



**Information Technologies
in Environmental Engineering
(ITEE 2007)**

March 29-30, 2007

**Carl von Ossietzky University
Oldenburg
Germany**

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Friday, March 30th, 2007

A14 1-102			
9:00	Keynote Sustainability Impact Assessment – The Role of Numerical E3-Models Christoph Böhringer		
9:45	<i>Coffee Break</i>		
A14 1-102	A14 1-113	A14 1-114	
10:00	Session 10: Life Cycle Assessment	Session 11: Environmental Policy and Management II	Workshop: Corporate Environmental Management Information Systems
12:00	<i>Lunch Break</i>		
A14 1-102			
13:00	Keynote Electric Power Management and a Clean Environment – a Discrepancy and an Algorithmic Challenge Horst F. Wedde		
13:45	<i>Coffee Break</i>		
A14 1-102	A14 1-113	A14 1-114	
14:00	Session 12: Environmental Information Systems IV	Session 13: Air Pollution	Session 14: Spatial Applications
15:40	<i>Closing Session: Best Paper Award and Farewell</i>		

Best Paper Award

The participants of the conference are kindly asked to nominate candidates for the Best Paper Award. For this purpose you find a special form in your conference documents. You may choose at most three candidates for the award.

Please return your form to the collection box at the conference office.

Session 1: Environmental Information Systems I

Room: A14 1-102

Chair: *Claus Rautenstrauch*

10:30	The Concept of Closed-loop Supply Chain Integration Through Agents-based System <i>Paulina Golinska, Marek Fertsch, Jorge Marx Gómez, Joanna Oleskow</i>
11:00	Environmental Management Systems and Information Management – Strategic-Systematical Integration of Green Value Added <i>Ian Molloy</i>
11:30	Petri Net Based EMIS-Mappers for Flexible Manufacturing Systems <i>Andreas Moeller</i>
12:00	Integration of MRP II and Material Flow Management Systems <i>Claus Rautenstrauch</i>

Session 2: Decentralized Energy Management Systems

Room A14 1-112:

Chair: *Michael Sonnenschein*

10:30	Distributed Power Generation: Requirements and Recommendations for an ICT Architecture <i>Ludger Winkels, Jan-Patrick Osterloh, Fabian Grüning, Martin Tröschel, Dave Boers, Tanja Schmedes, Mathias Uslar</i>
11:00	Models for Optimization of Electrical Energy Delivery for Regional Utilities <i>Swantje Nikolai</i>
11:30	Implementing and Evaluating the Common Information Model in a Relational and RDF-based Database <i>Stefan Schulte, Rainer Berbner, Ralf Steinmetz, Mathias Uslar</i>
12:00	Optimization of Adaptive Consumers to a Time-varying Electricity Supply <i>Ute Vogel, Michael Sonnenschein</i>

Session 3: Environmental Risk Assessment

Room A14 1-113:

Chair: *NN*

10:30	Knowledge Acquisition and Risk Analysis in Material Recovery Facilities by a Virtual Team <i>Ioannis Dokas, Konstantinos Kitis, Christos Dodis, Demetrios Panagiotakopoulos, Demetrios Karras</i>
11:00	Early Warning and Risk Management – An Interdisciplinary Approach <i>Walter Hürster, Thomas Wilbois</i>
11:30	Development of a GIS-based Risk Assessment Methodology for Flood Pollutants <i>Axel Sauer, Jochen Schanze, Ulrich Walz</i>
12:00	Modeling Arsenic and Oil Contamination After High Water Events in the Town and Floodplain of Bitterfeld (DE) <i>Marcus Schulz, Olaf Büttner, Michael Matthies, Michael Böhme, Wolf von Tümpling</i>

Session 4: Environmental Information Systems II

Room: A14 1-102

Chair: *Corinna V. Lang*

14:30	Designing a Bilingual Eco-Ontology for Open and Intuitive Search <i>Bettina Bauer-Messmer, Rolf Grütter</i>
15:00	Data Warehousing with Environmental Data <i>Ansgar Burmann, Jorge Marx Gómez</i>
15:30	Modeling of a Corporate Environmental Management Information System (CEMIS) for Production Processes <i>Corinna V. Lang</i>

Session 5: Environmental Policy and Management I

Room A14 1-112:

Chair: *Martin Müller*

14:30	SmartLIFE: Toward European Approaches to Sustainable Building <i>Walter Leal Filho</i>
15:00	Spatial Inventory of Greenhouse Gases on Regional Level <i>Rostylav Bun, Khrystyna Hamal, Mykola Gusti, Andriy Bun, Olga Savchyn</i>
15:30	Weblogs, Legitimacy and Organizations <i>Markus Glötzel, Martin Müller</i>

Session 6: Water Pollution I

Room A14 1-113:

Chair: *Ute Vogel*

14:30	Evidence of Heavy Metal Pollution in French Jura Lakes: Observed Impacts and Countermeasures <i>Rachid Nedjai</i>
15:00	GIS Use in the Aral Sea Area: Water Quality and Population's Health <i>E. Kamilova, D. Fayzieva, B. Nurtaev, L. Orlovsky, D. Reible</i>
15:30	Simulation and Optimization of Habitat Network Permeability <i>Jens Finke, Michael Sonnenschein</i>

Session 7: Environmental Information Systems III

Room: A14 1-102

Chair: *Jorge Marx Gómez*

16:30	A Protocol to Secure Context-aware Service Discovery in Complex Earth Experiments <i>Ricardo R. M. do Carmo, André C. M. Costa, José L. Campos dos Santos, José G. Pereira Filho</i>
17:00	New Measures for Evaluating Decision Systems Using Rough Set Theory: The Application in Seasonal Weather Forecasting <i>Yailé Caballero, Leticia Arco, Rafael Bello, Jorge Marx Gómez</i>
17:30	Data Quality Mining: Employing Classifiers for Assuring Consistent Datasets <i>Fabian Grüning</i>

Session 8: Corporate Sustainability Reporting

Room: A14 1-112

Chair: *Hans-Knud Arndt*

16:30	Using Topic Maps for Sustainability Reporting <i>Hans-Knud Arndt, Henner Graubitz, René Klesinski</i>
17:00	Conception of System Supported Generation of Sustainability Reports in a Large Scale Enterprise <i>Christian Grünwald, Jorge Marx Gómez</i>
17:30	Information Management for Sophisticated Environmental Reporting <i>Ralf Isenmann</i>

Session 9: Water Pollution II

Room: A14 1-113

Chair: *Albrecht Gnauck*

16:30	Water Supply and Water Demand of Beijing – A Game Theoretic Approach for Modeling <i>Shouke Wei, Albrecht Gnauck</i>
17:00	Evaluating Water Quality Standards Through Time Series Modeling by Wavelets <i>Jean Duclos Alegue, Albrecht Gnauck</i>
17:30	Simulation of Shallow Lake Eutrophication <i>Albrecht Gnauck</i>

Session 10: Life Cycle Assessment

Room: A14 1-102

Chair: *Stefan Gößling-Reisemann*

10:00	EcoClass – An Easy-to-access GUI for LCA Data to Assess Product Utilization Schemes <i>Volker Barth, Jens Krefeldt, Jan-Christian Marinasse</i>
10:30	RFID-based Information Management in the Automotive Plastic Recycling Industry <i>Zheng Lu, Hui Cao, Paul Folan, David Potter, Jim Browne</i>
11:00	Material Flow Management in a Motor Fabrication: Identifying saving potential in the mechanical production by modelling energy and material flows as well as machine time using Umberto <i>Jürgen Reinhard, Stefan Motsch</i>
11:30	Combining LCA with Thermodynamics <i>Stefan Gößling-Reisemann</i>

Session 11: Environmental Policy and Management II

Room: A14 1-112

Chair: *Ralf Isenmann*

10:00	The Effect of ICTs on Mobility and Environment in Urban Areas <i>Ji Young Song, Bong Gyou Lee, Koen Steemers, Nick Baker</i>
10:30	A Pilot Project for Eco Industrial Parks in North Rhine-Westphalia <i>Veronika Wolf</i>
11:00	Unifying Architecture for Industrial Ecology Communication and Education <i>Ralf Isenmann</i>
11:30	Poster Presentation: Data Mining as a Suitable Tool for Efficient Supply Chain Integration <i>Joanna Oleskow, Marek Fertsch, Paulina Golinska, Katarzyna Maruszewska</i>

Workshop: Corporate Environmental Management Information Systems

Room: A14 1-113

Chair: *Horst Junker, Corinna Lang*

10:00	Modeling a Material Flow Network of a Casting House <i>Alexander Bock</i>
10:20	Conception and Realization of a Web-based User Interface for an Environmental Simulation with Gridfunctionality <i>Stefan Hinze</i>
10:40	Concept to Migrate an Access Based Environmental Information System into a Web-based Front-end Solution for the Environmental Management of a Waste Disposal Company <i>Thomas Kästner</i>
11:00	Development of a Software-based Environmental Reporting According to the “Bundes-Immissionsschutzgesetz” <i>Jan Goscimski</i>
11:20	Environmental and Safety Management Support <i>Thomas Wetzel, Nabil Allam</i>
11:40	Development and Implementation of a Software to Accelerate Data Acquisition as Part of a Corporate Environmental Management Information System for an Energy Company <i>Mathias Zirkelbach</i>

Session 12: Environmental Information Systems IV

Room: A14 1-102

Chair: Horst Junker

14:00	Designing a Flexible ICT Framework for Processing Remote Gauging-Data <i>Peter Jakob, Flurin Sutter, Peter Waldner, Gustav Schneider</i>
14:30	Integrating Environmental Information with Systems of Factory Planning <i>Christian Grünwald, Jorge Marx Gómez</i>
15:00	Ecological and Economic Effects of Web-based Integrated Management Systems <i>Horst Junker</i>

Session 13: Air Pollution

Room: A14 1-112

Chair: Heinz Welsch

14:00	A Spatial Assessment of Air Pollution Impact of a Highway Project Using GIS <i>M.L. Agrawal, B. Maitra, M.K. Ghose</i>
14:30	The Air Quality Management System AirQUIS <i>Leiv Håvard Slørdal, Harold McInnes, Terje Krognnes</i>
15:00	Danger Assessment of Potential Resources of Air Pollution once Natural Disasters Occur <i>Tabassom Hashemi Farzad, Ebrahim Omid Garekani</i>

Session 14: Spatial Applications

Room: A14 1-113

Chair: Ioannis N. Athanasiadis

14:00	Finding Optimal Directions for Forest Trees Harvesting Using GIS-based Techniques <i>Wassim Jaziri</i>
14:30	Semantic Modeling in Farming Systems Research - The Case of the Agricultural Management Definition Module <i>Ioannis N. Athanasiadis, Sander Janssen, David Huber, Andrea Emilio Rizzoli, Martin van Ittersum</i>
15:00	System Architecture for Coverage and Visualization of Underground Pipeline Structures in Detectino <i>Jana Görmer, Helmut Lessing, Dirk Bettels</i>

Closing Session

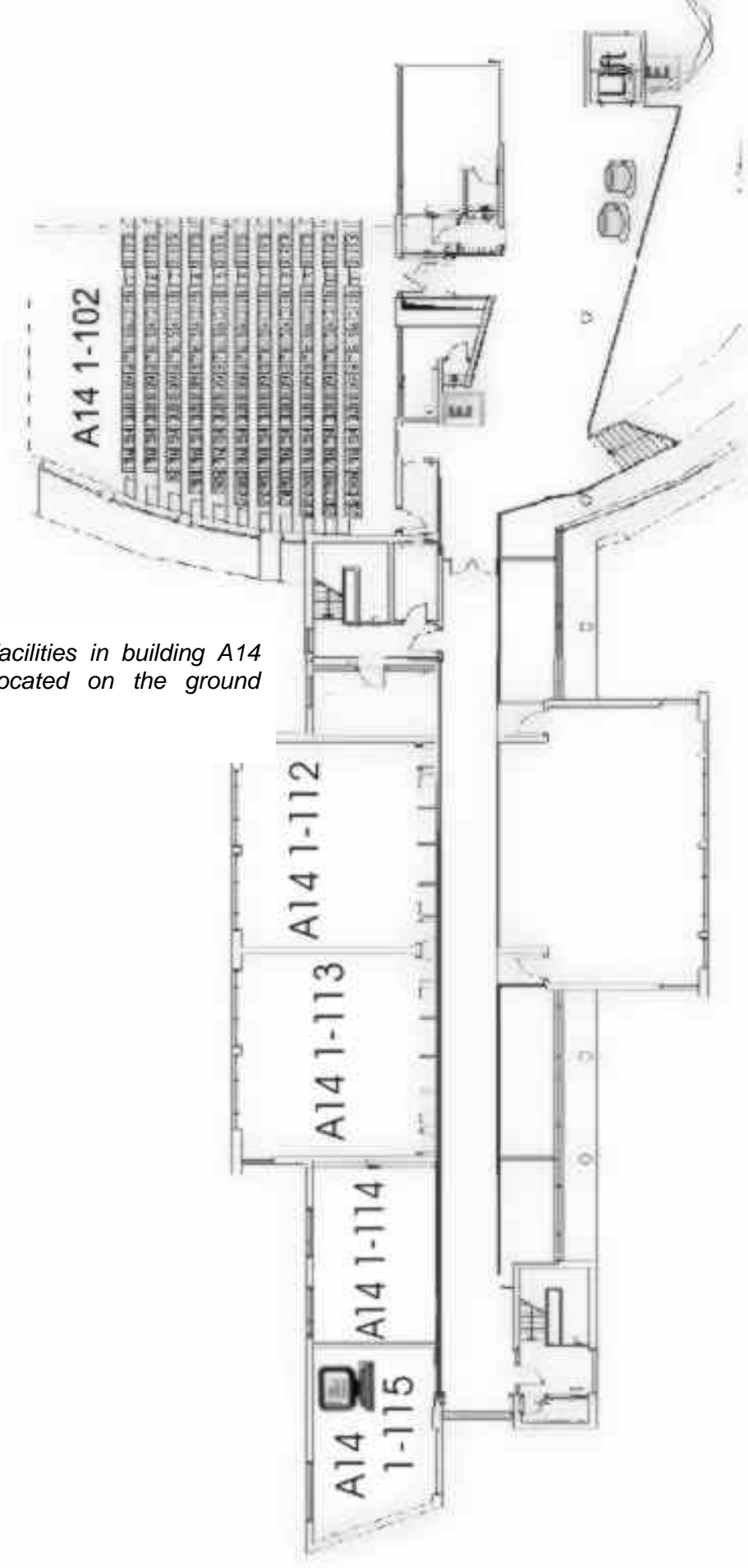
Room: A14 1-102

Chairs: M. Sonnenschein, M. Müller

15:40	Best Paper Award
	Farewell

Speakers are kindly requested to contact their session chair in the break before their talk.

The facilities in building A14 are located on the ground floor.



Registration Office

The Registration Office is located on the ground floor of building A14.
It is open from 8:30 -18:30h on Thursday and 8:30-16:00 h on Friday.

Lunch Coupons

We have lunch at the university restaurant “Mensa”. In your conference documents you find lunch coupons which give you a free choice of food at the meal service counters “Menü”, “Alternativ”, “Auswahl” or at “Culinarium”, which are all located on the **second floor** of the Mensa. (It does not include drinks – free drinks are offered in the conference building A14.)
Information about the current meals can be found on the conference bulletin board.

Access to the Internet

In room A14 1-115.

Name Badges

We kindly request you to return your name badge to the collecting box at the end of the conference.

Welcome Reception

Wednesday, March 28th, 2007

At 18:00 h

Location: PFL, Peterstr. 3, 26121 Oldenburg

The PFL building, located near the former city moat, is one of Oldenburg architectural sights in the late classicist style. It was built by Count Peter Friedrich Ludwig in 1838 and used as a hospital until 1984. Nowadays it accommodates a cultural center, a public library and lecture halls for concerts, conferences, readings and meetings.



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Guided Tour through Oldenburg City

Thursday, March 29th, 2007

At 18:45 h

Start: Castle of Oldenburg

Oldenburg's heart beats in the must-see old town. Grouped around the Old Town Hall, St. Lamberti Church and the castle, the town centre is one big pedestrian zone. Architecture from five centuries harmonises with today's attractive shopping worlds. Street cafes, bistros and restaurants which suit all tastes, picturesque spots and quarters, plenty of green and softly flowing waterways round off the picture.

The Guided Tour will end at the Old Town Hall where the conference dinner will take place.



Quelle: Wikipedia Commons

Conference Dinner

Thursday, March 29th, 2007

At 20:00 h

Location: Ratskeller, Markt 1, 26121 Oldenburg

The Ratskeller of Oldenburg is located in the "Old Townhall" in the Inner City of Oldenburg. It was built in 1887, but its first mentioning in the City Chronicles dates back to March, 29th 1355.

You find the voucher for the conference dinner in your conference documents.

