EnviroInfo 2007 - Preliminary Programme
September 12-15, 2007 Warsaw, The Staszic Palace

Wednesday 12th September 2007

8:45 – 9:00 Welcome: Olgierd Hryniewicz

Plenary Talks

9:00 – 9:30 Olgierd Hryniewicz, Zbigniew Nahorski: **Applications of systems analysis in solving problems related to environment**

9:30 – 10:00 Márta Nagy-Rothengass : **Policy of EC with respect to environmental informatics**

10:00 – 10:15 Break

	S1.1 Knowledge and Information Management	S2.1 Systems Analysis in Environmental Engineering and Environmental Informatics	S3.1 Decision Support Information Systems for Optimization and Control of Environmental Processes	W1.1 Which 'System' Do We Mean? – The Challenge to Bridge Multidisciplinary in Environmental Informatics	W2.1 Environmental Information for Public
10:15 – 10:40	Metadata Creation and Management of Distributed Data Catalogs with PortalU® and InGrid® 1.1 Thomas Vögele, Martin Klenke, Fred Kruse	Calculations of the Energy Consumption for Water Heating in Households on the basis of Publicly Available Data Birgitta Krüger	An Environmental Management Information System for Eco-Efficiency of Agro-Industries in Thailand based on Material Flow Networks Decha Pimpisut, Bernd Page, Thomas Spehs, Volker Wohlgemuth	Systems at the Interface of Multiple Disciplines Representing Environmentally Relevant Data and Concepts Charlotte Kaempf	Air Quality Information Service in Upper Silesia Joachim Bronder, Czesław Kliś, Jacek Długosz
10:40 – 11:05	An Ontology-Driven Approach for Harmonizing and Integrating Environmental Information Yu-Chi Chu, Su-Mei Huang, Chin-Cheng Lien, Chen-Chau Yang	Proposal of Interoperability Framework of the Czech Republic in Environmental Information Exchange Jiří Hřebíček, Danka Nemethová, Jaroslav Ráček	Innovated Model REPAS for Calculation of CO_2 Emission from Passenger Cars in Developing Countries Radoje Vujadinović, Danilo Nikolić	Environmental System Models - From Technical to World Models Werner Pillmann	State-of-the-art in the Dissemination of AQ Information to the General Public Kostas Karatzas
11:05 – 11:30	Using Internet Technologies and Services for Sustainability Reporting: Research Initiative, Agenda, Early Results Ralf Isenman, Hans-Knud Arndt, Jan Brosowski, Jorge Marx Gómez, Monika Schappert	A Software Architecture for the Cooperation Project HADU: (Hamburg's Dynamical Geological Underground) Jochen Wittmann	Integration of the Forest Growth Simulator SILVA in Practical Forest Management Arno Röder, Hans-Joachim Klemmt, Stefan Seifert, Ralf Moshammer, Hans Pretzsch	General Systems view in Ecosystem Theory and Ecosystem Modelling Albrecht Gnauck	Short-Term PM10 Concentration Forecast Modelling in the MARQUIS-Service Ingo Duering, Tilo Hoffmann, Daniel Nicklaß, Christine Soergel, Achim Lohmeyer

11:30 – 11:50 Coffee Break

	S1.2 Knowledge and Information Management	S2.2 Systems Analysis in Environmental Engineering and Environmental Informatics	S3.2 Decision Support Information Systems for Optimization and Control of Environmental Processes	W1.2 Which 'System' Do We Mean? – The Challenge to Bridge Multidisciplinary in Environmental Informatics	W2.2 Environmental Information for Public
11:50 – 12:15	**Extraction and Application of Environmentally Relevant Chemical Information from the ThermoML Archive** Axel Drefahl	**Study of the Dispersion Processes in a Wetland System - Application of Data Based Mechanistic and Transient Storage Models** Marzena Osuch, Renata Romanowicz, Jarosław Napiórkowski	**Cleaner Production Model Applied to Surface Finishing Workshop** Florine Leveillard, Valérie Laforest, Eric Piatyszek, Jacques Bourgois	**Semantic Systems Supporting Cross-Disciplinary Environmental Communication - a functional-systemic approach** Gerhard Budin	**Automatic Production of Multilingual Environmental Information** Francois Lareau, Bernd Bohnet, Leo Wanner
12:15 – 12:40	**The Science, Technology and Research Network (STARNET)** Walter Blados , Gladys Cotter, Thomas Hermann	**A Study of Flow Conditions aimed at Preserving Valuable Wetland Areas in the Upper Narew Valley using GSA-GLUE Methodology** Adam Kiczko, Renata Romanowicz, Jaroslaw Napiórkowski	**Multiobjective Optimization of Economy Structure with Ecological Restrictions** Nastassia Krukava	**Principles of Adaptive Decision Making Under Uncertainty** Laura Martignon	**Addressee-tailored Interpretation of Air Quality Data** Leo Wanner, Nadjet Bouayad, Daniel Nicklaß
12:40 – 13:05	**Source System Integration using the Framework for ORCHESTRA Services** Peter Kutschera, Severin Ecker, Gerald Schimak	**Application of Kriging Algorithms for Environmental and Engineering Parameters Approximation** Janusz Studziński, Lucyna Bogdan	**The French Information System on Soils: A Decision Support System for Soil Inventory, Monitoring and Management** Véronique Antoni, Nicolas Saby, Claudy Jolivet, Benoit Toutain, Jacques Thorette, Dominique Arrouays		**Pollen: A Challenge for Environmental Information Services** Siegfried Jäger, Tapio Linkosalo, Hanna Ranta, Jaakko Kukkonen, Mikhail Sofiev, Ari Karppinen, Alix Rasmunssen, Leo Wanner

13:05 – 14:30 Lunch

Plenary Talk
14:30 – 15:00 Lorenz Hilty: **Electronic waste: an emerging issue in environmental informatics**

15:00 – 15:15 Break

	S1.3 Knowledge and Information Management	S2.3 Systems Analysis in Environmental Engineering and Environmental Informatics	S3.3 Decision Support Information Systems for Optimization and Control of Environmental Processes	W3.1 EcoInforma Symposium: Integrating Information for Health and Environmental Protection	W4.1 Public Access to Environmental Information in the EU – Building an Integrated Information
15:15 – 15:40	Development of a Very Flexible Web based Database System for Environmental Research Reiner Krause	A Method for Rapid Characterization the Algae Size with Laser Granulometer Janusz Łomotowski, Magdalena Kęszycka	Methodological Basis for Information Management – The DIAMONT database for indicators, data and instruments as a contribution to the Alpine Convention Erich Weihs, Stefan Marzelli	DECERNS: Methodology and Software for Risk-Based Land Use Planning and Decision Support Alexandre Grebenkov, Boris Yatsalo, Terry Sullivan, Igor Linkov	Managing Environmental Information in Bulgaria, a report on the implementation of Directive 2003/4/EC Eolina Milova
15:40 – 16:05	A Web-based System to Support e-Collaboration in the Design and Construction of Environmental Models Halisson Brito, Julia Strauch, Jano Souza	The Adaptive Fridge – Comparing Different Control Schemes for Enhancing Load Shifting of Electricity Demand Michael Stadler, Wolfram Krause, Michael Sonnenschein, Ute Vogel	Optimization Approaches in Material Flow Models of Manufacturing Systems Mario Schmidt, Hendrik Lambrecht, Andreas Möller	Economic Impacts, Environmental Risks, and Low-Impact Practices Associated with the Giant Barnett Shale Natural Gas Field Ken Morgan	Directive 2003/4/EC: Implementing the Directive in the Czech Republic Jiri Hradec
16:05 – 16:30	Knowledge Sharing and Transfer - Interpretation Methodology and Experiences Gisela Dösinger, Klaus Tochtermann	Modelling Water Quality Management Grażyna Petriczek, Jerzy Hołubiec	Design Methodology of a Decision Support System for the Water Supply and Sewage System of a City Izabela Rojek	Merging Old and New: Framing Technology Transfer to Improve Mercury Risk Management for Artisans and Communities Marianne Bailey, Luis Fernandez, Loren Habegger, Margaret MacDonell, Leo Newland	PortalU® – a Tool to Support the Implementation of the European Environmental Information Directive Thomas Vögele, Fred Kruse, Martin Klenke, Hanno Lehmann, Christiane Giffei

16:30 – 16:50	Coffee Break

	S1.4 Knowledge and Information Management	S4.1 Environmental Engineering and Environmental Informatics with respect to Health Protection	S5.1 Emergencies and Disaster Management	W3.2 EcoInforma Symposium: Integrating Information for Health and Environmental Protection	W4.2 Public Access to Environmental Information in the EU – Building an Integrated Information
16:50 – 17:15	SNS Navigator: A Graphical Interface to Environmental Meta-Information Jörg Jochims , Wolf-Fritz Riekert	An Environmental-health Information System for Exposure Assessment of Population Living in Areas with Incinerators and Industrial Plants Andrea Ranzi, Laura Erspamer, Sotiris Michalopoulos, Valeria Fano, Francesco Forastiere, Carlo Alberto Perucci, Stefania Trinca, A. Gardini, Paolo Lauriola	Integrating Decision Support Applications in Computer Based Emergency Management Processes Uwe Rüppel, Armin Wagenknecht	Addressing Cumulative Risk: Integrating Fate and Toxicity Data to Guide Health Advisories for Disasters Margaret MacDonell	Shared Environmental Information System vs. Directive 2003/4/EC vs. Inspire Hartmut Streuff

Time					
17:15 – 17:40	**Test of Several Approaches for the Composition of Web Services in Meteorology** Benoît Gschwind, Lucien Wald, Robert Mahl, François Irigoin, Lionel Menard	**Environmental Information Perception, Analysis and Communication with the Aid of Natural Language Processing** Stefan Trausan-Matu, Kostas Karatzas, Costin Chiru	**Emergency Procedures with Linguistic Parameter Definitions** Andrzej Ziółkowski, Jan W. Owsiński	**An Adaptive Framework for Managing Nanoscale Materials Risks** Jo Anne Shatkin	**Challenges of Implementing Directive 2003/4/EC** Robert Kolk
17:40 – 18:05	**A Proposal for a Thesaurus for Web Services in Solar Radiation** Benoît Gschwind, Lionel Ménard, Thierry Ranchin, Lucien Wald, Paul Stackhouse	**Indicators of waste exposure in an area of Campania (Southern Italy) characterized by numerous dumping sites** Stefania Trinca, Giovanna Martini, Luciana Cossa, Fabrizio Falleni, Marzia Matteucci, Augusta Piccardi, Loredana Musmeci		**The History, Science and Risks of Defoliants Used in the Vietnam War** Bill Andrews	**Implementing Directive 2003/4/EC, a report from the frontier** Rudolf Legat

Thursday 13th September 2007

Plenary Talks

9:00 – 9:30 Marek Makowski: **Computer modeling of large systems related to environmental problems**

9:30 – 10:00 Thomas Pick :   **Public access to environmental information in EU**

10:00 – 10:15 Break

Time	**S6.1** e-Society and Environmental Protection	**S7.1** Mathematical Modeling and Computer Simulation Methods and Algorithms	**S8.1** Trends in Environmental Information and Geographical Information Systems	**W3.3** EcoInforma Symposium: Integrating Information for Health and Environmental Protection	**W2.3** Environmental Information for Public
10:15 – 10:40	**Functional and Technical Requirements for a Regional Environmental Information System** Peter Fischer-Stabel, Rolf Krieger, Kerstin Schäfer, Stefan Wannemacher	**Game Theory Based Water Quality Models For Reservoir Management** Shouke Wei, Albrecht Gnauck	**Transmission of Spatial Data through Web Services (Web Map Service and Web Feature Service) based on GIS** Aleš Veršič	**Using Risk Analysis to Capture the Spatial Spread of Avian Influenza, Evaluating the Cost-Effectiveness of Alternative Control Strategies, and Assessing the Impact on the Poor** Clare Narrod	**Text Planning of Air Quality Information** Leo Wanner, Nadjet Bouayad
10:40 – 11:05	**The Waste Prevention Kit for Education, Enterprises and Households (WastePrevKit)** Rlitta-Liisa Hahtala, Silja Huuhtanen, Seppo Kajaste, Elina Karhu, Sari Kemppainen, Olli Linsiö, Minna Partti	**Modelling Assessment of an in situ Oxygen Sparging Remediation of an Ammonium Contamination - Pilot Plant BIOXWAND Berlin** Christoph Horner, Frank Engelmann, Lutz-Peter Schmolke, Gunnar Nützmann	**The Management of Hydrological Cycle in Piedmont Region. The Experience of SIRI** Giuseppe Amadore, Luca Viarengo	**Animal Diseases and Human Health: Using Information Networks to Guide International Policy** Walt Armbruster	**Towards new generation environmental information services** Leo Wanner

| 11:05 – 11:30 | Linking Environmental Informatics and Industrial Ecology
Ralf Isenmann | Pricing financial instruments derivatives inspired by Kyoto Protocol
Piotr Nowak, Maciej Romaniuk | A Method for High Precision Coordinate Transformation in Environmental GIS Applications
Ivica Ruzic, Jadranka Pecar-Ilic | Risk Assessment, Cost-Benefit Analysis, and Online Resources for Food Safety Risk Analyses
Cristina McLaughlin | |

| 11:30 – 11:50 Coffee Break |

	S9.1 Monitoring, Transmission and Visualization Systems	S7.2 Mathematical Modeling and Computer Simulation Methods and Algorithms	S8.2 Trends in Environmental Information and Geographical Information Systems	W3.4 EcoInforma Symposium: Integrating Information for Health and Environmental Protection	W5.1 Visegrad workshop: The Role of ICT in the Process of Development of eGovernment Services
11:50 – 12:15	NOKIS - Information Infrastructure for the North and Baltic Sea Carsten Heidmann, Jörn Kohlus	Integrated Model-based Decision Support for Management of Weather-related Agricultural Losses Tatiana Ermolieva, Maciej Romaniuk, Gunther Fischer, Marek Makowski	An Analysis of Regional Energy Demand and an Assessment of Potential CO_2 Emission Reduction in Japan using GIS Shunsuke Mori, Shogen Koike, Takeshi Ishida	Protecting Workers: From Exposure Limits to Exposure Controls, Traditional Hazards to Nanotechnology Frank Hearl	will be supplied Jiri Hradec
12:15 – 12:40	Basic Considerations on Using Visualization and Fuzzy Methods to Generate 3D-Models from Different Geological Data Sources Jochen Wittmann	Automatical Extraction of the Forest Inventory Parameters on Laser Scanning Data using Mathematical Methods István Pál, Peng Huang, Hans Pretzsch, G. Schütze, H. – J. Klemmt, S. Seifert, T. Seifert, E. Uhl, L. Steinacker, P. Biber	Extending GIS-functionality for the Analysis of 3D-data in Landscape Ecology - A Comparison of Different Approaches Nguyen X. Thinh, Le Hai Dang, Sebastian Hoechstetter, Ulrich Walz	How to Keep the Quality Chain Workflow-Oriented Data Processing for Global Atmosphere Watch Measurement Stations Ludwig Ries	will be supplied soon Vladimir Benko
12:40 – 13:05	New Methods Including Picture Processing for Hydro-Meteorological On-line Data Acquisition Christian Kollmitzer, Paul Skritek, Kurt Woletz, Hermann Stadler	A Mathematical Model for Numerical Simulation of Shallow Water Flow: Description and Practical Application of GUAD 2D Javier Murillo, Pilar Brufau, Pilar García-Navarro, Martín Rodríguez Pallarés, Alfonso Andrés-Urruita	Improving Environmental Research Data Management Peter Mooney, Adam Winstanley		eGovernment Services in Environment - Automate Data Quality Assessment - Czech Republic Approach Michal Hejc, Jiri Hrebicek, Miloslav Hlavacek

| 13:05 – 14:30 Lunch |

| Plenary Talk |
| 14:30 – 15:00 Andrea Rizzoli: **Collaboration with the International Environmental Modelling and Software Society** |

| 15:00 – 15:15 Break |

	S9.2 Monitoring, Transmission and Visualization Systems	S7.3 Mathematical Modeling and Computer Simulation Methods and Algorithms	S8.3 Trends in Environmental Information and Geographical Information Systems	W4.3 Public Access to Environmental Information in the EU - Building an Integrated Information	
15:15 – 15:40	**Status and Prospects in Geo Raster Service Standardization** Peter Baumann	**Studying the Presence of Genetically Modified Variants in Organic Oilseed Rape by using Relational Data Mining** Aneta Ivanovska, Celine Vens, Sašo Džeroski, Nathalie Colbach	**Migrating to Modern Web Technologies - Experiences in Re-Designing a Substance Retrieval Systems** Matthias Menger, Petra Jahnke, Josef Eiblmaier	**From Aarhus to Inspire – Putting Environmental Information on the Map** Thomas Pick	
15:40 – 16:05	**Interactive Web Mapping and Monitoring of Soil Properties. A Case Study in France** Benoît Toutain, Nicolas Saby, Christian Walter, Christian Schvartz, Jacques Thorette Dominique Arrouays	**Numerical Methods for the Detection of Whirlwind (Cyclone, Tornado, Hurricane) on Satellite Data** István Pál	**An Architecture for the Utilities' Legacy Relational DBMSs** Fabian Grüning, Mathias Uslar	**EC Strategy for Supporting the Implementation in EU Member States** Daniele Franzone	
16:05 – 16:30	**Sustainability Reporting Topic Maps: An Approach to Support Stakeholder Inclusiveness** Hans-Knud Arndt, Henner Graubitz, Rene Klesinski	**Semiautomatic Verification of Groundwater Measured Data** Uwe Rueppel, Peter Goebel	**Spatial Information Management for Megacity Research in Asia** Harry Storch, Bang Anh Tuan, Michael Schmidt	**Building an Integrated Information Space for the Environment** Michel Schouppe	

16:30 – 16:50 Coffee Break

	S10.1 Economical Aspects related to Environmental Informatics	S11.1 Application of Environmental Informatics: Practical Cases	W6.1 Ranking Methods with the Emphasis on Partially Ordered Sets	W7.1 Integrated Modeling of Air Pollution for Poland	
16:50 – 17:15	**Integration of Risk-oriented Environmental Management Information Systems and Resource Planning Systems** Burkhardt Funk, Andreas Möller, Peter Niemeyer	**Automatic Verification of Groundwater Measured Data Using Methods of Time Series Analysis** Uwe Rüppel, Peter Göbel	**The usefulness of a stochastic approach for multi-criteria selection prior to risk assessment** Bernd Münier, Marianne Thomsen, Peter Sorensen	**will be supplied later** Tiziano Pignatelli	
17:15 – 17:40	**Drinking Water Pricing and Consumption. An Environmetrical Evaluation of the Situation in Poland** Pawel Bartoszczuk	**Integration of Standardized Geographical Data in the Detectino® Project** Jana Görmer, Helmut Lessing	**Finding the odd-man-out in development scoring and classifications** Jan W. Owsiński, Artur Więcław	**Assessment of Environmental Impact of Emission Sources in Integrated Air Quality Models** Piotr Holnicki	
17:40 – 18:05	**Impact of Pollution Emission Limits on Technological Structure of Production. A Modelling Approach** Jan Gadomski, Zbigniew Nahorski	**Web-Services as an Instrument for Data Retrieval and Data Mapping - The DIOXIN POP Database of Germany** Gerlinde Knetsch, Erich Weihs	**Refrigerants ranked by Partial Order Theory** Rainer Brüggemann, Silke Gerstmann, Hartmut Frank, Monika Weckert, Guillermo Restrepo	**The Optimal Strategy of SO2 Emission Abatement** Jarosław Stańczak, Piotr Holnicki	

Plenary Talks

9:00 – 9:30 Katarzyna Juda: **Air Pollution and Climate Modelling**

9:30 – 10:00 Margaret MacDonell: **title to be submitted**

10:00 – 10:15 Break

	S12.1 Risk Assessment and Risk Management	S11.2 Application of Environmental Informatics: Practical Cases	W6.2 Ranking Methods with the Emphasis on Partially Ordered Sets	W7.2 Integrated Modeling of Air Pollution for Poland	
10:15 – 10:40	**Data Mining as Tool for Protection against Avalanches and Landslides** Lisa Maurer, Christian Klingler, Rajendra Pachauri, Klaus Tochtermann	**Automatic Transformation and Harmonizing of Soil Data via Digital Translation Keys** Friedhelm Hosenfeld, Dieter Kuhn	**Method of Evaluation by Order Theory (METEOR): A Multi Criteria Decision Support System to Scrutinize the Data-Availability of Pharmaceuticals detected in Water** Kristina Voigt, Rainer Brüggemann	**A modelling and mapping system for impact assessment of atmospheric sulfur and nitrogen deposition on forest ecosystems** Adrian Schlama, Wojciech Mill	
10:40 – 11:05	**Cartography of Automated Environmental Technological Risks by Means of GIS Risk-Register, the Examples of Geneva, "Geneva Risk" and Zurich "ChemRisk"** Alberto Susini, Jesper Hansen, Felix Gmünder, Andreas Schönenberger, Christian Hürzeler, Philippe Minier	**A Technical and Distributed Management Basis for an Environmentally Clean and Sustainable Energy Supply** Horst Wedde, Sebastian Lehnhoff, Edmund Handschin, Olav Krause	**Hasse Diagramm Technique - A Useful Tool for Life Cycle Assessment of Refrigerants** Silke Gerstmann, Guillermo Restrepo Rubio, Monika Weckert, Hartmut Frank	**Integrated Assessment of Air Pollution and Greenhouse Gases Mitigation in Europe** Janusz Cofala	
11:05 – 11:30	**Framework for the Development of Environmental Risk Management Services according to the ORCHESTRA Architecture** Martin Schmieder, Thomas Usländer, Julian Fischer	**A Multi-layered System Architecture for Environmental Monitoring Data Management - - Taiwan s Experience** Yu-Chi Chu	**Directional adjustment of average rankings of two posets: an application to herb layer and tree layer pollution in Baden-Württemberg** Michael Rademaker, Bernard De Baets, Hans De Meyer, Rainer Brüggemann	**Towards an integrated assessment of environmental and human health impact of energy sector in Poland** Artur Wyrwa	

11:30 – 11:50 Coffee Break

	S12.2 Risk Assessment and Risk Management	S11.3 Application of Environmental Informatics: Practical Cases	W6.3 Ranking Methods with the Emphasis on Partially Ordered Sets	W7.3 Integrated Modeling of Air Pollution for Poland	
11:50 – 12:15	**WIN: a new Service Oriented Architecture for Risk Management** Christian Alegre, Rubén Pérezr	**Spatial Generalization Methods based on the Moving Window Approach and Their Applications on Landscape Analysis** Joachim Kiesel, Karl-Otto Wenkel	**A lattice-theoretic approach to computing averaged ranks illustrated on pollution data in Baden-Württemberg** Karel De Loof, Bernard De Baets, Hans De Meyer, Rainer Brüggemann	**Application of the FRAME model for estimation of yearly averaged concentration and deposition of atmospheric pollutants in Poland** Maciek Kryza, Marek Błaś, Mieczysław Sobik, Anthony Dore	
12:15 – 12:40	**Application of the Analytic Hierarchy Process in the Multiple Criteria Analysis of Retention Areas for Flood Risk Management** Nguyen X. Thinh, Rico Vogel	**Data Analysis and Processing of Biomonitoring Data in the Arrow Project for the Evaluation of Ecological State of Surface Waters in the Czech Republic According to WFD EU** Jiří Jarkovský, Klára Kubošová, Radim Klapka, Vratislav Kubík, Jaroslav Ráček, Jan Hodovský, Miroslav Petráš	**Partial Order Concepts in Ranking Environmental Chemicals** Rainer Brüggemann, Kristina Voigt, Peter Soerensen, Bernard De Baets	**Assessment of environmental impact of emission sources in integrated air quality models** Piotr Holnicki	
12:40 – 13:05		**Model based Climate Change Impact Assessment for Agriculture in North-East German Morain Landscapes- What we Have Learned ?** Karl-Otto Wenkel, Wilfried Mirschel		—	

13:05 – 14:30 Farewell Lunch

13:05 – 14:30   Closing the conference: Olgierd Hryniewicz, Werner Pillmann