

**International Conference**



**International Conference**

# **Water Efficiency in Urban Areas**

**Concepts, Technologies,  
Socio Economics**

**Würzburg, Germany**

**Thursday, January 29<sup>th</sup>, 2009**

**Friday, January 30<sup>th</sup>, 2009**



[www.otti.de](http://www.otti.de)

## Location:



**Würzburg:** Baroque City with southern flair and also known as the "gateway to the Romantic Road". Furthermore its "Residenz" is listed in the UNESCO World Heritage. It is the metropolis of sunny Franconia, a landscape whose vineyards flank the river Main and the wines are famous throughout the world.

Würzburg is very well accessed by the train "ICE" and has a direct line from Frankfurt Airport.

## Conference Chairman:

### **Prof. Dr. rer. nat. Walter Trösch**

Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

## Scientific Committee:

### **Prof. Dr. Peter Cornel**

TU Darmstadt, Institute WAR, Germany

### **Dr. Jan-Olof Drangert**

University Linköping, Sweden

### **Dr. Harald Hiessl**

Fraunhofer Institute for Systems and Innovation Research (ISI), Karlsruhe, Germany

### **Prof. Dr. Hans-Peter Nachtnebel**

University of Natural Resources and Applied Life Sciences, Dept. of Water-Atmosphere-Environment, Vienna, Austria

### **Dr. Jean-Philippe Torterotot**

Cemagref, Antony, France

### **Prof. Dr. Walter Trösch**

Chairman of the Conference, Fraunhofer IGB, Stuttgart, Germany

### **PD Dr. Bernhard Truffer**

Cirus, EAWAG, Dübendorf, Switzerland

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Fraunhofer IGB,  
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## Supporting Organisations:



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[www.bwk-bund.de](http://www.bwk-bund.de)



[www.ciwem.org](http://www.ciwem.org)



[www.danishwaterforum.dk](http://www.danishwaterforum.dk)



[www.germanwaterpartnership.de](http://www.germanwaterpartnership.de)



[www.kleinwasserkraft.at](http://www.kleinwasserkraft.at)



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For further information about seminars, conferences and upcoming events in the field of Renewable Energies please consult our homepage [www.otti.de](http://www.otti.de)

The 1. International Conference Water Efficiency in Urban Areas will be held in Würzburg, Germany, on January 29th/30th, 2009.

We have the pleasure in inviting you to participate actively to this non mainstream international conference aiming at the global challenges regarding sustainable drinking water supply and wastewater management in urban areas. To cope with the challenges fresh thinking and an integrated approach is required to cover a wide portfolio of measures to improve water efficiency ranging from urban planning, to architecture, to water resources management and water treatment technologies. An exhibition will round off the conference.

Worldwide groundwater and surface waters are key resources to supply potable water as well as water for irrigation and industrial production. However, in many regions the protection of these resources from pollution, their rate of use as well as their natural renewal are inadequate from a sustainable management point of view. Additionally, the sustainable management of water resources is further aggravated by effects associated with climate change and demographic change.

The conventional approach to provide water supply, sanitation and stormwater management services in urban areas as it was developed more than a century ago in industrialized water rich countries is not only inappropriate but also far too expensive to transfer directly to urban areas in developing countries. Even in urban areas of developed countries it becomes evident that the conventional centralized water infrastructure concept has drawbacks and sustainability deficits especially when it comes to water use efficiency and to its adaptability to changing demographic and climatic situations.

New approaches are necessary to balance water demand for various residential, commercial, industrial and agricultural users. The supply requires an integrated management of both, natural water resources as well as reuse of appropriately treated wastewater. It is also necessary not only applying innovative technology to increase water use efficiency but also non-technical, i.e. organisational and institutional innovations to modernize systematically the existing approach to urban water infrastructures and to water service provision.

It will be a pleasure to share different views on technical as well as non-technical innovations during the conference and we look forward to your ideas and contribution to improving sustainability of urban water services.

### Conference Chairman

Prof. Dr. rer. nat. Walter Trösch  
Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

### For Central and East Europe

On the interface between energy and water

- Water Reuse - Which quality of water for what?
- Increase of water efficiency
- Water management
- Water purification
- Urban planning
- Integrated systems for large buildings or residential areas
- Know-how Transfer

## You will meet:

- Planners housing industry
- Urban planners
- Architects
- Utilities
- Waste water administration unions
- Engineers and scientists active in the field of water efficiency
- Politicians
- Building technicians
- Consultants
- Other attendees

## Information about OTTI:

OTTI has a 30-person strong team who proffer seminars, specialist forums and conferences. About 5000 specialists and managerial personnel from business, administration and science take part every year.

The OTTI is one of the leading conference organisers in the field of renewable energy sources. With us you not only update your knowledge, but also feel good. Lectures on the latest themes provide optimal information and that with shared meals, evening events where you can make worthwhile contacts with other participants and lecturers.

**For more detailed information please visit [www.otti.de](http://www.otti.de)**

# Programme:

## Thursday, January 29<sup>th</sup>, 2009

### 10.00 Opening Address

Eckardt Günther, OTTI, Regensburg Germany

### Aim of the Conference

Chairman Walter Trösch, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

## CLIMATE CHANGE – BOUNDARY CONDITIONS

**Chair: Hans-Peter Nachtnebel, University of Natural Resources and Applied Life Sciences, Dept. of Water-Atmosphere-Environment, Vienna, Austria**

### 10.20 Consequences of Climate Change and Demographic Change for Urban Infrastructure Systems

Harald Hiessl, Fraunhofer Institute for Systems and Innovation Research (ISI), Karlsruhe, Germany

### 10.50 Water Resources, Aquatic Ecosystems and Related Uses Facing Climate Change: a Global View

Jean-Philippe Torterotot, CEMAGREF, Antony Cedex, France

### 11.20 Climate Change Impacts on the Water Resources

Axel Bronstert, University Potsdam, Germany

### 11.50 Lunch and Visit to the Poster Exhibition

## PLANNING / STRATEGY

**Chair: Bernhard Truffer, Cirus, EAWAG, Dübendorf, Switzerland**

### 13.30 Water Systems as Part of a Sustainable Urban Utility Provision

Christian Günner, Hamburg Wasser, Germany

### 14.00 How do we Perceive a Sanitation Strategy today?

Jan-Olof Drangert, University Linköping, Sweden

### 14.30 Project RIF (Regional Infrastructure Foresight)

**Strategic Planning in Urban Water Management – Addressing Opportunities with Participative Foresight**  
Eckhard Stoermer, Cirus, EAWAG, Dübendorf, Switzerland

### 15.00 Scandinavia, a Sustainable Urban Planning in Russia

Urban Knapp, ENA Architekten, Stuttgart/Baden-Baden, Germany

### 15.20 Coffee break and visit to the Poster Exhibition

## TECHNOLOGICAL OPTIONS

**Chair: Harald Hiessl, Fraunhofer Institute for Systems and Innovation Research (ISI), Karlsruhe, Germany**

### 16.00 Integrated Management of Water Energy and Waste in Town Districts

Walter Trösch, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany

### 16.20 Semi-Centralized Supply and Treatment Systems for Urban Areas

Peter Cornel, TU Darmstadt, Institute WAR, Germany

### 16.40 Energy Efficiency in Urban Water Management

Markus Boller, EAWAG, Dübendorf, Switzerland

### 17.00 Palestine, Water Reuse Study

Laure Nicolet-Misslbeck, Dorsch Consult Wasser und Umwelt GmbH, Munich, Germany

### 17.20 Good Practices of Urban Ecosan Systems

Elisabeth von Münch, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Eschborn, Germany

## POSTER SESSION

**Chair: Peter Cornel, TU Darmstadt, Institute WAR, Germany**

### 17.40 A1 Urban Water Management and Climate Change

Sonia Gupta, Centre for Built Environment, Kolkata, India

### A2 Rainwater harvesting as an Adaptation to Climate Change

Rainwater Harvesting Expert K.R. Gopinath  
KRG Rainwater Foundation, Chennai, India

### B1 Water in an Asian Megacity: Challenges and Contradictions

Prof. Santosh Kumar Ghosh, Centre for Built Environment, Kolkata, India

### B2 Improved Water and Wastewater Services in Metro Manila under PPP

Virgilio Jr. Rivera, Manila Water Company, Inc., Quezon City, Philippines

### B3 Estimating Water Consumption for Improved Water Management

Ehsan Naeddem, Centre for Advanced Studies in Engineering, University Taxila, Pakistan

### B4 Kolkata's Wastewater Feeds 4000 Hectares of Fish Farms

Jaap Butter, DHV BV, Consulting Engineers, Amersfoort, The Netherlands

### C1 Reuse of Urban Waste Water for Food Production

Arunima Guha, Youth Water Forum, Kolkata, India

### C2 Effects of Pre-Ozonation on the Optimized Coagulation of a Typical North Serbia Source Water: Pilot Scale Evaluation

Aleksandra Tubić, Faculty of Sciences, Novi Sad, Republic of Serbia

### C3 Energy Demand for Desalination with Solar Driven Reverse Osmosis Units

Joachim Went, Fraunhofer ISE, Freiburg, Germany

### E1 A New Approach to Optimisation and Cost Reduction of Drinking Water Supply Systems

Hans-Dieter Stuchly, Björnnsen Beratende Ingenieure GmbH, Koblenz, Germany

## E2 Contractual Choices, Governance and Performance in the Italian Water Industry

Martina, Bozzola, Department of Economics, Graduate Institute of International Studies, Geneva, Switzerland

19.30 Dinner Restaurant "Backöfele", Würzburg, Germany

**Friday, January 30<sup>th</sup>, 2009**

## ECONOMICS/FINANCE

**Chair: Jan-Olof Drangert, University Linköping, Sweden**

- 08.30 **New Business Models for Public Waste Water Utilities**  
Ekkehard Pfeiffer, Emschergenossenschaft/Lippeverband, Essen, Germany
- 09.00 **Investment Needs and Transition**  
**Into which direction we should invest into the future?**  
Jens Libbe, Deutsches Institut für Urbanistik, Berlin, Germany
- 09.30 **Technologies for Urban Water Efficiency – which Areas fit Venture Capital Investments**  
Helge Daebel, Emerald Technologies Ventures, Zürich, Switzerland
- 10.00 Georg Obert, Babcock and Brown, Munich, Germany
- 10.30 **Coffee Break and Visit to the Poster Exhibition**

## IMPLEMENTATION OF STRATEGIES

**Chair: Jean-Philippe Torterotot, Cemagref, France**

- 11.00 **Factors of Drinking Water Consumption Among the German Speaking Swiss Population**  
Sören Vogel, EAWAG, Dübendorf, Switzerland
- 11.30 **Implementing Climate Adaptation of Urban Areas**  
Frans van de Ven, Deltares / Delft University of Technology – Urban Water Management, Delft, The Netherlands
- 12.00 **Implementing Strategies to Reduce Disaster Risk in Water Services**  
Hans-Peter Nachtnebel, University of Natural Resources and Applied Life Sciences, Dept. of Water-Atmosphere-Environment, Vienna, Austria
- 12.30 **Water Reuse and Recycling in Industrial Application**  
Karl-Heinz Rosenwinkel, Institute for Water Quality and Waste Management, Leibniz University of Hannover, Germany
- 13.00 **Closing Remarks**  
Walter Trösch, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB), Stuttgart, Germany
- 13.10 **End of the Conference**

## Organisation and Conference Fee:

### Organisation Committee

**Eckardt Günther**  
**Gabriele Struthoff-Müller**  
**OTTI e.V., Renewable Energies**

Wernerwerkstraße 4,  
93049 Regensburg, Germany

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### Conference Fee

**If registered until November 14<sup>th</sup>, 2008**

**Per Person:** € 580,00

Member of OTTI/Supporting Organisations: € 510,00

**If registered after November 14<sup>th</sup>, 2008**

**Per Person:** € 680,00

Member of OTTI/Supporting Organisations: € 610,00

**Reduced fee for presenters:** € 310,00

From the third participant on, every other participant of your company profits from our **15 % discount** on the seminar fee.

Fees cover the admission to all sessions, invitation to all coffee breaks, a lunch, a dinner and the conference proceedings.

### Conference Venue

Congress Centrum Würzburg  
Am Congress Centrum  
97070 Würzburg, Germany

Phone: +49 931 372372

Fax: +49 931 373652

tourismus.tagungen@wuerzburg.de

www.wuerzburg.de

### Travelinformation/Accommodation

Travelinformation and a list with hotels you will find under:  
<http://www.otti.de/pdf/travelinformationWaterEfficiency.pdf>

Please book your accommodation as soon as possible by yourself!

### Registration Conditions

You will receive the relevant papers and confirmation as soon as we have your registration. The fees are exempt from value-added tax (VAT) and are payable in full upon receipt of the invoice. Payment must be received no later than 14 days before the conference begins (it has to be settled in EURO). All bank charges have to be covered by the transmitter! OTTI reserves the right to refuse admission if the amount has not arrived, unless said amount is paid by cheque on the day. In case transferring occurs later than 14 days before the conference, please keep a copy of the transfer order ready and show it in the organisation office at the conference. OTTI reserves the right to change the programme at short notice for urgent reasons. There is no charge for cancellations made at least 35 days before the event starts. If the booking is cancelled 34 days before the start of the conference a service charge of € 120,00 will be made. For later cancellations (14 days before the conference starts) the complete conference fee will be charged. All cancellations must be in writing. It is possible to send a substitute delegate at any time without additional cost, but we need a written message about the change 4 days before the conference starts. Legal domicile and place of fulfilment is Regensburg, Germany.

# International Conference Water Efficiency in Urban Areas

January 29<sup>th</sup> – 30<sup>th</sup>, 2009 (WEA-3091)

**OTTI e.V.**

**Headword: Water Efficiency in Urban Areas**

**Wernerwerkstraße 4  
93049 Regensburg  
Germany**

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# International Conference Water Efficiency in Urban Areas

