



EnviroInfo 2009

Environmental Informatics and Industrial Environmental Protection: Concepts, Methods and Tools

23rd International Conference on
Informatics for Environmental Protection

Volker Wohlgemuth, Bernd Page, Kristina Voigt (Eds.)

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Volume 1

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Wilhelminenhofstraße 75A, 12459 Berlin, Germany, volker.wohlgemuth@htw-berlin.de

Bernd Page, Department of Informatics, University of Hamburg

Vogt-Koelln-Strasse 30, 22527 Hamburg, Germany, page@informatik.uni-hamburg.de

Kristina Voigt, Helmholtz Zentrum Muenchen, German Research Center for Environmental Health (GmbH), Ingolstaedter Landstr. 1, 85764 Neuherberg , kvoigt@helmholtz-muenchen.de

Conference Homepage

<http://www.enviroinfo2009.org>

Preface - Environmental Informatics and Industrial Environmental Protection: Concepts, Methods and Tools

Volker Wohlgemuth¹, Bernd Page² and Kristina Voigt³

¹ HTW Berlin, University of Applied Sciences, Email: Volker.Wohlgemuth@htw-berlin.de

² University of Hamburg, Email page@informatik.uni-hamburg.de

³ Helmholtz Zentrum München, German Research Center for Environmental Health, Email: kvoigt@helmholtz-muenchen.de

The EnviroInfo 2009 is the continuation of a long tradition of conferences and workshops within the field of environmental informatics starting as early as in 1986. The nucleus of the upcoming field of "computer applications for environmental protection" was the 1st Symposium held at the Karlsruhe Research Center in 1986 and the foundation of the Technical Committee "Informatik im Umweltschutz" (Environmental Informatics) within the German Society for Informatics (GI). The new extended title of the Technical Committee is now **Environmental Informatics, Informatics for Environmental Protection, Sustainability and Risk Management**. More than 22 years later, 22 EnviroInfo conferences have been held with approximately 3.000 papers submitted by 7.500 authors published in proceedings' volumes since the first event. From a German initiative the conference has extended to the European level and beyond concerning the venues, the participants and the topics. This conference will present more than 130 papers which have been submitted by authors from around 25 countries. The EnviroInfo 2009 as the 23rd conference in this series is held in Berlin, the capital of Germany, at the HTW Berlin, University of Applied Sciences, which runs the first degree courses (Master and Bachelor programme) in the field of Industrial Environmental Informatics in Germany for many years already.

Each conference has a special focus in Environmental Informatics. This conference event puts the special focus on the topic "**ICT for industrial environmental protection**" and thus will reflect on practical problems and the need for an adequate IT-assistance for the purpose of sustainability for companies. A special emphasis is also laid on the requirements of small and medium-sized enterprises and their need for a simple and easy to use IT-assistance in this domain. In this sense topics like carbon footprinting, environmental management information systems, sustainability reporting and accounting, material and energy efficiency specially tailored to the needs of companies will be discussed in dedicated sessions and workshops.

A prominent role in this conference will play the sessions of the European project **ICT-ENSURE** which has been born within the EnviroInfo community. ICT-ENSURE (Information and Communication Technologies - Environmental Sustainability Research) is the leading EU support action in the area "ICT for Environmental Sustainability Research".

The main objectives are to extend the network of environmental sustainability research and to explore the structure and content of European research programmes relevant for sustainable development. In several workshops, e.g. ICT for Climate Change and Climate Change adaption, Shaping a Single Information Space for the Environment, the Role of ICT in Industrial Symbiosis Projects, ICT for Sustainable Use of Natural Resources, the (preliminary) results and findings of this project will be presented. The workshop

¹ HTW Berlin, University of Applied Sciences, Germany, Email: volker.wohlgemuth@htw-berlin.de

² University of Hamburg, Germany, Email: page@informatik.uni-hamburg.de

³ Helmholtz Zentrum Muenchen, Germany, Email: kvoigt@helmholtz-muenchen.de

ICT for Risk Management organised in cooperation with CODATA Germany, the German National Committee on Data for Science and Technology, will be also held as a side event of the EnviroInfo conference integrated into the ICT-ENSURE track.

The **Berliner BUIS Tage**, a German language event concerning Environmental Management Information Systems for Industry (Betriebliche Umweltinformationssysteme, BUIS) with main emphasis on Small and Medium Enterprises (SMEs) round up the programme.

It is a specialty of the EnviroInfo conferences that a student's best paper prize will be awarded. This event should encourage young researchers to join the EnviroInfo community.

A further feature with respect to students is the **Students Workshop** organized by HTW Students of the Study Program Industrial Environmental Informatics.

Another asset of this EnviroInfo 2009 in Berlin are presentations by **Working Groups of the Technical Committee** with their working results in an especially dedicated session.

Some sessions regarding established topics will be held in order to inform the community on the pursuit of research and application as well as some new and rewarding topics as well as features will be presented at the EnviroInfo2009 in Berlin.

Because some of the workshops are held in German language we decided to publish two conference proceedings. All English papers are published in this conference volume and will be handed out to all EnviroInfo2009 participants. The German submissions which belong to the "**Berliner BUIS Tage**" and to the workshop "**eGovernment in der kommunalen Umweltverwaltung**" will be published in German language after the conference and will be sent to all participants of these workshops.

We wish all participants of the EnviroInfo 2009 fruitful talks and a manifold exchange of ideas with other colleagues from different disciplines of sciences. Due to the interdisciplinary character of environmental informatics one important goal of this conference should be to bring experts from industry, research and education together to exchange thoughts and proposals for solution of urgent problems to make our world a better place for living.

Last but not least the editors would like to thank all contributors to the conference and these conference proceedings. Special thanks to the members of the programme and organizing committee. Especially we want to thank all students of the HTW Berlin, study programme Industrial Environmental Informatics for their altruistic commitments to the conference and also to Werner Pillmann and Klaus Tochtermann who have been involved with the ICT-ENSURE project integration into the conference. Special thanks go to our sponsors for their assistance and to the HTW Berlin for being the host of this conference.

Berlin, September 07th, 2009

Volker Wohlgenuth
Bernd Page
Kristina Voigt

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Volume 2

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