CODATA 2004 PROGRAM

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John Rumble, Jr. USA

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Nahum Gershon, USA
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Registration Desk Hours

Sunday, 7 November	**12:00 PM – 7:00 PM**
Monday, 8 November	**8:00 AM – 4:00 PM**
Tuesday, 9 November	**8:00 AM – 1:00 PM**
Wednesday, 10 November	**8:00 AM – 10:00 AM**

Items to Note

Internet Access is possible through the hotel with WLan-Access.
The costs are: 1 hour: EUR 3,90 / 3 hours: EUR 9,90 / 5 hours: EUR 14,90 / 10 hours: EUR 24,90

Morning coffee is available from 10:30 AM to 11:00 AM each day.

Afternoon coffee is available from 2:45 PM to 4:15 PM each day.

CODATA 2004 Sponsors

Réalisé avec l'aide du
Ministère chargé de la recherche,
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UNESCO: United Nations Educational,
Scientific and Cultural Organization

Welcome to CODATA 2004

Virtually everything we do has been profoundly affected by the Information Revolution: how we travel, how we shop, how we communicate, how we do business. Computers, telecommunications and software have combined to change human existence in every way imaginable. Indeed the changes are so profound that two World Summits on Information Society have been scheduled - one in Geneva 2003 and one in Tunis in 2005.

Science is at the heart of this Information Revolution. The scientific advances of the twentieth century - in materials, electronics, physics, chemistry, applied mathematics and computer science - were fundamental in developing the technology needed to make the information revolution a reality. And in many ways, science today also reflects the impact the Information Revolution has had on science itself - how science is done, how scientific discoveries are made, how scientists work and collaborate.

CODATA 2004 is the first major international conference designed specifically to address all facets of how the Information Society is creating new and unprecedented horizons for science. The Conference features keynotes talks, plenary lectures and contributed paper sessions that provide new and important insights about the Information Revolution and its impact on science. We look forward to your participation at what promises to be a very exciting event.

Andreas Oberweis and John Rumble,
Co-Chairs of the International Scientific Program Committee 2004

CODATA 2004 Keynote Speakers

CODATA 2004 keynote speakers are distinguished scientists and policy makers who have focused on scientific data as a core component of research and policy concerns. Each of the Keynote talks provides unique insights in the growing importance of databases in scientific discovery.

Professor Dr. Jürgen Renn
Open Access Initiative (Monday 9:00 AM Saal)

Since 1994, Professor Dr. Jürgen Renn has been Director at the Max-Planck Institute for the History of Science. Professor Renn has specialized in the history of early modern mechanics, history of relativity theory; and the interaction between cognitive and contextual factors in the history of science among other varied interests. In 1998 he has received the Pirelli International Award for an electronic representation of Galileo's notes on motion. In 2002 he has founded the European Cultural Heritage Online Initiative. Professor Renn has been instrumental in developing the Berlin Movement for Open Access to scientific information.

Professor Dr. Johann (Johnny) Gasteiger
Design and Data in Chemistry: The Interplay of Ideas and Facts (Monday 9:45 AM Saal)

Professor Dr. Johnny Gasteiger is at the University of Erlangen-Nuremberg where he co-founded the "Computer-Chemie-Centrum" and is one of the developers of the field of chemo-informatics in Germany. His research interests are in the development of software for drug design, simulation of chemical reactions, organic synthesis design, simulation of spectra and chemical information processing by neural networks and genetic algorithms. His approaches to using information technology for chemical research are widely used in industry and academia. In 1991 he was awarded the Gmelin-Beilstein Medal of the German Chemical Society for Achievements in Computer Chemistry, and in 1997 he received the Herman Skolnik Award of the Division of Chemical Information of the American Chemical Society.

Gladys Cotter
Interoperability: Biodiversity (Tuesday 9:00 AM Saal)

Gladys Cotter is the Assistant Chief Biologist for Information in the Biological Resources Discipline, U.S. Geological Survey (USGS) in the U.S. Department of the Interior. Ms. Cotter heads the Biological Information Office. She is responsible for the USGS biological informatics program, including the development of the National Biological Information Infrastructure (NBII). Ms. Cotter is a major advocate for using information technology to advance the collection, management and use of biodiversity data and the preservation of our natural heritage. She is also instrumental in fostering international cooperation among biodiversity data projects.

Professor Yoshiyuki Sakaki
Comparative Genomics: A Bioinformatics-based Key Approach for Understanding our Genome (Tuesday 9:45 AM Saal)

Professor Yoshiyuki Sakaki is Director of the Genomic Sciences Center of the Riken Institute in Yokohama, Japan. The Genome Sciences Center (GSC) is performing systematic and intensive studies on life from the molecular to whole organism levels by developing high-quality technology and information systems. GSC has performed extremely large-scale structural analyses of the essential elements of life, that is, genomes, genes and proteins. Studies include bioinformatics to integrate above studies at various levels from molecule to organisms. Through these studies, GSC hopes to advance understanding of the wisdom of life or strategy of life that have been acquired through biological evolution for the past 4 billion years.

CODATA 2004 Featured Sessions

Plenary Sessions

Data and Society
The importance of scientific data in the advancement of society is difficult to over-emphasize This session looks at different ways scientific data affects society.
Monday 11:00 AM Zehlendorf
Rene DePalque (Germany)
Simone Reiger (Germany)
Roberta Miller (United States)

Data Archiving
The long-term preservation of scientific data has been revolutionized by the Information Society. Come hear about recent progress in creating sustainable data archives.
Monday 11:00 AM Steiglitz
Clifford Lynch (United States)
Gian Maria Pinna (Italy)

Data Visualisation
In a world where we are overwhelmed with volumes of data, data visualization is critical to scientists to understand, use and exploit data in today's research world.
Tuesday 11:00 AM Steglitz
Milan Konecy (Czech Republic)
Bodo Urban (Germany)
Thomas Kirste (Germany)

Scientific Data Mark-up Languages
In a WWW environment that fosters the rapid and uncoordinated growth of many scientific databases, mark-up languages are crucial for database interoperability.
Wednesday 9:00 AM Steglitz
Brian Matthews (United Kingdom)
Haruki Nakamura (Japan)
Peter Murray-Rust (United Kingdom)

Other Invited Sessions

Data Archiving – The InterPares Project
A major data archiving project for scientific data.
Monday 1:45 PM Steglitz
Luciana Duranti (Canada)
Paul Arthur Berkamn (United States)
William Underwood (United States)
Fraser Taylor (Canada)

Environmental Informatics
Environmental information for sustainable development.
Monday 1:45 Zehlendorf
Werner Pillmann (Austria)
Reif Isenmann (Germany)
Gerlinde Knetsch (Germany)
Thomas Ruddy (Switzerland)

Scientific Informatics in EurAsia
Scientific data activities in this region of growing importance.
Tuesday 11:00 AM Lankwitz
Alexi Gvishiani (Russia)
Jean Bonnin (France)
Antoni Nowakowski (Poland)
Tatiana Shuliakovski (Russia)
Juliusz Kulikowski (Poland)
Mikhail Zgurovsky (Ukraine)
Ilia Tavkhelidze (Georgia)

Publication and Citation of Scientific Data
How scientific data are published and cited today..
Wednesday 1:45 PM Steglitz
Norman Pashkin (United Kingdom)
Michael Lautenschlager (Germany)
Jens Klump (Germany)
Heike Neuroth (Germany)

Best Practices and Innovation in Scientific Data

CODATA 2004 has more than 160 invited and contributed papers organized into sessions that appeal to every attendee. Session topics are

Interoperability (Four sessions)
Knowledge Discovery (Four sessions)
Data Quality
Open Scientific Communication (Two sessions)
Scientific Data for Economic Development (Two sessions)
Data Visualisation (Four sessions).
Multi-Disciplinary Data Projects (Two sessions)
Gas Hydrates Data Systems
E-Learning
Infoscience Today (Two sessions)

Featured Invited Speakers

The following are invited plenary talks that should be of general interest (session indicated).

Ronald Munro (United States) Data Quality
Luigi Fusco (Italy) Interoperability – Environmental and Earth Sciences
Charles Barton (Australia) Interoperability – Environmental and Earth Sciences
Kate Beard (United States) Knowledge Discovery – General
Yan Bao Ping (China) Open Scientific Communications
Tomoko Nakanishi (Japan) Data Visualisation – Biological Sciences
F. Jack Smith (Northern Ireland) Open Scientific Communications
Robert Chen (United States) Multi-Disciplinary Data Science
E. Dendy Sloan (United States) Gas Hydrates
Konrad Froitzheim (Germany) Inforscience Today
Hideaki Sugawara (Japan) Multi-Disciplinary Data

CODATA 2004 Prize Award

Jean Bonnin, Paris, Awarded the 2004 CODATA Prize

The 2004 CODATA Prize recipient is Jean Bonnin, President of the Association "Earth Data Network for Education and Scientific Exchange" (EDNES). Jean Bonnin is recognized for outstanding achievement in the areas of geophysics, seismology and geodynamics. The prize is awarded during the 19th International CODATA Conference to be held in Berlin, Germany, 7-10 November 2004.

His contribution to geophysics and geodynamics is outstanding. In the 1960s, he was a contributing author to the theory of Plate Tectonics, one of the most revolutionary theories of the 20th century. Working in close collaboration with other famous French and American geologists and geophysicists, he was an active member of the group that created a principally new concept and model of the Lithosphere/Asthenosphere structure of the Earth.

Jean Bonnin's current research focuses on Information Society Technologies adaptation for scientific and technological data handling and studies. It includes the projects "New Methods of Working for Information Society Technologies Programme Promotion to Commonwealth of Independent States" (WISTCIS) and "Teleworking as a Tool for Information Society Technologies Program romotion to Baltic States" (TELEBALT), which are coordinated by EDNES and funded by Information Society Technologies (IST) Programme of the European Union. CODATA, being represented by its TG "Virtual Laboratories for Earth and Environmental Sciences" plays participates in the TELEBALT project. This important work encourages EU-CIS teleworking for the benefits of the IST Programme.

During his time as the Secretary-General of the European-Mediterranean Seismological Center, he turned the then little-known organization into a major contributor to international seismological data studies, and joined together the efforts of many European seismological institutes.

As the President of EDNES, he has carried out a variety of projects that have integrated together data activities in a number of European countries, and have also been important to organizations in other countries, including Russia and the United States.

Since 1979, Jean Bonnin has been a full professor at the Institute of Physics of the Earth in Strasbourg and has authored three books and 35 scientific articles. His distinguished career has included several fields of interest, including global tectonics and lithosphere deformation, data management, and seismicity.

CODATA, the ICSU Committee on Data for Science and Technology, is an international scientific organization concerned with the collection, management, manipulation, access to and exploitation of quantitative data in science and technology. For over 30 years, CODATA has been at the center of international, multi-lateral, multi-disciplinary cooperation for data activities. Through its task groups, conferences and publications, CODATA enriches the scientific world with the latest advances in data and data technology. The CODATA Secretariat is located in Paris, France, and serves a world-wide network of over 20 national committees and 14 scientific union members, as well as many supporting organizations.

CODATA 2004 Workshops and Tutorials

Friday and Saturday, 5-6 November 2004

CODATA Workshop: Gas Hydrates Data Task Meeting (GHDTM04)

Potsdam, Germany

The CODATA Gas Hydrate Data Task Group, established in 2000, has the objective to develop a concept of a comprehensive information system including all aspects of natural gas hydrates. This group will formulate requirements and recommendations on the type of data needed for the system and the quality of data sufficient for considering both basic problems of origin and transformation of gas hydrates in natural conditions as well as ways of exploitation of resources, risk assessments, industrial applications, environment and fundamental research on gas hydrates.

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Sunday, 7 November 2004

Satellite Symposium for Materials Informatics and its Evolution

At the Hotel Steglitz, Steglitz Room, Albrechstrasse 2, Berlin-Steglitz, Germany

We are now experiencing major "phase changes" in materials informatics, in common with all scientific fields today. The *Symposium for Materials Informatics and its Evolution* is designed to develop new perspectives on future collaboration in materials informatics. By meeting in conjunction with CODATA 2004 "The Information Society: New Horizons for Science," we hope to bring together materials informatics experts on an international basis to develop an action plan. This symposium will start with reviews of the opportunity and challenges and move to intensive discussions aimed at identifying plans for collaboration under the auspices of CODATA and other groups. This symposium is closely associated with another symposium on materials design "Challenges of Data Science to Proactive Engineering", held in Tokyo during Oct.24-26, 2004

Contact Person:

Masayoshi Yamazaki
National Institute for Materials Science (NIMS)
E-mail: yamazaki.masayoshi@nims.go.jp

Sunday, 7 November 2004

CODATA Course on Information Visualization

At the Hotel Steglitz, Atrium Room, Albrechstrasse 2, Berlin-Steglitz, Germany
From 9 AM to 4PM

Instructors: Nahum Gershon, MITRE, USA <gershon@mitre.org>
Jean-Jacques Royer, CNRS, Nancy, France <royer@crpg.cnrs-nancy.fr>
Daniel Keim, University of Konstanz, Germany <keim@inf.uni-konstanz.de>
Koji Okamoto, The University of Tokyo, Japan <okamoto@q.t.u-tokyo.ac.jp>

The course will give the participants a working knowledge of effective visualization approaches for presenting information and data. Visual representation of information requires merging of data visualization methods, computer graphics, design, and imagination. In contrast with scientific data, i.e. spatially or geometrically based data, information spaces are more abstract and different from physical data spaces and thus require different visualization approaches. The course will cover various types of data and information, browsing and searching, large document collections, and small and large databases. The attendees will learn how to make sense of data and information with visualization. Practical applications will be illustrated using specific case studies. The course highlights the process of producing effective visualizations, making sense of information, taking users' needs into account, and illustrating good practical visualization procedures in specific case studies.

CODATA 2004 WSIS Session

Wednesday, 9 November 2004

World Summit on the Information Society (WSIS) - Science and the Summit I

9:00 AM

Location: Steglitz

In December 2003, more than 172 countries participated in the World Summit on the Information Society (WSIS). These participants recognized that science has a central role in the development of the information society and that many of the building blocks of the information society are the results of scientific and technical advances made possible by the sharing of research results[1]. The role of e-science in the information society was also recognized in the subsequent Agenda for Action endorsed at the Summit[2].

An underlying theme of the Agenda for Action is the importance of access to information and knowledge. Indeed, many of the principles and actions identified in Phase One of the WSIS emphasize the importance of access to research data and the scientific literature generated from publicly-funded research. For example, Article C3 focuses specifically on "Access to Information and Knowledge" and C3 10 (a) promotes the development of policy guidelines for the *"development and promotion of public domain information as an important international instrument promoting public access to information."*

After a concerted effort, the scientific community was very successful in placing these issues on the WSIS agenda and in having them recognized by the participating governments. It now has a little over a year to respond to the challenges set out in the Agenda for Action.[3] Many initiatives are already under way in the United States, the European Union, and in developing countries that directly address the issues raised at WSIS.

During this interim period, CODATA, in collaboration with other scientific organizations, will:

- Carry out activities that directly or indirectly lead to implementation of many of these Agenda Action items. Most notably it will organise an international workshop in September 2005 *"Moving Towards an Information Commons for e-Science and Innovation: Identifying, Strategic Institutional and Policy Guidelines"*

- Highlight many of the initiatives that are currently under way within the scientific community that relate to the Agenda Action items. Use of different tools and platforms to bring this inventory together.

- Commence preparations for participation at the scientific event in Tunis in 2005

The WSIS session, which is taking place on November 10, provides the opportunity for participation and input from the scientific community regarding the implementation of the three actions stated above. The time to participate and provide insight is now, when inputs to Tunis are still being formulated.

We welcome your active participation at this session. The session begins at 9:00 AM with presentations by several prominent WSIS supporters, and continues after the morning coffee break with a Roundtable discussion.

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[1] Article 7 of the Declaration of Principles of the World Summit on the Information Society, December 2003, Geneva. http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1161|1160

[2] 22. E-science
a) Promote affordable and reliable high-speed Internet connection for all universities and research institutions to support their critical role in information and knowledge production, education and training, and to support the establishment of partnerships, cooperation and networking between these institutions.
b) Promote electronic publishing, differential pricing and open access initiatives to make scientific information affordable and accessible in all countries on an equitable basis.
c) Promote the use of peer-to-peer technology to share scientific knowledge and pre-prints and reprints written by scientific authors who have waived their right to payment.
d) Promote the long-term systematic and efficient collection, dissemination and preservation of essential scientific digital data, for example, population and meteorological data in all countries.
e) Promote principles and metadata standards to facilitate cooperation and effective use of collected scientific information and data as appropriate to conduct scientific research.

[3] The second phase of the Summit takes place in Tunisia in November 2005.

CODATA 2004 Special Events

Sunday, 7 November 2004

CODATA 2004 Opening Ceremony and CODATA 2004 Prize Award Ceremony

Saal Room
6:30 PM

Opening Remarks	Shuichi Iwata (Japan), CODATA President
Welcome to Berlin	Horst Kremers (Germany)
Review of Logistics	Kathleen Cass (France), Executive Director CODATA
Meet Mr. Jau-Hsiung Wang, Winner of the Sangster Award	Shuichi Iwata (Japan), CODATA President Gordon Wood (Canada)
The CODATA Prize: What It Is and What It Means	Alexei Gvishiani (Russia) and SUN Honglie (China), CODATA Vice-Presidents
CODATA Prize Address	Jean Bonnin, President of the Association "Earth Data Network for Education and Scientific Exchange" (EDNES), France
Introduction to the Reception	Alexei Gvishiani (Russia) and SUN Honglie (China), CODATA Vice-Presidents

CODATA Prize Reception

Tuesday, 9 November 2004

CODATA 2004 Gala Banquet Dinner

Saal Room
7:45 PM

Please plan to attend the CODATA 2004 Gala Banquet Dinner. The evening includes dinner and dance. The Flintstones Big Band Entertainment will entertain us with swing standards and themes from television and movies.

Reserve your seat now – the reservation form is on page 23 of this program.

Note: Beginning at 7:00 PM, a "before dinner" reception will take place in the Cocktail Bar.

Wednesday, 10 November 2004

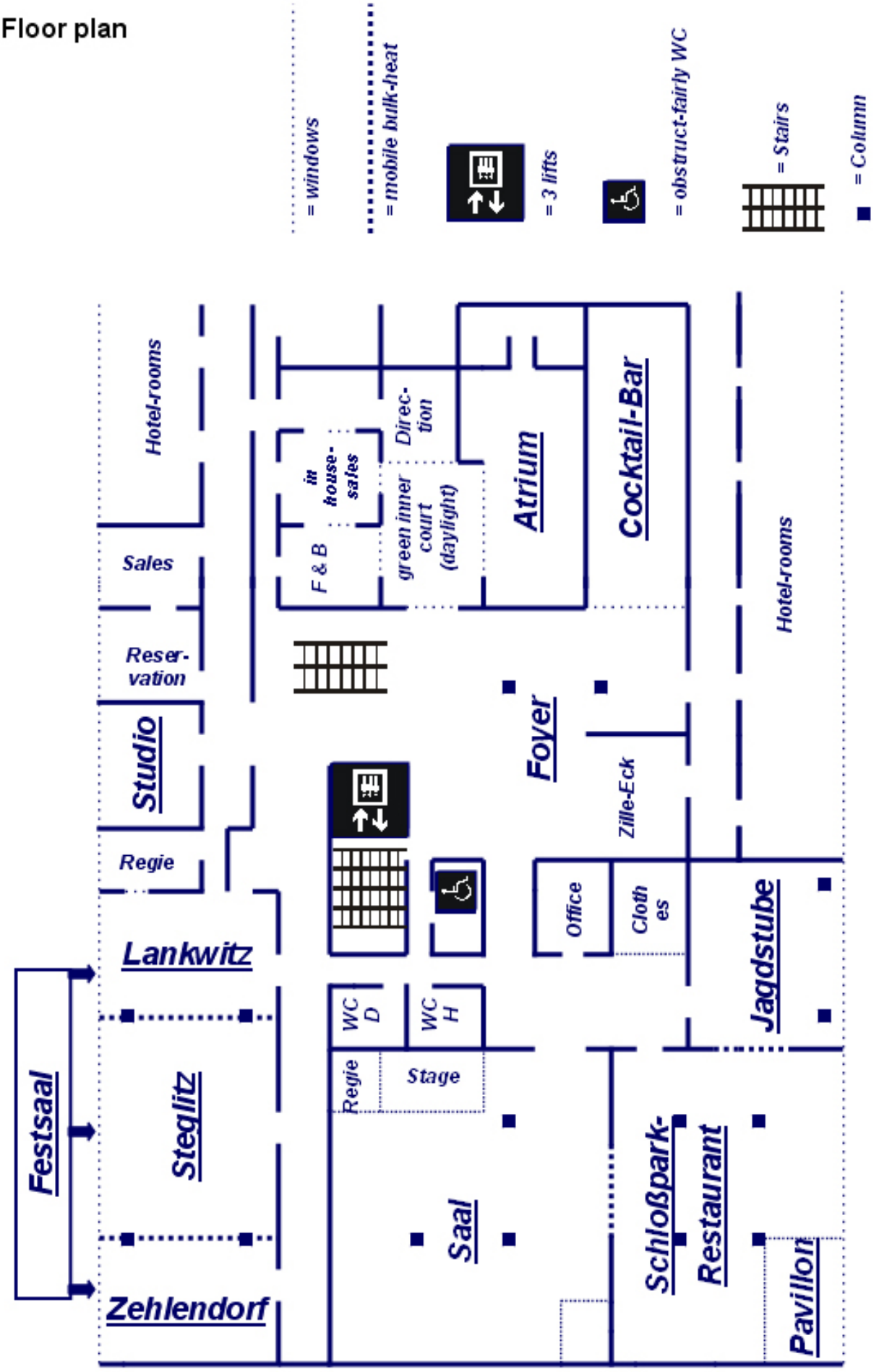
Closing Ceremony

Saal Room
4:30 PM

Closing Comments, and a Look at the Future of CODATA	Shuichi Iwata (Japan), CODATA President

Adjourn
5:00 PM

Floor plan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Lankwitz
Steglitz
Zehlendorf
Festsaal
F & B
in house-sales
green inner court (daylight)
Direc-tion
Atrium
Cocktail-Bar
Foyer
Zille-Eck
Office
Cloth es
Hotel-rooms
Jagdstube
WC D
WC H
Regie
Stage
Saal
Schloßpark-Restaurant
Pavillon

CODATA 2004 Program at a Glance

Pre-Conference Workshops Friday, 5-6 November 2004 - CODATA Workshop: Gas Hydrates Data Task Meeting (GHDTM04) - Potsdam, Germany Sunday, 7 November 2004 - Satellite Symposium for Materials Informatics and its Evolution - Berlin, Germany Sunday, 7 November from 9 AM to 4PM - CODATA Course on Information Visualization - At the Hotel Steglitz, Albrechstrasse 2, Berlin-Steglitz, Germany				
Sunday, 7 November 2004				
6:00 PM	Opening Ceremony and CODATA Prize Address and Reception (Saal)			
Monday, 8 November 2004				
9:00 AM	Keynotes (Saal)			
10:30 AM	*Coffee*			
11:00 AM	Data Archiving (Steglitz)	Data and Society (Zehlendorf)		
12:30 PM	*Lunch*			
1:45 PM	Data Archiving - The InterPares Project (Steglitz)	Environmental Informatics (Zehlendorf)	Data Quality (Lankwitz)	
	3:30 PM Data Archiving (Steglitz)	3:00 PM Interoperability - Data Systems for the Environmental and Earth Sciences (Zehlendorf)	3:30 PM Interoperability - General Papers (Lankwitz)	
	5:00 PM Data Archiving Discussion Group (Steglitz)	5:00 PM Knowledge Discovery - Environmental (Zehlendorf)	5:00 PM Knowledge Discovery - General Papers (Lankwitz)	
Tuesday, 9 November 2004				
9:00 AM	Keynotes (Saal)			
10:30 AM	*Coffee*			
11:00 AM	Open Scientific Communications I (Zehlendorf)	Data Visualisation (Steglitz)	Scientific Informatics in EurAsia (Lankwitz)	Posters (Foyer)
12:30 PM	*Lunch*			
1:45 PM	Open Scientific Communications II (Zehlendorf)	Interoperability - Materials Data Systems I (Lankwitz)	Data Visualisation - Biological Sciences (Steglitz)	
	3:15 PM Scientific Data for Economic Development - I (Zehlendorf)	3:15 PM Interoperability - Materials Data Systems II (Lankwitz)	3:30 PM Knowledge Discovery - Biodiversity (Steglitz)	
	4:15 PM Scientific Data for Economic Development II (Zehlendorf)	4:30 PM Multi-Disciplinary Data Projects - Challenges and Opportunities I (Lankwitz)	4:30 PM Interoperability - Biodiversity Data Systems (Steglitz)	
7:00 PM 7:45 PM	Cocktail Reception (Cocktail Bar) Gala Banquet and Dinner (Saal)			
Wednesday, 10 November 2004				
9:00 AM	Mark-Up Languages Plenary (Steglitz)	World Summit on the Information Society (WSIS) - Science and the Summit I (Saal)	Gas Hydrates Data Systems (Lankwitz)	
10:30 AM	*Coffee*			
11:00 AM	Infoscience Today I (Steglitz)	World Summit on the Information Society (WSIS) - Science and the Summit II (Saal)	Knowledge Discovery - Earth Sciences (Lankwitz)	
12:30 PM	*Lunch*			
1:45 PM	Infoscience Today II (Zehlendorf)	Publication and Citation of Scientific Data (Steglitz)	Data Visualisation in the Earth and Geo Sciences (Lankwitz)	
	3:15 PM Multi-Disciplinary Data Projects - Challenges and Opportunities (Zehlendorf)	3:00 PM E-Learning (Steglitz)	3:00 PM Data Visualisation - General Papers (Lankwitz)	
4:30 PM	Closing Ceremony (Saal)			
5:00 PM	Adjourn			

CODATA 2004 – Monday, 8 November

Keynote Speakers

9:00 AM – 10:30 AM
Chair: Andreas Oberweis, Germany
Location: Saal

Open Access Initiative
Jürgen Renn, Germany

Design and Data in Chemistry: The Interplay of Ideas and Facts
Johann Gasteiger, Germany

Coffee 10:30 AM to 11:00 AM

Data Archiving – Plenary

11:00 AM – 12:30 PM
Chair: William Anderson, USA
Location: Steglitz

Digital Libraries and Data Archiving
Clifford A. Lynch
Coalition for Networked Information, USA

Earth Observation Data - ESA's Long-Term Archiving and Access Solution
Gian Maria Pinna
European Space Agency, Italy

Data and Society – Plenary

11:00 AM – 12:30 PM
Chair: Krishnan Lal, India
Location: Zehlendorf

The Use of Scientific and Technological Data in Today's Society
Rene Deplanque
FIZ CHEMIE Berlin, Germany

Towards a Web of Culture and Science
Simone Rieger
Max Planck Institute for the History of Science, Germany

Social Data and Society: Preventing Misuse of Social Data in the 21st Century
Roberta Balstad Miller
Columbia University , USA

Lunch 12:30 PM to 1:45 PM

Data Archiving – The InterPARES Project

1:45 PM
Chair: Luciana Duranti, Canada
Location: Steglitz

Long-term Preservation of Accurate and Authentic Digital Data: The InterPARES Project
Luciana Duranti, Canada

Antarctic Treaty Searchable Database Case Study
Paul Arthur Berkman, USA

Space Science Data Archive Case Study
William E. Underwood, USA

The Cybercartographic Atlas of Antarctica, and Related Archival Issues
Fraser Taylor, Canada

Environmental Informatics

1:45 PM
Chair: Werner Pillmann, Austria
Location:Zehlendorf

Informatics Applications for Sustainable Development - Environmental Communication in Europe
Werner Pillmann, Austria

Progress in Sustainability Reporting - Reaping the Benefits of the Internet and Associated Technologies
Ralf Isenmann, Germany

Use of GIS and Statistics for an Environmental Monitoring System in Germany
Gerlinde Knetsch, Winfried Schröder, Germany

The Roles of Technology Assessment and Civil Society in the Development of Controversial Technical Innovations
Thomas Ruddy, Switzerland

Data Quality

1:45 PM
Chair: Gordon Wood. Canada
Location: Lankwitz

Data Evaluation as a Scientific Discipline
Ronald G. Munro, USA

Agent-Oriented Approach for Materials Data Evaluation Using XML-based Materials Data Systems
Yoshio Monma, Tetsuya Tsujikami, Hiroshi Yoshizu, Khomei Halada, Japan

Data Retrieval and Evaluation within the Web-enabled Alloys-DB
H.H. Over, E. Wolfart, The Netherlands

LiqCryst and SciDex: Material Databases as Scientific Instruments
Volkmar Vill, Germany

International Chart Of The Nuclides – 2003
T.V. Golashvili, V.M. Kupriyanov, A.P. Demidov, Russia

Data Archiving – General
3:30 PM
Chair: Liu Chuang, China
Location: Steglitz

The Digital Curation Centre
David Giaretta, UK

Management of Data Archiving in Global Change Information Research Center, Geographic Science and Natural Resources, China
Zhao Bingru, China

Designating User Communities for Scientific Data: Challenges and Solutions
Mark A. Parsons, Ruth Duerr, USA

Digital Archiving of Scientific Information: The Czech Experience
Pavel Slavik, P. Mach, M. Snorek, Czech Republic

Preserving the Cultural Heritage: An Investigation into the Feasibility of the OAIS Model for Application in Small Organisations
Jaqueline Spence, UK

Archiving for a New Age
James L. Green, Timothy E. Eastman, Edwin J. Grayzeck, Robert McGuire, Donald M. Sawyer, USA

Very Long Term Preservation of Digital Information Using Metadata and Ontologies
Heinrich Jasper, Germany

Interoperability – Data Systems for the Environmental and Earth Sciences
3:00 PM
Chair: Robert Chen, USA
Location: Zehlendorf

Earth Science e-Collaboration Based on a Grid Infrastructure
Luigi Fusco, Italy

Preparing for eGY
Charles Barton, Australia

Spatial Data Integration in GIS Environment
Elżbieta Bielecka, Poland

Alternative Rainwater-Management and Improvement of the Mesoclimate in Urban Areas by Plant Based Surface Treatment Technology
Nikolaus Model, Felipe Omar Tapia Silva (Mexico), Anne Wehrmann, Hans-Joachim Henze, Germany

Technological Aspects Of Heterogeneous Information Resources Integration
Evgeny Vyazilov, Nickolay Mikhailov, Sergey Belov, Sergey Sukhonosov, Vladislav Chepurnov, Russia

The Space Physics Interactive Data Resource (SPIDR) development in preparation for the electronic Geophysical Year eGY-2007
Mikhail N. Zhizhin, Russia; Eric A. Kihn, USA

Information and Data Management at the South African Environmental Observation Network (SAEON)
Avinash Chuntharpursat, South Africa

Interoperability - General
3:30 PM
Chair: Anna Moreno, Italy
Location: Lankwitz

The European Virtual Institute For Thermal Metrology
Joachim Fischer, Germany

The Space Physics Archive Search and Exchange (SPASE) Data Access and Retrieval System
James R. Thieman, USA

A Metadata Specification for Scientific Databases in a Data Grid Environment
Li Jianhui, Xiao Yun, Yan Baoping, Hou Yanfei, Hu Lianglin, China

Combining Applications and Database Integration Approaches in a Common Distributed Genomic Platform
Pierre-Emmanuel Gros, Joan Hérisson, Nicolas Ferey, Rachid Gherbi, France

XML Technologies and Its Application in MetaData Management System
Zha Xinzheng, Xiao Yun, Wu Kaichao, Wang Longxiao, China

The SEDO Project: An Internet Navigator for Publishing Socio-economic Data
Thomas Tamisier, Fernand Feltz, Stéphane Riegel, Grand-Duchy of Luxembourg

Data Archiving Discussion Group
5:00 PM
Chairs: William Anderson USA and Liu Chuang , China
Location: Steglitz

Knowledge Discovery -Environmental
5:00 PM
Chair: Horst Kremers, Germany
Location: Zehlendorf

Key Aspects Of Data And Information for Climate Change Science
Alexander Sterin, Russia

Application of Spatial Analysis in Imple-mentation of a Qualitative Infiltration Model to Evaluate the Aquifer's Potential Recharge for Conservation Areas of Mexico City
Felipe Omar Tapia Silva, Franz Mora, Mexico

Data Mining Techniques in Support of Science Data Stewardship
Eric A. Kihn USA, Mikhail Zhizhin, Russia

Exploring Patterns in Land cover Changes Using Interactive Visual Representations and Data Mining Tasks
Monica Wachowicz, The Netherlands

Mining Land Use Change Patterns within a Geocollaborative Environment
Monica Wachowicz, The Netherlands

Knowledge Discovery - General
5:00 PM
Chair: Kingsley Oise Momodu, Nigeria
Location: Lankwitz

Information Integration through Events
Kate Beard, Neal Pettigrew, USA

Strategy-focused Knowledge Management with a Knowledge Score Card
Pradyot Sahu, India

Russian Federation in World System of Ecological Tourism.
Irina N. Tikunova, Moscow State University, Russia

Mathematical Model of Continuum with Defects in Application to Geophysical Problems
M.D. Kovalenko, Yu.L. Rebetsky, A.D. Gvishiani, Russia, and M.Diament, J.E. Dubois, France

CODATA 2004 – Tuesday, 9 November

Keynote Speakers
9**:00 AM – 10:30 AM**
Chair: SUN Honglie, China
Location: Saal

Interoperability: Biodiversity
Gladys Cotter, U.S. Geological Survey, USA

Comparative Genomics: A Bioinformatics-based Key Approach for Understanding our Genome
Yoshiyuki Sakaki, Director, RIKEN Genomic Sciences Center, Japan

Coffee 10:30 AM to 11:00 AM

Open Scientific Communications I
11:00 AM
Chair: Paul Uhlir, USA
Location: Zehlendorf

Towards e-Science: Scientific Database (SDB) and its Applications in a New Stage
Yan Baoping, Nan Kai, China

Information Networking and Integration: Collaboration between Data Centres and Academic Journals
F. Genova, C. Bertout, F. Ochsenbein, S. Lesteven, France

Digital Disciplinary Differences – Field Differences in Computer Mediated Science
Gaston Heimeriks, Peter Van den Besselaar, The Netherlands

The Experiences, Progress and Challenges to the Practice of the Scientific Database's (SDB) Data Sharing Policy
Yu Luqing, Xiao Yun, Li Jianhui, Wang Runqiang, China

Data Visualisation Plenary
11:00 AM
Chair: Nahum Gershon, USA
Location: Stegllitz

Visualization of Geospatial Data
Milan Konecny
International Cartographic Association and Masaryk University Faculty of Science, The Czech Republic

Personalized Information Visualization
Bodo Urban
Fraunhofer Institute for Computer Graphics (IGD), Germany

Ambient Intelligence: The Impact of the Information Revolution on Our Everyday Life
Thomas Kirste
Fraunhofer Institut für Graphische Datenverarbeitung (IGD), Germany

Scientific Informatics Challenges in EurAsia
11:00 AM
Chair: Alexi Gvishiani, Russia
Location: Lankwitz

EDNES Program of EU Iinformation Society Technologies Priority Promotion in European and Asian countries
Alexei Gvishiani, Russia

EU Information Society Technologies project in the Baltic States
Jean Bonnin, France; Alexander Beriozko, Russia

Scientific Databases in Poland
Antoni Nowakowski, Poland

The IST project WISTCIS: Background, State of the Art and Prospectives
J. Bonnin (France), A.Gvishiani, T. Shulyakovskaia, A. Soloviev, Russia

Basic Problems of Scientific Data Resources Development and Utilization in Poland
Juliusz L. Kulikowski, Poland

The Scenario Analysis Platform as a Tool for Decision-Makers
Michael Zgurovsky, Ukraine

ICT in Georgia and S&T Data Exchange
Tavkhelide, Georgia

Poster Session Begins
11:00 AM
Location: Foyer

Please see the full list of poster presentations on page 16.

Lunch 12:30 PM to 1:45 PM

Open Scientific Communications II

1:45 PM
Chair: Yan Bao Ping, China
Location: Zehlendorf

Data Science Journal
F.J. Smith, Northern Ireland

Growth of Literature and Data from the Seventeenth Century to Today
Heinrich Behrens, Irmgard Lankenau, Germany

Cataloguing Websites of Libraries
Omar Larouk, France

Indian Effort in Scientific Data Compilation on a Few Areas of Materials Science And Engineering
R.K. Dayal and Baldev Raj, India

The Law and Ethics of Database Protection in Europe and the US
Maria Canellopoulou Bottis, Greece

Interoperability – Materials Data Systems I

1:45 PM
Chair: Yoshio Monma, Japan
Location: Lankwitz

Materials Digital Library: Exploring Benefits and Obstacles to Widespread Adoption of MatML
L.M. Bartolo, C.S. Lowe, A.C. Powell IV, D.R. Sadoway, J. Vieyra, K. Stemen, USA

Web Ontology Definition for Design Oriented Material Selection
Toshihiro Ashino, Japan

Development of Unified Database Construction System for Different Kinds of Materials – An Attempt in the New Materials Center, Japan
Tatsuo Sakai, Kohmei Halada, Hiroshi Yoshizu, Yoshio Monma, Toshio Shuto, Akira Ueno, Kazuo Isonishi, Akiyoshi Sakaida, Izuru Nishikawa, Seiichi Nishino, Tatsuo Inoue, Junichi Kikuchi, Japan

An Integrated Website for the Management and the Exploitation of a Research Project
Flavio Fontana, Anna Moreno, Paolo Masoni, Italy

A VAMAS Round Robin for Testing the Use of ISO Standards in Archiving, Exchanging and Sharing of Life Cycle Assessment Data
Anna Moreno, Flavio Fontana, Italy

A Definition Method of Surfaces for a Interfacial Energy Database
Jose Berengueres, Japan

Data Visualization - Biological Sciences

1:45 PM
Chair: Takashi Kunisawa, Japan
Location: Steglitz

Application of Radiation and Radioisotopes in Agricultural Science
Tomoko M. Nakanishi, Japan

SSEP: Secondary Structural Elements of Proteins (2.0)
K. Sekar, India

Immersive Graph-based Visualization and Exploration of Biological Data
N. Férey, P.E. Gros, J. Hérisson, R. Gherbi, France

DNA in Virtuo: Visualization and Virtual Manipulation of 3D Genomic Structures
J. Hérisson, P.E. Gros, N. Férey, O. Magneau, R. Gherbi, France

Infoscience Technology: An Impact of Internet Accessible Melanoid Data on Health Issues
Z.S. Hippe, J.W. Grzymala-Busse, M. Knap, W. Paja, Poland

Poster Sessions (Continued)

1:45 PM
Location: Foyer

Please see the full list of poster presentations on page 18.

Scientific Data for Economic Development I

3:15 PM
Chair: Ruhasih Dardjat, Indonesia
Location: Zehlendorf

Towards the Establishment of a National Poverty Data Center: The Case of the National Development Agency (NDA), South Africa
Lulama Makhubela, South Africa

African Economies and The Need For Improved Information Communication Technologies
Kingsley Oise Momodu, Nigeria

(session continued next page)

Interoperability - Materials Data Systems II

3:15 PM
Chair: Krishna Rajan, USA
Location: Lankwitz

XML-related Data Exchange from the Test Machine into the Web-enabled Alloys-DB
M. Nagy, H.H. Over, P. Hähner, The Netherlands

Development of the Material Database Retrieval System Using Developed Data Schema by Using RelaxNG
Toshio Shuto, Yutaka Oyatsu, Hiroshi Yoshizu, Kohmei Halada, Japan

Experimental Results of the Surface Tension and Density for Data Base of Pb- free Soldering Materials
Z. Moser, W. Gasior and A. Debski, Poland

(session continued next page)

Knowledge Discovery – Biodiversity

3:30 PM
Chair: Walter Berendsohn, Germany
Location: Steglitz

Gene Arrangements and Branching Orders of Species Based Gene Transpositions
Takashi Kunisawa, Japan

Construction of Data Resources and Design and Application of Search System in Chinese Feed Network Database
Xiong Ben-hai, Pang Zhi-hong and Luo Qing-yao, China

Toward the Virtual Cell Genome-based Design of a Cell-free Culture Medium for Intracellular Parasite, Tropheryma whipplei
H. Ogata, P. Renesto, D. Raoult, J.M. Claverie, France

Scientific Data for Economic Development I (continued)

Geo-Information Needs for Poverty Management
F. O. Akinyemi, Nigeria

Reporting and Compensation for Non-sampling Errors
Themba Mohoto, South Africa

Developing An Environmental Management Information System For Kumasi, Ghana
Moses Mensah, Edward Antwi, Ghana

Comparative Analysis of Household Waste in the Cities of Stuttgart and Kumasi - Options for Waste Recycling and Treatment in Kumasi
E. Ketibuah, Germany

Interoperability - Materials Data Systems II (continued)

Natural Products Databases based on SciDex
Volkmar Vill, Germany

Organizing Geochemical Kinetics Data Base System
Shumin Hu, Junsheng Zhang, Ronghua Zhang, Yan Fang, Rongfang Bie, China

Scientific Data for Economic Development II

4:15 PM
Chair: Steve Rossouw, South Africa
Location: Zehlendorf

Multi-hazard Assessment at the National and Local Levels: Case Studies in Developing Urban Regions
Klaus Jacob and Art Lerner-Lam, USA

Evaluation of Economic, Social and Political Gaps in World Development
Alexey V. Tikunov, Russia

Systemic's Towards Sustainable Development
Albert Truyol, France

Critical Analysis on APEC Energy Balance
Tjahjokartiko Gondokusumo, Indonesia

Study on Indicators for Research in Developing Countries: The Senegalese Case
Abdoulaye Gaye, Senegal

Multi-Disciplinary Data Projects: Challenges and Opportunities I

4:30 PM
Chair: Paul Mezey, Canada
Location: Lankwitz

Global Natural Disaster Risk and Vulnerability: Multidisciplinary Data Integration in Support of Global Disaster Management
Robert S. Chen, Maxx Dilley, Uwe Deichmann

World Ocean Database 2001 (WOD01)
Robert D. Gelfeld, USA

Nanotechnology : A Multidisciplinary Challenge
Albert Truyol, France

Cross-domain Database Support for Large-Scale Scientific Raster Data Sets
Peter Baumann, Germany

Overview of the World Engineering Anthropometry Resource Objectives
Kathleen M. Robinette (USA), Lee Young Suk (South Korea), Sandy Ressler (USA)

Interoperability – Biodiversity Data Systems

4:30 PM
Chair: Bonnie Carroll, USA
Location: Steglitz

Data Sharing: The Experience of the SpeciesLink Network in Brazil
Vanderlei Perez Canhos, Sidnei de Souza, Renato de Giovanni, Mauro Munoz, Alexandre Marino, Fabrício Pavarini, Dora Ann Lange Canhos, Brazil

Some Applications of Ontologies in Biodiversity Informatics
Wolfgang Lipp, Germany

Delivering a Name-server for Biodiversity Information
Charles Hussey, Steve Wilkinson, John Tweddle, United Kingdom

Managing Biodiversity and Ecological Data, Information and Knowledge
William K. Michener, USA

Building a Biodiversity Content Management System for Science, Education, and Outreach
Cynthia Sims Parr, Roger Espinosa, Tanya Dewey, George Hammond, Philip Myers, USA

Bioinformatics Enabling Biodiversity Science and Societal Benefits
Thomas Hermann, Gladys A. Cotter, Thomas Lahr, John M. Hill (presenting), USA

CODATA 2004 – Wednesday, 9 November

Mark-Up Languages Plenary
9:00 AM
Chair: Toshihiro Ashino
Location: Steglitz

The Semantic Web and Science Data Exchange
Brian Matthews
CCLRC Rutherford Appleton Laboratory, UK

XML Description of Protein Structural Data for Data Grid and Computing Grid
Haruki Nakamura
Institute for Protein Research, Osaka University, Japan

Chemical Mark-Up Language
Peter Murray-Rust
Murray-Rust Group Web Server (World Wide Molecular Matrix), United Kingdom

World Summit on the Information Society (WSIS) - Science and the Summit I
9:00 AM
Chair: Krishan Lal, India
Location: Saal

Opening
Open Access for All: A Required Step towards a Society of Shared Knowledge
His Excellency Adama Samassekou
PrepCom of WSIS, African Academy of Languages

UNESCO and the WSIS Process
Axel Plathe, Senior Program Specialist, Information Society Division,
United Nations Educational, Scientific and Cultural Organization (UNESCO)

Science and the World Summit on the Information Society
Carthage Smith, Deputy Executive Director, International Council for Science (ICSU)

WSIS online
Bertrand de la Chapelle

Cherishing the Memory of Science: Towards International Guidelines for Access to Research Data from Public Funding
Peter Schröder, Co-ordinator for Information Policy, The Ministry of Education and Science, The Netherlands

Past, Present and Future of Science in the Information Society
Wesley Shrum, Louisiana State University, Scientific Event Tunis

Gas Hydrates Data Systems
9:00 AM
Chair: Fedor Kuznetsov, Russia
Location: Lankwitz

Plenary: Gas Hydrates - An Ideal Subject for CODATA Activity in the Information Age
E. Dendy Sloan, USA and Fedor A. Kuznetsov, Russia

3D Modeling for Defining Gas Hydrate Potentialities
Jean-Jacques Royer, France

Construction of Gas Hydrate Information System in China
Xiao Yun, Wang Runqiang, Li Jianhui, Zhang Hui, Yu Luqing, China

A Comprehensive Informational System on Gas Hydrates
L. Chernyavski, F. Kuznetsov, A. Nikitin, Russia

Gas-Hydrate Formation Accelerated by Tiny Bubbles from Porous Plate
Feng, China

Seismic Velocity Structure at a Gas-hydrate Reflector, Offshore Western India, from Full Waveform Inversion
Kalachand Sain, N.K. Thakur and S.I. Reddi, India

Coffee 10:30 AM to 11:00 AM

Infoscience Today I
11:00 AM
Chair: Helene Bestougeff, France
Location: Steglitz

Fuzzy Logic Expert Rule-based Multi-Sensor Data Fusion for Land Vehicle Attitude Estimation
Jau-Hsiung Wang and Yang Gao, Canada

Multimodal Interface for Data Retrieval during Conversation
Roman Zenka, Pavel Slavik, Czech Republic

(session continued next page)

World Summit on the Information Society (WSIS) - Science and the Summit II
Roundtable Discussion
11:00 AM
Chair: Robert Chen, CODATA
Location: Saal

- CODATA activities
- Outlining the three projects of the ICSU Grant
- Brief description of our partners to date

The main focus of the discussion is on Project One, i.e., the Preparation of the International Workshop in Europe in 2005 to highlight new opportunities brought about by e-science and some of the challenges that must be addressed to enable e-science to reach its full potential.

Knowledge Discovery - Earth Sciences
11:00 AM
Chair: Mikhail Zgurovsky, Ukraine
Location: Lankwitz

The Technology of Geological Environment Stability Assessment with Disposal of Radioactive Waste in Geological Formations.
E.N. Kamnev, V.N. Morozov, V.N. Tatarinov, U. Ziegenhagen

A Composite Materials Design Platform Integrating Materials Mnowledge Base, Database and Simulation System
Yibin Xu, Masayoshi Yamazaki, Koichi Yagi, Japan

(session continued next page)

Infoscience Today I, continued

Developing Mobile Spatial Services for the Geosciences
Martin Breunig, Rainer Malaka, Wolfgang Reinhardt, Joachim Wiesel, Germany

Query Log Analysis for Information System Improvement : The Arianet Example
B. Delecroix, R. Eppstein, France

Monitoring System Of Web-Portal
Vladislav Chepurnov, Evgeny Vjazilov, Sergey Belov, Sergey Sukhonosov, Russia

From Information to Knowledge Management: a New Role for the Information Professional?
Marie-Josèphe Pierrat, William Turner, France

Scientific and Technical Information Activities in Russia: Emerging Metadata Search Engines, Super-networks and GRIDs
Mikhail Zhizhin, Russia

Knowledge Discovery - Earth Sciences, continued

Peculiarity Oriented Mining For Heterogeneous Databases-A Multilayered Approach
R. Hemamaalini, Kanna Nehemiah, T.S. Nirmala, India

Creating Experimental Data of Geo-chemical Kinetics and Data Base
Ronghua Zhang, Xuetong Zhang, Shumin Hu, Junsheng Zhang, Yan Fang·Rongfang Bie, China

Investigation of Regularity in Materials by Comprehensive Material Database
Y. Kaneta, Y. Chen, A. Moteki, S. Wada, H. Kobayashi, S. Iwata, Japan; P. Villars, Switzerland

Intelligent Resource Discovery using Ontology-Based Resource Profiles
J. Steven Hughes, Dan Crichton, Sean Kelly, Jerry Crichton, Thuy Tran, USA

Using the World Ocean Database 2001 to Estimate Decadal Changes in Heat Content and Freshwater Budget for the World Ocean
Tim Boyer, USA

Lunch 12:30 PM to 1:45 PM

Infoscience Today II
1:45 PM
Co-Chairs: Juliusz Kulikowski, Poland andKonrad Froitzheim, Germany
Location: Zehlendorf

Presence in Communication Spaces
Konrad Froitzheim, Peter Schubert, Germany

Marine Project Data Management System
J.S. Sarupria, G.V. Reddy

A Preliminary Study of Data Engineering and its Relevant Questions
Yan Baoping, Xiao Yun, Wu Kaichao, China

The Process to Develop New Browser for Future Web Environment
Tetsuo Miyoshi, Hisashi Takamatsu, Shin Nakane, and Shuichi Iwata, Japan

Toward a Formal Multi-aspect Description of Knowledge Resources' Structure
Juliusz L. Kulikowski, Poland

Publication and Citation of Scientific Data
1:45 PM
Chair: Heinrich Behrens, Germany
Location:Steglitz

Digital Object Identifiers for Scientific Data Sets
Norman Paskin, UK

WDC Network for Earth System Research
Michael Lautenschlager, Germany

Open Access to Data and the 'Berlin Declaration'
Jens Klump, Sabine Schneider, Joachim Wächter and the CeGIM Consortium, Germany

Long-term Accessibility and Preservation of Scientific Publications and Data
Heike Neuroth, Germany

Data Visualization - Earth and Geo Science
1:45 PM
Chair: Jean-Jacques Royer, France
Location: Lankwitz

3D Modeling and Visualization
Jean-Jacques Royer, France

Visualization and Sustainable Development Decision Making
E. Siekierska, Canada

3D Geological Mapping as a New Method to Visualize Subsurface Data: A Case Study of the Algarve Region/South Portugal
Pascal Luxey, France; Inga Moeck, Heinz Schandelmeier, Germany

3D Visualization and Interpretation of a Geothermal Aquifer based on pre-Existing Drill Hole and 2D Seismic Data
Inga Moeck, Heinz-Gerd Holl, Heinz Schandelmeier, Wilhelm Dominik, Germany

Visualization of a Detailed Rocket Trajectory on a Cartographic Maps based on Open Web Standards
João Emile Louis, Nandamudi L. Vijaykumar, Brasil

VidaMine: User-Centred Development of a Visual Mining Environment
Stephen Kimani, Stefano Lodi, Tiziana Catarci, Giuseppe Santucci, and Claudio Sartori, Italy

Multi-Disciplinary Data Projects - Challenges and Opportunities II

3:15 PM
Chair: Jean Garnier, France
Location: Zehlendorf

WFCC-MIRCEN World Data Centre for Micro organisms (WDCM) meets Global Biodiversity Information Facility (GBIF)
Hideaki Sugawara, Japan

Studies of the Earth's Ozone from Historic Stellar Spectra
R. Elizabeth Griffin, Canada

Lifeline Earthquake Risk Assessment Database Design
Wen Aihua, Tang Aiping, China

Nuclide Guide
Zhao Zhixiang, Huang Xiaolong, Ge Zhigang, China; T.V.Golashvili, A.P.Demidov, V.P.Chechev, Russia

E-Learning

3:00 PM
Chair: F. Jack Smith, UK
Location: Steglitz

Knowledge Management and Life-long Education in Scientific Matter
Anna Moreno, Sergio Grande, Italy

How People Learn (HPL)
Quincy Obayuwana, Nigeria

The Hypermedia Learning Object System – Exploiting Learning Objects In A Semantic Educational Web
Michael Engelhardt, Arne Hildebrand, Andreas Kárpáti, Torsten Rack, Ivette Schmidt, Thomas C. Schmidt, Mathias Werlitz, Germany

eLearning and Visualization of Data
Horst Boegel, Germany

Knowledge Management and Pedagogy, News of the Couple
Jean Paul Pinte, France

Use of Aggregated Parameters at Development of Practical Tasks for Distant-learning Courses on Sustainable Development
Alexander Krivolutsky, Vladimir Tikunov, Russia

Data Visualization – General

3:00 PM
Chair: Howard Park, Korea
Location: Lankwitz

Data for Decision Making in Health
Christian Bourret, Gabriella Salzano, University of Marne-la-Vallée, France

Caliph & Emir: Semantics in Multimedia Retrieval and Annotation
Mathias Lux, Werner Klieber, Michael Granitzer, Austria

Structures for Virtual Cities
Hrivnak Jan, Mgr; Chludil Jiri, Ing, Czech Republic

Semantic Information Visualization
Martin Klima, Pavel Halabala, Pavel Slavik, Czech Republic

Managing Scientific Data using Strategy Maps
Pradyot Sahu, India

Closing Ceremony

4:30 PM
Location: Saal

Closing Comments and a Look at the Future of CODATA — Shuichi Iwata (Japan), CODATA President

Adjourn

5:00 PM

CODATA 2004 – Posters

Poster sessions will be on Tuesday, 9 November from 11:00 AM – 12:30 PM and 1:45 PM – 5:00 PM. Posters are listed here alphabetically by first author.

1. An Approach for Designing a Restricted Bulgarian Natural Language Database Query System
Silyan Arsov, Bulgaria

2. Access to Past and Present of the Living World - The Global Biodiversity Information Facility (GBIF)
Walter G. Berendsohn & Susanne Oehlschlaege, Germany

3. Services-based Data Access and Integration Middleware for Scientific Database
Yang Deting, Nan Kai, China

4. Structural Materials Database of MITS in NIMS (http://tsuge.nims.go.jp/)
M. Fujita, M. Yamasaki, Y. Xu, K. Kimura, S. Matsuoka and K. Yagi, Japan

5. A Collaborative Tool for Biologists - the Berlin Model Internet Taxonomic Editor
Marc Geoffroy, Anton Güntsch, Jinling Li & Walter G. Berendsohn, Germany

6. The Information Struggle
R. Elizabeth Griffin, Canada

7. The Threat of Lost Libraries
R. Elizabeth Griffin, Canada

8. The Use Of Information Resources On The State Of The Marine Environment To Support The Decisions Based On Web - Technologies
Denis Ignatenko, Evgeny Vyazilov, Russia

9. Present Status of JAERI Material Performance Database (JMPD) for Irradiation Assisted Stress Corrosion Cracking (IASCC) Data
Yoshiyuki Kaji and Takashi Tsukada, Japan

10. Thermodynamic Data Compilations Using Tentative Standard Electronic Files (SELF) and Digital Object Identifiers (DOI)
Henry V. Kehiaian, France

11. Correctness Of Co-Operative Activities In The Arising Virtual Information Environment
Zbigniew Kierzkowski, Poland

12. Solid Earth Sample Registry (SESAR)
Kerstin Lehnert, Steve Goldstein, W. Christopher Lenhardt, USA

13. Study of Ecological Metadata Standard
Hu Lianglin, Hou Yanfei, Li Jianhui, China

14. SICURA, the Spanish Food Safety Network. A cooperative Framework in Food Safety
Antonio Martínez López, Remedios Melero, Jordi Salazar Soler, Jesús Torrecilla Soria, Spain

15. Expert System for Elucidation of Structures of Organic Compounds – Structural Diagram Generation
Lu Xu, Cao-Cao Luo, China

16. Design and Implementation of a Platform for Electronic Journals OAI-PMH Compliant. An Approach to Spanish e-Journals
Reme Melero, Jose Ramón Pérez-Agüera, Spain

17. Spatial Electrical Loads Modelling by Geostatistical Methods
Barbara Namyslowska-Wilczynska, Artur Wilczynski, Poland

18. Virtual Experiments Platform for Materials Design and Modeling
Nobutaka Nishikawa**,** Masatoshi Nihei, Shuichi Iwata, Japan

19. Fusion of Data Capture, Self-Organization and Landscape Creation: Association of Dispersed Mobile Purifiers
Nobuto Oka, Masafumi Yabe, Akira Sugawara, Shuichi Iwata, Japan

20. Biocomputing, Drug Design And Database Systems
Lawal F. Oluwatoyin, Nigeria

21. Application of Dual Model in Animal Feed Formulation Optimizing System
Pang Zhihong, Xiong Benhai, Luo Qingyao, China

22. Online Mendelian Inheritance in Korean (OMIK), Establishment of the Database System for Genetic Diseases Found in Korean Population.
Hyung-Seon Park, Hyun-Ju Kim, Soon-Chan Hong, Sang-Joo Lee and Hyeon S. Son, Korea

23. Collaborative Web Sites - The Codata France approach
Christel Porte, Hélène Bestougeff, France

24. Introduction of Nanoscience and Technology Databases of China
Wang Runqiang, Xiao Yun, Li Jianhui, Zhang Hui, Yu Luqing, China

25. Building a Biodiversity Commons: Institutional Missions and Electronic Information Access in the Life Sciences
Gretchen Schwarz, USA

26. Taiwan Biodiversity Information Facility: Developing information Lnfrastructure and Integrating databases
Kwang-Tsao Shao, Taiwan

27. Keeping Biological Information Systems (BIS) Open and Simple
Peter T. Strobl, Austria

28. Polymorphism Markup Language (PML) for the Interoperability of Data on SNPs and Other Sequence Variation
Hideaki Sugawara, Hiroshi Mizushima, Tokio Kano, Yasumasa Shigemoto, Yoichi Hashimoto, Isao Tomabechi, Naoki Sakagami, Masayuki Ikawa, Takashige Oroguchi, Toshiyuki Katagiri, Japan

29. Atomic and Molecular Database at NIFS
H. Suno, D. Kato, and T. Kato, Japan

30. ENBI and BioCASE: The ABCD of Connecting Specimen Databases in Europe
Javier de la Torre, Wolfgang Lipp, Markus Döring & Walter G. Berendsohn, Germany

31. A Content Based Image Retrieval System Based on Color Features
Irena Valova, Bulgaria

32. An Approach for Data - Driven Decision Making
Masahumi Yabe, Nobuto Oka, Yasuyuki Nakai,and Shuichi Iwata, Japan

33. Production of The Data Input Interface for The Materials Database
Hiroshi Yoshizu, Kohmei Halada, Masahiro Utiumi, Takeshi Nakata, Japan

CODATA 2004 – Presenting Author Index

Aihua, Wen; Tang Aiping, China, Multi-Disciplinary Data Projects - Challenges and Opportunities II, Lifeline Earthquake Risk Assessment Database Design

Akinyemi, F. O., Nigeria, Scientific Data for Economic Development I, Geo-Information Needs for Poverty Management

Arsov, Silyan, Bulgaria, Poster, An Approach for Designing a Restricted Bulgarian Natural Language Database Query System

Ashino, Toshihiro, Japan, Interoperability - Materials I, Web Ontology definition for design oriented material selection

Bartolo, L.M.; C.S. Lowe, A.C. Powell IV, D.R. Sadoway, J. Vieyra, K. Stemen, USA, Interoperability - Materials I, Materials Digital Library: Exploring Benefits and Obstacles to Widespread Adoption of MatML

Barton, Charles, Australia, Interoperability - Data Systems for the Environmental and Earth Sciences, Preparing for eGY

Baumann, Peter, Germany, Multi-Disciplinary Data Projects - Challenges and Opportunities I, Cross-domain Database Support for Large-Scale Scientific Raster Data Sets

Beard, Kate; Neal Pettigrew, USA, Knowledge Discovery - General, Information Integration through Events

Behrens, Heinrich; Irmgard Lankenau, Germany, Open Scientific Communications II, Growth of literature and data from the seventeenth century to today

Berendsohn, Walter G.; Susanne Oehlschlaege, Germany, Poster, Access to past and present of the living world - The Global Biodiversity Information Facility (GBIF)

Berengueres, Jose, Japan, Interoperability - Materials I, A definition method of surfaces for a Interfacial Energy Database

Berkman, Paul Arthur, USA, Data Archiving - The InterPARES Project, Antarctic Treaty Searchable Database Case Study

Bielecka, Elżbieta, Poland, Interoperability - Data Systems for the Environmental and Earth Sciences, Spatial data integration in GIS environment

Boegel, Horst, Germany, E-Learning, eLearning and Visualization of Data

Bonnin, J. (France), A.Gvishiani, T. Shulyakovskaia, A. Soloviev, Russia, Scientific Informatics Challenges in EurAsia, The IST project WISTCIS: background, state of the art and prospectives

Bonnin, Jean, France; Alexander Beriozko, Russia, Scientific Informatics Challenges in EurAsia, EU Information Society Technologies project in the Baltic States

Bottis, Maria Canellopoulou, Greece, Open Scientific Communications II, The Law and Ethics of Database Protection in Europe and the US

Bourret, Christian; Gabriella Salzano, France, Data Visualization - General, Data for Decision Making in Health

Boyer, Tim, USA, Knowledge Discovery - Earth Sciences, Using the World Ocean Database 2001 to estimate decadal changes in heat content and freshwater budget for the world ocean

Breunig, Martin; Rainer Malaka, Wolfgang Reinhardt, Joachim Wiesel, Germany, Infoscience Today I, Developing Mobile Spatial Services for the Geosciences

Canhos, Vanderlei Perez; Sidnei de Souza, Renato de Giovanni, Mauro Munoz, Alexandre Marino, Fabrício Pavarini, Dora Ann Lange Canhos, Brazil, Interoperability - Biodiversity, Data Sharing: the experience of the speciesLink network in Brazil

Chen, Robert S.; Maxx Dilley, Uwe Deichmann, Multi-Disciplinary Data Projects - Challenges and Opportunities I, Global Natural Disaster Risk and Vulnerability: Multidisciplinary Data Integration in Support of Global Disaster Management

Chepurnov, Vladislav; Evgeny Vjazilov, Sergey Belov, Sergey Sukhonosov, Russia, Infoscience Today I, Monitoring System Of Web-Portal

Chernyavski, L.; F. Kuznetsov, A. Nikitin, Russia, Gas Hydrates, A Comprehensive Informational System on Gas Hydrates

Chuntharpursat, Avinash, South Africa, Interoperability - Data Systems for the Environmental and Earth Sciences, Information and Data Management at the South African Environmental Observation Network (SAEON)

Cotter, Gladys, USA, Keynote, Interoperability-Biodiversity

Dayal, R.K.; Baldev Raj, India, Open Scientific Communications II, Indian Effort In Scientific Data Compilation On A Few Areas Of Materials Science And Engineering

de la Chapelle, Bertrand, France, WSIS, WSIS online

de la Torre, Javier; Wolfgang Lipp, Markus Döring & Walter G. Berendsohn, Germany, Poster, ENBI and BioCASE: The ABCD of connecting specimen databases in Europe

Delecroix, B.; R. Eppstein, France, Infoscience Today II, Query log analysis for information system improvement : The Arianet example

Deplanque, Rene, Germany, Data and Society Plenary, The use of scientific and technological data in today's society

Deting, Yang; Nan Kai, China, Poster, Services-based Data Access and Integration Middleware for Scientific Database

Duranti, Luciana, Italy, Data Archiving - The InterPARES Project, Long-term preservation of accurate and authentic digital data: The InterPARES project

Engelhardt, Michael; Arne Hildebrand, Andreas Kárpáti, Torsten Rack, Ivette Schmidt, Thomas C. Schmidt, Mathias Werlitz, Germany, E-Learning, The Hypermedia Learning Object System – Exploiting Learning Objects In A Semantic Educational Web

Feng, China, Gas Hydrates, Gas-Hydrate Formation Accelerated by Tiny Bubbles from Porous Plate

Férey, N.; P.E. Gros, J. Hérisson, R. Gherbi, France, Data Visualization - Biological Sciences, Immersive Graph-based Visualization and Exploration of Biological Data

Fischer, Joachim, Germany, Interoperability - General Papers, The European Virtual Institute For Thermal Metrology

Fontana, Flavio; Anna Moreno, Paolo Masoni, Italy, Interoperability - Materials I, An integrated website for the management and the exploitation of a research project

Froitzheim, Konrad; Peter Schubert, Germany, Infoscience Today II Plenary, Presence in Communication Spaces

Fujita, M.; M. Yamasaki, Y. Xu, K. Kimura, S. Matsuoka and K. Yagi, Japan, Poster, Structural Materials Database of MITS in NIMS (http://tsuge.nims.go.jp/)

Fusco, Luigi, Italy, Interoperability - Data Systems for the Environmental and Earth Sciences, Earth Science e-Collaboration Based on a Grid Infrastructure

Gasteiger, Johann, Germany, Keynote, Design and Data in Chemistry: The Interplay of Ideas and Facts

Gaye, Abdoulaye, Senegal, Scientific Data for Economic Development II, Study on Indicators for Research in Developing Countries: The Senegalese Case

Gelfeld, Robert D., USA, Multi-Disciplinary Data Projects - Challenges and Opportunities I, World Ocean Database 2001 (WOD01)

Genova, F.; C. Bertout, F. Ochsenbein, S. Lesteven, France, Open Scientific Communications I, Information networking and integration: collaboration between data centres and academic journals

Geoffroy, Marc; Anton Güntsch, Jinling Li & Walter G. Berendsohn, Germany, Poster, A collaborative tool for biologists - the Berlin Model Internet taxonomic editor

Giaretta, David, UK, Data Archiving - General, The Digital Curation Centre

Golashvili, T.V.; V.M. Kupriyanov, A.P. Demidov, Russia, Data Quality, International Chart Of The Nuclides – 2003

Gondokusumo, Tjahjokartiko, Indonesia, Scientific Data for Economic Development II, Critical Analysis on APEC Energy Balance

Green, James L.; Timothy E. Eastman, Edwin J. Grayzeck, Robert McGuire, Donald M. Sawyer, USA, Data Archiving - General, Archiving for a New Age

Griffin, R. Elizabeth, Canada, Multi-Disciplinary Data Projects - Challenges and Opportunities II, Studies of the Earth's Ozone from Historic Stellar Spectra

Griffin, R. Elizabeth, Canada, Poster, The Information Struggle

Griffin, R. Elizabeth, Canada, Poster, The Threat of Lost Libraries

Gros, Pierre-Emmanuel; Joan Hérisson, Nicolas Ferey, Rachid Gherbi, France, Interoperability - General Papers, Combining Applications and Databases Integration Approaches in a Common Distributed Genomic Platform

Gvishiani, Alexei, Russia, Scientific Informatics Challenges in EurAsia, EDNES Program of EU Iinformation Society Technologies Priority Promotion in European and Asian countries

Heimeriks, Gaston; Peter Van den Besselaar, The Netherlands, Open Scientific Communications I, Digital Disciplinary Differences – Field Differences in Computer Mediated Science

Hemamaalini, R.; Kanna Nehemiah, T.S. Nirmala, India, Knowledge Discovery - Earth Sciences, Peculiarity Oriented Mining For Heterogeneous Databases-A Multilayered Approach

Hérisson, J.; P.E. Gros, N. Férey, O. Magneau, R. Gherbi, France, Data Visualization - Biological Sciences, DNA in Virtuo: Visualization and Virtual Manipulation of 3D Genomic Structures

Hill, John M., Thomas Hermann, Gladys A. Cotter, Thomas Lahr, USA, Interoperability - Biodiversity, Bioinformatics Enabling Biodiversity Science and Societal Benefits

Hippe, Z.S.; J.W. Grzymala-Busse, M. Knap, W. Paja, Poland, Data Visualization - Biological Sciences , Infoscience Technology: An Impact of Internet Accessible Melanoid Data on Health Issues

Hrivnak, Jan, Mgr; Chludil Jiri, Ing, Czech Republic, Data Visualization - General, Structures for virtual cities

Hu, Shumin; Junsheng Zhang, Ronghua Zhang, Yan Fang, Rongfang Bie, China, Interoperability - Materials II, Organizing Geochemical Kinetics Data Base System

Hughes, J. Steven; Dan Crichton, Sean Kelly, Jerry Crichton, Thuy Tran, USA, Knowledge Discovery - Earth Sciences, Intelligent Resource Discovery using Ontology-Based Resource Profiles

Hussey, Charles; Steve Wilkinson, John Tweddle, UK, Interoperability - Biodiversity, Delivering a name-server for biodiversity information

Ignatenko, Denis; Evgeny Vyazilov, Russia, Poster, The Use Of Information Resources On The State Of The Marine Environment To Support The Decisions Based On Web - Technologies

Isenmann, Ralf, Germany, Environmental Informatics, Progress in Sustainability Reporting - Reaping the Benefits of the Internet and associated Technologies

Jasper, Heinrich, Germany, Data Archiving - General, Very Long Term Preservation of Digital Information Using Metadata and Ontologies

Kaji, Yoshiyuki; Takashi Tsukada, Japan, Poster, Present Status of JAERI Material Performance Database (JMPD) for Irradiation Assisted Stress Corrosion Cracking (IASCC) Data

Kamnev, E.N.; V.N. Morozov, V.N. Tatarinov, U. Ziegenhagen, Knowledge Discovery - Earth Sciences, The technology of geological environment stability assessment with disposal of radioactive waste in geological formations.

Kaneta, Y.; Y. Chen, A. Moteki, S. Wada, H. Kobayashi, S. Iwata, Japan; P. Villars, Switzerland, Knowledge Discovery - Earth Sciences, Investigation of Regularity in Materials by Comprehensive Material Database

Kehiaian, Henry, V., France, Poster, Thermodynamic Data Compilations Using Tentative Standard Electronic Files (SELF) and Digital Object Identifiers (DOI)

Ketibuah, E., Germany, Scientific Data for Economic Development I, Comparative Analysis of Household Waste in the Cities of Stuttgart and Kumasi - Options for Waste Recycling and Treatment in Kumasi

Kierzkowski, Zbigniew, Poland, Poster , Correctness Of Co-Operative Activities In The Arising Virtual Information Environment

Kihn, Eric A.; Mikhail Zhizhin, Russia, Knowledge Discovery - Environmental, Data Mining Techniques in Support of Science Data Stewardship

Kim, Jinsuk; Mi-Nyeong Hwang, Sul-Ah Ahn and Hyeon S. Son, Korea, Knowledge Discovery - Biodiversity, N-gram Indexing for Protein Sequence Databases

Kimani, Stephen; Stefano Lodi, Tiziana Catarci, Giuseppe Santucci, and Claudio Sartori, Italy, Data Visualization - Earth and Geo Science, VidaMine: User-Centred Development of a Visual Mining Environment

Kirste, Thomas, Germany, Data Visualisation Plenary, Ambient Intelligence: The impact of the information revolution on our everyday life

Klaus, Jacob; Art Lerner-Lam, USA, Scientific Data for Economic Development II, Multi-hazard assessment at the national and local levels: Case studies in developing urban regions

Klima, Martin; Pavel Halabala, Pavel Slavik, Czech Republic, Data Visualization - General, Semantic information visualization

Klump, Jens; Sabine Schneider, Joachim Wächter and the CeGIM Consortium, Germany, Publication and Citation of Scientific Data, Open Access to Data and the 'Berlin Declaration'

Knetsch, Gerlinde; Winfried Schröder, Germany, Environmental Informatics, Use of GIS and Statistics for an Environmental Monitoring System in Germany

Konecny, Milan, The Czech Republic, Data Visualisation Plenary, Visualization of Geospatial Data

Kovalenko, M.D.; Yu.L. Rebetsky, A.D. Gvishiani, Russia, and M.Diament, J.E. Dubois, France, Knowledge Discovery - General, Mathematical model of continuum with defects in application to geophysical problems

Krivolutsky, Alexander; Vladimir Tikunov, Russia, E-Learning, Use of aggregated parameters at development of practical tasks for distant-learning courses on sustainable development

Kulikowski, Juliusz L., Poland, Infoscience Today II, Toward a Formal Multi-aspect Description of Knowledge Resources' Structure

Kulikowski, Juliusz L., Poland, Scientific Informatics Challenges in EurAsia, Basic Problems of Scientific Data Resources Development and Utilization in Poland

Kunisawa, Takashi, Japan, Knowledge Discovery - Biodiversity, Gene Arrangements and Branching Orders of Species Based Gene Transpositions

Larouk, Omar, France, Open Scientific Communications II, Cataloguing Websites of Libraries

Lautenschlager, Michael, Germany, Publication and Citation of Scientific Data, WDC Network for Earth System Research

Lehnert, Kerstin; Steve Goldstein, W. Christopher Lenhardt, USA, Poster, Solid Earth Sample Registry (SESAR)

Li Jianhui, Xiao Yun, Yan Baoping, Hou Yanfei, Hu Lianglin, China, Interoperability - General Papers, A Metadata Specification for Scientific Databases in a Data Grid Environment

Lianglin, Hu; Hou Yanfei, Li Jianhui, China, Poster, Study of Ecological Metadata Standard

Lipp, Wolfgang, Germany, Interoperability - Biodiversity, Some Applications of Ontologies in Biodiversity Informatics

López, Antonio Martínez; Remedios Melero, Jordi Salazar Soler, Jesús Torrecilla Soria, Spain, Poster, SICURA, the Spanish Food Safety Network. A cooperative framework in food safety

Louis, João Emile; Nandamudi L. Vijaykumar, Brasil, Data Visualization - Earth and Geo Science, Visualization of a detailed Rocket Trajectory on a Cartographic maps based on Open Web Standards

Lux, Mathias; Werner Klieber, Michael Granitzer, Austria, Data Visualization - General, Caliph & Emir: Semantics in Multimedia Retrieval and Annotation

Luxey, Pascal, France; Inga Moeck, Heinz Schandelmeier, Germany, Data Visualization - Earth and Geo Science, 3D geological mapping as a new method to visualize subsurface data: a case study of the Algarve region/South Portugal

Lynch, Clifford A., USA, Data Archiving Plenary, Digital libraries and data archiving

Makhubela, Lulama, South Africa, Scientific Data for Economic Development I, Towards the Establishment of a National Poverty Data Center: The Case of the National Development Agency (NDA), South Africa

Matthews, Brian, UK, Mark-Up Languages Plenary, The Semantic Web and Science Data Exchange

Melero, Reme; Jose Ramón Pérez-Agüera, Spain, Poster, Design and implementation of a platform for electronic journals OAI-PMH compliant. An approach to Spanish e-journals

Mensah, Moses; Edward Antwi, Ghana, Scientific Data for Economic Development I, Developing An Environmental Management Information System For Kumasi, Ghana

Michener, William K., USA, Interoperability - Biodiversity, Managing Biodiversity and Ecological Data, Information and Knowledge

Miller, Roberta Balstad, USA, Data and Society Plenary, Social Data and Society: Preventing Misuse of Social Data in the 21st Century

Miyoshi, Tetsuo; Hisashi Takamatsu, Shin Nakane, and Shuichi Iwata, Japan, Infoscience Today II, The process to develop new browser for future web environment

Model, Nikolaus; Felipe Omar Tapia Silva (Mexico), Anne Wehrmann, Hans-Joachim Henze, Germany, Interoperability - Data Systems for the Environmental and Earth Sciences, Alternative Rainwater-Management and Improvement of the Mesoclimate in Urban Areas by Plant Based Surface Treatment Technology

Moeck, Inga, Heinz-Gerd Holl, Heinz Schandelmeier, Wilhelm Dominik, Germany, Data Visualization - Earth and Geo Science, 3D visualization and interpretation of a geothermal aquifer, based on pre-existing drill hole and 2D seismic data

Mohoto, Themba, South Africa, Scientific Data for Economic Development I, Reporting and Compensation for Non-sampling Errors

Momodu, Kingsley Oise, Nigeria, Scientific Data for Economic Development I, African Economies and The Need For Improved Information Communication Technologies

Monma, Yoshio; Tetsuya Tsujikami, Hiroshi Yoshizu, Khomei Halada, Japan, Data Quality, Agent Oriented Approach for Materials Data Evaluation Using XML-based Materials Data Systems

Moreno, Anna; Flavio Fontana, Italy, Interoperability - Materials I, A VAMAS Round Robin for testing the use of ISO standards in archiving, exchanging and sharing of Life Cycle Assessment data

Moreno, Anna; Sergio Grande, Italy, E-Learning, Knowledge management and life long education in scientific matter

Moser, Z.; W. Gasior and A. Debski, Poland, Interoperability - Materials II, Experimental Results of the Surface Tension and Density for Data Base of Pb- free Soldering Materials

Munro, Ronald G., USA, Data Quality, Data Evaluation as a Scientific Discipline

Murray-Rust, Peter, UK, Mark-Up Languages Plenary, Chemical Mark-Up Language

Nagy, M.; H.H. Over, P. Hähner, The Netherlands, Interoperability - Materials II, XML related Data Exchange from the Test Machine into the Web-enabled Alloys-DB

Nakamura, Haruki, JAPAN, Mark-Up Languages Plenary, XML Description of Protein Structural Data for Data Grid and Computing Grid

Nakanishi, Tomoko M., Japan, Data Visualization - Biological Sciences, Application of Radiation and Radioisotopes in Agricultural Science

Namyslowska-Wilczynska, Barbara; Artur Wilczynski, Poland, Poster, Spatial Electrical Loads Modelling by Geostatistical Methods

Neuroth, Heike, Germany, Publication and Citation of Scientific Data, Long-term Accessibility and Preservation of Scientific Publications and Data

Nishikawa, Nobutaka; Masatoshi Nihei, Shuichi Iwata, Japan, Poster, Virtual Experiments Platform for Materials Design and Modeling

Nowakowski, Antoni, Poland, Scientific Informatics Challenges in EurAsia, Scientific Databases in Poland

Obayuwana, Quincy, Nigeria, E-Learning, How People Learn (HPL)

Ogata, H.; P. Renesto, D. Raoult, J.M. Claverie, France, Knowledge Discovery - Biodiversity, Toward the virtual cell genome-based design of a cell-free culture medium for intracellular parasite, Tropheryma whipplei

Oka, Nobuto; Masafumi Yabe, Akira Sugawara, Shuichi Iwata, Japan, Poster, Fusion of Data Capture, Self-Organization and Landscape Creation: Association of Dispersed Mobile Purifiers

Oluwatoyin, Lawal F., Nigeria, Poster, Biocomputing, Drug Design And Database Systems

Over, H.H.; E. Wolfart, The Netherlands, Data Quality, Data Retrieval and Evaluation within the Web-enabled Alloys-DB

Pang Zhihong, Xiong Benhai, Luo Qingyao, China, Poster, Application of Dual Model in Animal Feed Formulation Optimizing System

Park, Ho-Eun; Mi-Nyeong Hwang, Hyeon S. Son and Jinsuk Kim, Korea, Knowledge Discovery - Biodiversity, Example-based Classification of Protein Subcellular Locations Using Penta-gram Features

Park, Hyung-Seon; Hyun-Ju Kim, Soon-Chan Hong, Sang-Joo Lee and Hyeon S. Son, Korea, Poster, Online Mendelian Inheritance in Korean (OMIK), establishment of the database system for genetic diseases found in Korean population.

Parsons, Mark A.; Ruth Duerr, USA, Data Archiving - General, Designating User Communities for Scientific Data: Challenges and Solutions

Paskin, Norman, UK, Publication and Citation of Scientific Data, Digital Object Identifiers for scientific data sets

Pierrat, Marie-Josèphe; William Turner, France, Infoscience Today I, From information to knowledge management: a new role for the information professional?

Pillmann, Werner, Austria, Environmental Informatics, Informatics Application for Sustainable Development - Environmental Communication in Europe

Pinna, Gian Maria, Italy, Data Archiving Plenary, Earth Observation Data - ESA's Long-Term Archiving and Access Solution

Pinte, Jean Paul, France, E-Learning, Knowledge management and pedagogy, news of the couple

Porte, Christel ; Hélène Bestougeff, France, Poster, Collaborative web sites - The Codata France approach

Renn, Jürgen, Germany, Keynote, Open Access Initiative

Rieger, Simone, Germany, Data and Society Plenary, Towards a Web of Culture and Science

Robinette, Kathleen M. (USA), Lee Young Suk (South Korea), Sandy Ressler (USA), Multi-Disciplinary Data Projects - Challenges and Opportunities I, Overview of the World Engineering Anthropometry Resource Objectives

Royer, Jean-Jacques, France, Data Visualization - Earth and Geo Science, 3D Modeling and Visualization

Royer, Jean-Jacques, France, Gas Hydrates, 3D Modeling for Defining Gas Hydrate Potentialities

Ruddy, Thomas, Switzerland, Environmental Informatics, The Roles of Technology Assessment and Civil Society in the Development of Controversial Technical Innovations

Sahu, Pradyot, India, Infoscience Today II, Managing scientific data using strategy maps

Sahu, Pradyot, India, Knowledge Discovery - General, Strategy-focused knowledge management with a knowledge score card

Sain, Kalachand; N.K. Thakur and S.I. Reddi, India, Gas Hydrates, Seismic velocity structure at a gas-hydrate reflector, offshore western India, from full waveform inversion

Sakai, Tatsuo; Kohmei Halada, Hiroshi Yoshizu, Yoshio Monma, Toshio Shuto, Akira Ueno, Kazuo Isonishi, Akiyoshi Sakaida, Izuru Nishikawa, Seiichi Nishino, Tatsuo Inoue, Junichi Kikuchi, Japan, Interoperability - Materials I, Development of Unified Database Construction System for Different Kinds of Materials – An Attempt in the New Materials Center, Japan

Sakaki, Yoshiyuki, Japan, Keynote, Comparative Genomics: A Bioinformatics-based Key Approach for Understanding our Genome

Samassekou, His Excellency Adama, African Academy of Languages, WSIS , Open Access for All: A Required Step towards a Society of Shared Knowledge

Sarupria, J.S.; G.V. Reddy, Infoscience Today I, Marine Project Data Management System

Schröder, Peter, The Netherlands, WSIS, Cherishing the Memory of Science: Towards International Guidelines for Access to Research Data from Public Funding

Shrum, Wesley, USA, WSIS, Past, Present and Future of Science in the Information Society

Schwarz, Gretchen, USA, Poster , Building a Biodiversity Commons: Institutional Missions and Electronic Information Access in the Life Sciences

Sekar, K., India, Data Visualization - Biological Sciences, SSEP: Secondary Structural Elements Of Proteins (2.0)

Shao, Kwang-Tsao, Taiwan, Poster, Taiwan Biodiversity Information Facility: Developing information infrastructure and integrating databases

Shuto, Toshio; Yutaka Oyatsu, Hiroshi Yoshizu, Kohmei Halada, Japan, Interoperability - Materials II , Development of the Material Database Retrieval System Using Developed Data Schema by Using RelaxNG

Siekierska, E., Canada, Data Visualization - Earth and Geo Science, Visualization and Sustainable Development Decision Making

Silva, Felipe Omar Tapia; Franz Mora, Mexico, Knowledge Discovery - Environmental, The application of spatial analysis in the implementation of a qualitative infiltration model to evaluate the aquifer's potential recharge for conservation areas of Mexico City

Sims Parr, Cynthia; Roger Espinosa, Tanya Dewey, George Hammond, Philip Myers, USA, Interoperability - Biodiversity, Building a biodiversity content management system for science, education, and outreach

Slavik, P.; P. Mach, M. Snorek, Czech Republic, Data Archiving - General, Digital archiving of scientific information: Czech experience

Sloan, E. Dendy, USA and Fedor A. Kuznetsov, Russia, Gas Hydrates Plenary, Gas Hydrates - An Ideal Subject for CODATA Activity in the Information Age

Smith, Carthage, Deputy Executive Director of ICSU, WSIS Science and the World Summit on the Information Society

Smith, F.J., Ireland, Open Scientific Communications II, Data Science Journal

Spence, Jaqueline, UK, Data Archiving - General, Preserving the cultural heritage: an investigation into the feasibility of the OAIS model for application in small organisations

Sterin, Alexander, Russia, Knowledge Discovery - Environmental, Key Aspects Of Data And Information For Climate Change Science

Strobl, Peter T., Austria, Poster, Keeping Biological Information Systems (BIS) Open and Simple

Sugawara, Hideaki, Japan, Multi-Disciplinary Data Projects - Challenges and Opportunities II, WFCC-MIRCEN World Data Centre for Micro organisms (WDCM) meets Global Biodiversity Information Facility (GBIF)

Sugawara, Hideaki; Hiroshi Mizushima, Tokio Kano, Yasumasa Shigemoto, Yoichi Hashimoto, Isao Tomabechi, Naoki Sakagami, Masayuki Ikawa, Takashige Oroguchi, Toshiyuki Katagiri, Japan, Poster, Polymorphism Markup Language (PML) for the interoperability of data on SNPs and other sequence variation

Suno, H.; D. Kato, and T. Kato, Japan, Poster, Atomic and molecular database at NIFS

Tamisier, Thomas; Fernand Feltz, Stéphane Riegel, Grand-Duchy of Luxembourg, Interoperability - General Papers, The SEDO project: an Internet Navigator for publishing socio-economic data

Taylor, Fraser, Canada, Data Archiving - The InterPARES Project, The Cybercartographic Atlas of Antarctica, and Related Archival Issues

Thieman, James R., USA, Interoperability - General Papers, The Space Physics Archive Search and Exchange (SPASE) Data Access and Retrieval System

Tikunov, Alexey V., Russia, Scientific Data for Economic Development II, Evaluation of economic, social and political gaps in world development

Tikunova, Irina N., Moscow State University, Russia, Knowledge Discovery - General, Russian Federation in world system of ecological tourism.

Truyol, Albert, France, Multi-Disciplinary Data Projects - Challenges and Opportunities I, Nanotechnology : A Multidisciplinary Challenge

Truyol, Albert, France, Scientific Data for Economic Development II, Systemic's Towards Sustainable Development

Underwood, William E., USA, Data Archiving - The InterPARES Project, Space Science Data Archive Case Study

Urban, Bodo, Germany, Data Visualisation Plenary, Personalized Information Visualization

Valova, Irena, Bulgaria, Poster , A Content Based Image Retrieval System Based on Color Features

Vill, Volkmar, Germany, Data Quality, LiqCryst and SciDex: Material Databases as Scientific Instruments

Vill, Volkmar, Germany, Interoperability - Materials II, Natural Products Databases based on SciDex

Vyazilov, Evgeny; Nickolay Mikhailov, Sergey Belov, Sergey Sukhonosov, Vladislav Chepurnov, Russia, Interoperability - Data Systems for the Environmental and Earth Sciences, Technological Aspects Of Heterogeneous Information Resources Integration

Wachowicz, Monica, The Netherlands, Knowledge Discovery - Environmental, Exploring patterns in land cover changes using interactive visual representations and data mining tasks

Wachowicz, Monica, The Netherlands, Knowledge Discovery - Environmental, Mining Land Use Change Patterns within a Geocollaborative Environment

Wang Runqiang, Xiao Yun, Li Jianhui, Zhang Hui, Yu Luqing, China, Poster, Introduction of Nanoscience and Technology Databases of China

Wang, Jau-Hsiung; Yang Gao, Canada, Infoscience Today I, Fuzzy Logic Expert Rule-based Multi-Sensor Data Fusion for Land Vehicle Attitude Estimation

Xiong Ben-hai, Pang Zhi-hong and Luo Qing-yao, China, Knowledge Discovery - Biodiversity, Construction of Data Resources and Design and Application of Search System in Chinese Feed Network Database

Xu, Lu; Cao-Cao Luo, China, Poster , Expert system for elucidation of structures of organic compounds – Structural diagram generation

Xu, Yibin; Masayoshi Yamazaki, Koichi Yagi, Japan, Knowledge Discovery - Earth Sciences, A composite materials design platform integrating materials knowledge base, database and simulation system

Yabe, Masahumi; Nobuto Oka, Yasuyuki Nakai,and Shuichi Iwata, Japan, Poster, An Approach for Data - Driven Decision Making

Yan Baoping, Xiao Yun, Wu Kaichao, China, Infoscience Today II, A Preliminary Study of Data Engineering and its Relevant Questions

Yan Baoping; Nan Kai, China, Open Scientific Communications I, Towards e-Science: Scientific Database (SDB) and its applications in a new stage

Yoshizu, Hiroshi; Kohmei Halada, Masahiro Utiumi, Takeshi Nakata, Japan, Poster, Production of The Data Input Interface for The Materials Database

Yu Luqing; Xiao Yun, Li Jianhui, Wang Runqiang, China, Open Scientific Communications I, The experiences, progress and challenges to the practice of the Scientific Database's (SDB) data sharing policy

Yun, Xiao; Wang Runqiang, Li Jianhui, Zhang Hui, Yu Luqing, China, Gas Hydrates, Construction of Gas Hydrate Information System in China

Zenka, Roman; Pavel Slavik, Czech Republic, Infoscience Today I, Multimodal Interface for Data Retrieval during Conversation

Zgurovsky, Michael, Ukraine, Scientific Informatics Challenges in EurAsia, The Scenario Analysis Platform as a Tool for Decision-Makers

Zha Xinzheng, Xiao Yun, Wu Kaichao, Wang Longxiao, China, Interoperability - General Papers, XML Technologies And Its Application in MetaData Management System

Zhang, Ronghua; Xuetong Zhang, Shumin Hu, Junsheng Zhang, Yan Fang, Rongfang Bie, China, Knowledge Discovery - Earth Sciences, Creating Experimental Data of Geo-chemical Kinetics and Data Base

Zhao Bingru, China, Data Archiving - General, Management of Data Archiving in Global Change Information Research Center, Geographic Science and Natural Resources, China

Zhao Zhixiang; Huang Xiaolong, Ge Zhigang, China; T.V.Golashvili, A.P.Demidov, V.P.Chechev, Russia, Multi-Disciplinary Data Projects - Challenges and Opportunities II, Nuclide Guide

Zhizhin, Mikhail N.; Russia; Eric A. Kihn, USA, Interoperability - Data Systems for the Environmental and Earth Sciences, The Space Physics Interactive Data Resource (SPIDR) development in preparation for the electronic Geophysical Year eGY-2007

Zhizhin, Mikhail, Infoscience Today I, Scientific and technical information activities in Russia: emerging metadata search engines, super-networks and GRIDs

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Gala Banquet Dinner Reservation Form

Tuesday, 9 November 2004
Hotel Steglitz
Berlin, Germany at 7:00 p.m.

Participant (Use one form per person)

Mr.___ Ms: ___ Last Name: _____ First Name: _____

Address: _____

Postal/Zip code: _____ City: _____ Country: _____

E-mail: _____ www: _____

The cost of the Gala Banquet Dinner is 50 EUROS per person.

How many reservations? _____ x 50 EUROS each = _____

Your reservations can be paid by **cheque**, **bank transfer**, or **credit card**.

Bank transfer:

Account Name:	CODATA
Name of Bank:	BRED Banque
Address:	105 Boulevard de Montmorency, 75016, Paris
Account No:	10107 00116 00110160850 03
IBAN:	FR76 1010 7001 1600 1101 6085 018
SWIFT Code	BRED FR PP

Any fee incurred in the bank transfer is the responsibility of the sender:

Credit Card:

American Express ____ Mastercard ____ Visa ____

Name on Card:_____

Authorised Signature_____

Card No_____

Expiry Date_____

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CODATA 2004 – Social Tours

Reichstag(1) Tour
Tuesday November 9

Tour in **German** language

Participants leave 09.00 from Hotel SI
By S-Bahn (guidance 1 Student)
Arrive Unter den Linden, walk 300 m to Reichstag building
Check-in 09.50
Please carry your valid travel documents with you (passport, visa)!
Guided visit 10.00 - 10.45
After guided tour possibility to walk in the famous glass-roof of the Reichstag building.
Individual return, not included in price

This tour will take a maximum of 20 participants.

Participation fee: 6 Euro

Reichstag(2) Tour
Tuesday November 9

Tour in **English** language

Participants leave 11.00 from Hotel SI
By S-Bahn (guidance 1 Student)
Arrive Unter den Linden, walk 300 m to Reichstag building
Check-in 11.50
Please carry your valid travel documents with you (passport, visa)!
Guided visit 12.00 - 12.45
After guided tour possibility to walk in the famous glass-roof of the Reichstag building.
Individual return, not included in price

This tour will take a maximum of 40 participants.

Participation fee: 6 Euro

Registration:

Mr.___ Ms: ___ Last Name: _____ First Name: _____

Address: _____

Postal/Zip code: _____ City: _____ Country: _____

E-mail: _____ www: _____

How many reservations? _____ x 6 EUROS each = _____

Reserving for (circle one) German Language Tour English Language Tour

Your reservations can be paid by **cash** or **credit card**.

Credit Card:

American Express ____ Mastercard ____ Visa ____

Name on Card:_____

Authorised Signature_____

Card No_____

Expiry Date_____

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CODATA 2004 – Social Tours

Potsdam Cecilienhof and Sanssouci Castle
Wednesday November 10

Participants leave 9:15 from SI Hotel by rented bus.

This excursion includes:
Arrive Cecilienhof castle 10:00
Guided tour (english) 10:10 End 10:40
Bus to Sanssouci castle arr. 11:15
Guided tour (english) 11:45 end 13:15 (1.5 h)
Depart 13:30
Return to SI hotel 14:20

Lunchtime at Moevenpick Restaurant "Historische Muehle"
This is an individual lunch and is not included in participation fee.

Arrive 13.30, Depart 15.00
Return to SI hotel 15:40

This tour can take a maximum of 40 people, must have 30.

Participation fee: 32 Euro

Registration:

Mr.___ Ms: ___ Last Name: _____ First Name: _____

Address: _____

Postal/Zip code: _____ City: _____ Country: _____

E-mail: _____ www: _____

How many reservations? _____ x 32 EUROS each = _____

Reserving for (circle one) German Language Tour English Language Tour

Your reservations can be paid by **cash** or **credit card**.

Credit Card:

American Express ____ Mastercard ____ Visa ____

Name on Card:_____

Authorised Signature_____

Card No_____

Expiry Date_____

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CODATA 2004 – Social Tours

Post-Conference Excursion to Dresden
Saturday November 13

Leave from Hotel SI 9.00 a.m.
Return at Hotel SI 8.45 p.m.

This excursion includes:
Railway travel by Eurocity train Berlin-Dresden-Berlin
Guided walk (in English) through Dresden Old Town Center
Lunch
Museum Visit

Booking is US $ 90

Note: Reservations for this tour were only available until 29 October.

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