



**Man • Environment • Bauhaus
Light up the Ideas of Environmental Informatics**

26th International Conference on Informatics for Environmental Protection

Hans-Knud Arndt, Gerlinde Knetsch, Werner Pillmann (Eds.)

Proceedings of the 26th International Conference on Informatics -
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Torsten Urban Otto-von-Guericke-University Magdeburg, Germany

Editors

Hans-Knud Arndt
Otto-von-Guericke-University Magdeburg
Universitaetsplatz 2, 39106 Magdeburg, Deutschland
e-mail: hans-knud.arndt@iti.cs.uni-magdeburg.de

Gerlinde Knetsch
Umweltbundesamt
Wörlitzer Platz 1, 06844 Dessau, Deutschland
e-mail: gerlinde.knetsch@uba.de

Werner Pillmann
ISEP, International Society for Environmental Protection
Bechardgasse 24/12, 1030 Vienna, Austria
e-mail: pillmann@isep.at

Conference Homepage

www.enviroinfo2012.org

Part 1

Core Application Areas

Preface

“Less is More”

(Ludwig Mies van der Rohe, last director of the historical Bauhaus)

Less is (More) Sustainable. From a historical point of view, the Bauhaus anticipated essential thoughts of environmental protection and sustainability more than 90 years ago. In the era of globalization this citation is more topical than ever. Based on the concepts of Bauhaus in relation to the environmental protection it is advisable to transform these ideas in the area of Environmental Informatics.

Since 1986, the EnviroInfo Conferences on Informatics for Environmental Protection focus on concepts, methods and tools to process, analyze and interpret environmental information and support the discourse on environmental issues. The conference has developed into a leading international and interdisciplinary conference on environmental Information and Communication Technologies. EnviroInfo has a strong tradition of discussing fundamental aspects in the field of environmental informatics, developing understanding for enhancing the scope of potential environmental systems.

Following the last successful conference of the series in Ispra/Italy this conference is held in the German Umweltbundesamt Building in Bauhaus City Dessau. This 26th EnviroInfo conference demonstrates again the broad application area of environmental informatics for networking knowledge about environmental systems under the headline.

MAN • ENVIRONMENT • BAUHAUS Light up the Ideas of Environmental Informatics

This year's EnviroInfo is jointly organized by the Otto-von-Guericke-University Magdeburg (Germany) represented by the Working Group of Management Information Systems of the Faculty of Computer Science and the Umweltbundesamt FG IV 2.1, Informationssysteme Chemikaliensicherheit in Dessau (Germany) in cooperation with the International Society for Environmental Protection (Vienna, Austria).

The main topics of the conference from an environmental and informatics perspective are:

Environment and Health	Linking Open Environmental Data
Communication of Chemical Safety Information	Green IT
Environmental Management Information Systems	ICT for Life Cycle Assessment
Environmental and Sustainability Indicators	GIS and Web Services
ICT and Climate Change	Modeling and Simulation
Environmental Communication	INSPIRE, GMES, GEOSS
Open Government	Mobile Applications

This peer reviewed proceedings contain more than 100 papers on these and other conference main topics.

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Magdeburg, Dessau, Vienna
August 2012

Hans-Knud Arndt, Gerlinde Knetsch, Werner Pillmann

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Hans-Knud Arndt Otto-von-Guericke-University Magdeburg, Germany
Conference Chair

Gerlinde Knetsch Umweltbundesamt Dessau, Germany
Conference Chair

Werner Pillmann International Society for Environmental Protection, Vienna, Austria
Scientific Chair

Paul Bultmann Otto-von-Guericke-University Magdeburg, Germany
Sven Gerber Otto-von-Guericke-University Magdeburg, Germany
Sabine Laube Otto-von-Guericke-University Magdeburg, Germany
Torsten Urban Otto-von-Guericke-University Magdeburg, Germany

Editors

Hans-Knud Arndt
Otto-von-Guericke-University Magdeburg
Universitaetsplatz 2, 39106 Magdeburg, Deutschland
e-mail: hans-knud.arndt@iti.cs.uni-magdeburg.de

Gerlinde Knetsch
Umweltbundesamt
Wörlitzer Platz 1, 06844 Dessau, Deutschland
e-mail: gerlinde.knetsch@uba.de

Werner Pillmann
ISEP, International Society for Environmental Protection
Bechardgasse 24/12, 1030 Vienna, Austria
e-mail: pillmann@isep.at

Conference Homepage

www.enviroinfo2012.org

Part 2

Open Data and Industrial Ecological Management

Preface

“Less is More”

(Ludwig Mies van der Rohe, last director of the historical Bauhaus)

Less is (More) Sustainable. From a historical point of view, the Bauhaus anticipated essential thoughts of environmental protection and sustainability more than 90 years ago. In the era of globalization this citation is more topical than ever. Based on the concepts of Bauhaus in relation to the environmental protection it is advisable to transform these ideas in the area of Environmental Informatics.

Since 1986, the EnviroInfo Conferences on Informatics for Environmental Protection focus on concepts, methods and tools to process, analyze and interpret environmental information and support the discourse on environmental issues. The conference has developed into a leading international and interdisciplinary conference on environmental Information and Communication Technologies. EnviroInfo has a strong tradition of discussing fundamental aspects in the field of environmental informatics, developing understanding for enhancing the scope of potential environmental systems.

Following the last successful conference of the series in Ispra/Italy this conference is held in the German Umweltbundesamt Building in Bauhaus City Dessau. This 26th EnviroInfo conference demonstrates again the broad application area of environmental informatics for networking knowledge about environmental systems under the headline.

MAN • ENVIRONMENT • BAUHAUS Light up the Ideas of Environmental Informatics

This year’s EnviroInfo is jointly organized by the Otto-von-Guericke-University Magdeburg (Germany) represented by the Working Group of Management Information Systems of the Faculty of Computer Science and the Umweltbundesamt FG IV 2.1, Informationssysteme Chemikaliensicherheit in Dessau (Germany) in cooperation with the International Society for Environmental Protection (Vienna, Austria).

The main topics of the conference from an environmental and informatics perspective are:

Environment and Health	Linking Open Environmental Data
Communication of Chemical Safety Information	Green IT
Environmental Management Information Systems	ICT for Life Cycle Assessment
Environmental and Sustainability Indicators	GIS and Web Services
ICT and Climate Change	Modeling and Simulation
Environmental Communication	INSPIRE, GMES, GEOSS
Open Government	Mobile Applications

This peer reviewed proceedings contain more than 100 papers on these and other conference main topics.

Special thanks are going to the authors and workshop organizers Thomas Bandholtz and Jorge-Marx-Gómez for their efforts to present actual findings and bring current topics to discussion. We also thank Sabine Laube and Paul Bultmann (Otto-von-Guericke-University Magdeburg) for providing support in administration and logistics, Katja Gündel and Daniela Schönfelder (METOP GmbH, Magdeburg) for providing and managing the internet presence of the conference, Sven Gerber, Torsten Urban (Otto-von-Guericke-University Magdeburg) and Christian Schmitt (KIT, Karlsruhe) for the proceedings production support, and Sandra Bilkenroth (rothSTICH | grafik | design) for the conference program design. The appreciation and assistance of the editor's team in several phases of the EnviroInfo preparation supports the fruitful cooperative work of the conference preparation.

Magdeburg, Dessau, Vienna
August 2012

Hans-Knud Arndt, Gerlinde Knetsch, Werner Pillmann

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