in food and water samples using sensitive LC/MS/MS technology

09:50-10:10 Malebo Matlala, Jonathan Taylor and Leon van Rensburg  
(North West University, RSA)  
The use of Diatoms for analysing water quality in wetlands, a South African perspective\_

10:10-10:30 M. Seidel, A. Wolter, C. Peskoller, R. Niessner (TU München, GER)  
Combining rapid enrichment processes with microarrays for the detection of multiple pathogenic bacteria in drinking water

10:30-11:00 Coffee Break

11:00-11:30 **(Keynote)** Bin Hu (Univ. Wuhan, PRC)  
New trends in environmental water analysis

11:30-11:5 R. Köster, T. U. Wagner, B. Hetzer (Karlsruhe Institute of Technology, GER)  
Highly sensitive detection of environmental pollutants -aquatic colloids- in drinking water by Laser-induced Breakdown Detection (NPA/LIBD)

11:50-12:10 Marié Julsing (Spectro Analytical Instruments, RSA)  
Improvement of the sensitivity utilizing pneumatic nebulization with subsequent removal of the solvent

12:10-12:30 Hans-Christian Sorge (IWW, GER)  
An important tool to perform a responsible drinking water supply

12:30-12:50 Christian Thomasius and Elke Eckert (Berlin Water, GER)  
An Integral Rehabilitation Strategy for Urban Water and Sewerage Networks

12:50-14:00 Lunch

## Session 5 "Water Treatment"

- 14:00-14:30     **(Keynote)** Jo M. Barnes (Univ. Stellenbosch, RSA)  
Health Aspects of the Re-Use of Household Wastewater
- 14:30-14:50     Monika Reitz (RWTH Aachen, GER)  
Treatment of grey and black water on board of see-going vessels
- 14:50-15:10     Heinz Maus, Kai Thormeyer  
(RWG Ruhr-Wasserwirtschafts-Gesellschaft mbH, GER)  
Potential for Synergism by Co-Treatment of Municipal and Industrial Wastewater
- 15:10-15:30     Christoph Brepols, Kinga Drensla, Norbert Engelhardt, Norbert Gröning, Henning Heidermann, Andreas Janot, Heinrich Schäfer  
(Erftverband, GER)  
Ten years of operation and research in municipal membrane bioreactor facilities
- 15:30-16:30     Poster Session
- 16:30-16:50     Myint M. Sein, Alexandra Jarocki, Torsten C. Schmidt, Alfred Golloch, Clemens von Sonntag (Univ. Duisburg-Essen, GER)  
Oxidative Treatment of Organic Water Contaminants Tributyltin chloride, TCPP, TnBP, Iopamidol and Diclofenac in Wastewater Effluents by O<sub>3</sub> and O<sub>3</sub>/H<sub>2</sub>O<sub>2</sub>
- 16:50-17:10     Wolf von Tümpling, Andrea van der Veen, Martina Baborowski, Claudia Kraft, Jörg Kraft, Margarete Mages, Mihály Óvári (UFZ, GER)  
Dynamics of heavy metals and arsenic in river sediments after mining spills in the catchment area of the Hungarian Tisza
- 17:10-17:30     Dieter Stetter, Oliver Dördelmann (IWW Mülheim, GER)  
Heavy metal removal using ion exchange processes - research projects, approval and application in Germany
- 19:00-21:00     Conference Dinner

## Wednesday, 04 March 2009

### Session 6 "IWRM "

- 09:00-09:30     **(Keynote)** N.N.  
T.B.A.
- 09:30-09:50     Jörg Londong and Dietrich Borchardt (Bauhaus Univ. Weimar, GER)  
Prioritisation of measures for water pollution control in river basin management
- 09:50-10:10     E.O. Igbinosa, A.I. Okoh (Uni. Fort Hare, RSA)  
Impact of discharge wastewater final effluents on the qualities of a receiving watershed in a typical rural community of the Eastern Cape Province
- 10:10-10:30     A. Smit, G. Mackintosh, P. De Souza, A. Blanckenberg  
(Stellenbosch Municipality, RSA)  
Stellenbosch Municipality Drinking-Water Quality Management: Lessons Learnt
- 10:30-10:50     Coffee Break
- 10:50-11:10     Christine Kübeck, Wolfgang van Berk, Axel Bergmann, Carsten Hansen, Christoph König (TU Clausthal, GER)  
Raw Water Quality Management - Hydrogeochemical Modelling
- 11:10-11:30     U. Jack, G. Mackintosh, G. Offringa and Jo Burgess  
(Emanti Management Pty, RSA)  
Development and Implementation of a Drinking Water Supply System Management Tools and Guidelines

### **Session 6 "IWRM" (continued)**

11:30-11:50 K. Streuders, P. De Souza, F. Stevens, S. Moorgas (DWAF, RSA)  
Use of a Performance Management Tool for Driving Improved Municipal Water  
Quality Management: Northern Cape Experience

### **Session 7 "Funding Opportunities"**

12:00-12:15 Peter Wolfmeyer (ZENIT GmbH, GER)  
The Enterprise Europe Network - Opportunities for international Technology  
Transfer in the water sector

12:15-12:30 Tanja Fröhlich (German Embassy, GER)  
German-South African research cooperation in the water sector

12:30-12:45 Robert Kriger (NRF, RSA)  
Public Funding Structures in South Africa

12:45-13:00 Discussion

13:00-13:15 Closing enviroWater

13:15-14:30 Lunch

14:30-18:00 **Various Workshops & Short Courses**  
**(see Announcements)**

## Poster Contributions

The poster will be on display during the whole conference. For the presentation we will have dedicated poster sessions on Monday, 02 March 2009 (tentative time: 16:30-16:50) and on Tuesday, 03 March 2009 (tentative time: 15:30-16:30).

Alfred Golloch (CAI, GER)

The Removal of X-Ray Contrast Media from Wastewater - an Environmental Problem

Jens Dahlmann and Stefan Pflugmacher (Applied Biosystems, GER)

Low level quantification, identification, and characterization of cyanobacterial toxins using LC/MS/MS with library searching capabilities

Jens Dahlmann and Jan Lembcke (Applied Biosystems, GER)

Recent Challenges in LC-MS/MS Laboratories. How to overcome the challenges of Fast LC in combination with Fast Scanning

Mark D Imisides (Aqua Diagnostic Pty Ltd, Australia)

Optimization of Wastewater Treatment Plant operation by the real-time estimation of influent BOD with PeCOD<sup>®</sup> technology

Yvonne Ruhe, Christoph Plogmeier, Guenter Meon (Univ. Braunschweig, GER)

Development of a Decision Support System (DSS Lake Chao) for the Mitigation of Eutrophication of Lake Chao, China

Kinga Drensla, Norbert Engelhardt, Henning Heidermann, Andreas Janot (Ertverband, GER)

Practice and experience with the chemical cleaning of membranes

Christoph M. Konig, Torsten Seidel (delta h Ingenieurgesellschaft, GER)

3D MULTICOMPONENT REACTIVE TRANSPORT MODELING OF NITRATE REDUCTION IN THE CATCHMENT AREA OF WATER WORKS ON THE NIEDERRHEIN IN GERMANY

Khalid Y. Muwembe, Lukiya Tazalika, Deus Bamanya

(Ministry of Water and Environment, Makerere University, UGANDA)

Using Remote Sensing for Assessment and Monitoring of Drought Related Surface Water Stress in Pastoral Areas of Uganda

Werner Bidlingmaier, Eckhard Kraft, Jorg Londong, Jasmin Heinze (Bauhaus Univeritat Weimar, GER)

Transferring Environmental Engineering and Sanitation Knowledge – long distance learning and co-operations

E. Yucesoy, Martin Denecke, R. Widmann (Univ. Duisburg-Essen, GER)

Estimation of Actual Biomass in Activated Sludge by Determination of Protein Concentrations with the Modified Lowry Method

Natasha Potgieter (Univ. of Venda, RSA)

Evaluation of point-of-use intervention strategies to improve the microbiological quality of stored drinking water in rural communities in South Africa

E.E.O. Odjadjare, A.I. Okoh (Univ. Fort Hare, RSA)

Quality of the final effluents of wastewater treatment facility in a typical urban community of the Eastern Cape: Physicochemical regimes, Salmonella and Listeria species survival as case studies

Anthony I. Okoh, Augustina N. Osode (Univ. Fort Hare, RSA)

Wastewater treatment in a sub-urban community of the Eastern Cape: compliance status of final effluent in terms of physicochemical qualities and Escherichia coli prevalence

Chicgoua Noubactep (Univ. Gttingen, GER)

Affordable "Drinking Water for all": an Achievable Goal

Ratnaningtyas Budhi Lestari (Univ. Duisburg-Essen, GER)

Inside to the coagulation and precipitation process in the Nalgonda technique for drinking water defluoridation

Torsten C. Schmidt, Ulrich Borchers (Univ. Duisburg-Essen/IWW Mulheim, GER)

Chemical Indicators of Water Quality

Rudiger Kaus (FH Niederrhein, GER)

Measurement uncertainty arising from sampling Overview about the new EURACHEM-Guide

## Poster Contributions (continued)

Rüdiger Kaus (FH Niederrhein, GER)

Use of uncertainty information in compliance assessment Overview about the new EURACHEM-Guide

Rüdiger Kaus (FH Niederrhein, GER)

Method development of a quick determination of pesticides with LC-MS/MS and direct injection

Holger Lutze (Univ. Duisburg-Essen, GER)

Elimination of Taste and Odor Compounds and Bromate Formation during Ozonation and the AOP  $O_3/H_2O_2$

Jo M. Barnes, M.M. Slabbert (Univ. Stellenbosch, RSA)

The Antibiotic Resistance of E. coli Organisms Surviving Improper Water Chlorination

N. Huisamen, G.O. Sigge & T.J. Britz (Univ. Stellenbosch, RSA)

Investigation of the Water Quality of the Eerste and Plankenburg Rivers as Irrigation Sources and the Impact on the Safety of Fresh Produce

Amanda S. Brand, Gunnar O. Sigge & Trevor J. Britz (Univ. Stellenbosch, RSA)

Assessment of microbiological quality of the Berg River as a source of irrigation water for raw and minimally processed crops

S.Henden, M.Horstkott, I.Kirstein, J.Bergmann, W.Junge, A.Perschke and H.Franke (Univ. Duisburg-Essen, GER)

Algae-bioreactor as a filter for exhaust gases and waste water with high organic carbonic contents

R. Brown, T. Manxodidi, L. Rossouw, B. Gaile, P. de Souza (Emanti Management, RSA)

Challenges Associated with River Health Management: The Stellenbosch Experience

Karl Molt (Univ. Duisburg-Essen, GER)

Infrared Spectrometric Purity Control of Organic Liquids and Water

S. M. E. Ngobe, E Varkevisser (Rand Water, RSA)

Socioeconomic aspects of water (virtual water, water and society): Water in the environment - Rand water urban water systems

Enos Ngobe (Rand Water, RSA)

Water and security: Essential service agreement and strikes

Gilles Bornert (DRSSA Brest, France)

Water Quality Management in Critical Situations: The French Experience

Further poster presentations are still accepted. Please email your proposal as soon as possible to [info@envirowater.de](mailto:info@envirowater.de)