12TH INTERNATIONAL CONFERENCE ON SYSTEMS RESEARCH INFORMATICS AND CYBERNETICS

chaired by

Prof. George Eric Lasker
International Institute for Advanced Studies
in Systems Research and Cybernetics
University of Windsor
Windsor, Ontario, Canada

co-chaired by

Prof. Kensei Hiwaki
Tokyo International University
Kawagoe, Saitama, Japan

Prof. Jens Pohl
Cal Poly
San Luis Obispo, CA, USA

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Dr. S. Wiesbauer, Chmn. of the Secretariat and the Coordination Council
Mr. Michael Zieman, Associate Chmn. of the Coordination Council
Dipl. Soz. Paed. Patrik Hauns, Chmn., Local Arrangements Committee
Monday, July 31, 2000
10:00-16:00
Registration Center

* Registration of Participants
* Distribution of Conference Materials
* Collection of Final Papers

Monday, July 31, 2000
14:00-17:30
The Aula

Opening Plenary Session: Keynote Addresses
Chair: by Prof. William Graham, President, (CAUT), Ottawa and the University of Toronto, Canada
Prof. Greg Andonian, Carleton University, Ottawa, Canada

Welcoming Address
by Prof. George E. Lasker, Conference Chairman and President,
The International Institute for Advanced Studies, University of Windsor, Windsor, Ontario, Canada

Welcoming Address
by Dr. Sigrun Lang, the Right Honourable Mayor of Baden-Baden, and the President, International Baden-Baden Foundation (IBBF) for Culture of Peace and the Dialogue of Civilizations.

Groundwork for a Biospheric Systems Ethics for the 21st Century
by Prof. Ervin Laszlo, President, the Club of Budapest, Hungary

Gaining Ability for Reconciliation: Enlivening Human Wisdom
by Dr. Ayten Aydin, Former UN/FAO Senior Adviser, Rome, Italy

Statism—Compromise and The Individual
by Mark Scott, Distinguished Talk Show Personality, WXYT-AMI270, Infinity Broadcasting, Southfield, MI, USA

Sciences and Social Interaction: Can Interdisciplinarity Bridge the Gap?
by Prof. Inga Krättli, President, Collegium Humanum, Niederurnen, Switzerland, and Beverly Hills, FL, USA

Collaborative Consciousness: Commercialization and Democracy
by Prof. William Graham, President, Canadian Association of University Teachers (CAUT), Ottawa and the University of Toronto, Canada

Aftermath of the First Decade of Serotonin Misinformation and Doublespeak in Our Orwellian World
by Dr. Ann Blake-Tracy, West Jordan, Utah, USA

Coping with an Error in a Knowledge Society: The Case of the Year 2000 Computer Crisis
by Prof. Stuart A. Umpleby, President, American Society for Cybernetics, Research Program in Social and Organizational Learning, The George Washington University, Washington, D.C., USA

Adapting to the Information Age
by Prof. Jens Pohl, Director, Collaborative Agent Design (CAD) Research Center, Cal Poly State University, San Luis Obispo, California, USA
Plenary Session & Symposium on New Threats to Freedom of Expression (Keynote Addresses)
Chair: Prof. Robert John, Director, International Council for Human Ecology and Ethnology, New York, NY, USA
Prof. William Graham, President, Canadian Association of University Teachers, CAUT, Ottawa, and University of Toronto, Canada

Truth, Politics and the Art of Lying
by Prof. Karel Boullart, University of Gent, Belgium

The Art of Lying and Mass ‘Medicating’ of Society in Our Orwellian World
by Dr. Ann Blake-Tracy, West Jordan, Utah, USA

Value of Freedom – the Right to Hold Any View and Express it
by Mark Scott, Distinguished Talk Show Host Personality, WXYT-AM1270 Infinity Broadcasting, Southfield, MI, USA

Information, Communication and Control:
Towards the New Censorship Paradigm.
by Prof. Frank Ellis, University of Leeds, U.K.

Psychological Defenses and Dissent Treated as Psychopathology
by Prof. Robert John, Director, ICHEE, New York, NY, USA

Threats to Freedom of Expression: The Past, The Present and The Future
by Prof. George E. Lasker, IIAS, University of Windsor, Canada

DISCUSSION

FESTIVE RECEPTION

Hosted by the Right Honourable Mayor of Baden-Baden
will be held on
Tuesday, August 1, 2000, at 19:00
at the Old City Hall of Baden-Baden.
All Conference Participants and their Companions are cordially invited.
Plenary Session of the Conference (Keynote Addresses)
Chair: Prof. Akira Ishikawa, Aoyama Gakuin University, Tokyo, Japan
      Prof. Robert J. Taormina, Massey University, New Zealand

The Certainty of Uncertainty: Limits to Modeling in Systems
by Prof. Charles Middleton, Ryerson Polytechnic University, Toronto, Canada

Collaborative Support Systems: A Method is Not a Theory
by Prof. Gerard de Zeeuw, University of Amsterdam, The Netherlands

Infrastructure and Institutionalism: Making of a Traffic–Jam
by Prof. Mark Ellenbogen, President of Prague Society
      for International Cooperation; Senior Associate of Syracuse University,
      and Visiting Fellow of Magdalen College, Oxford, U.K.

Harmonious Equilibrium of Natural Systems in Their Environment:
      A Challenge for the Next Decades
by Prof. Thiebaut Moulin, Ecole Nationale Superieure
      de Techniques Avancees (ENSTA), Paris, France

Space Dilation and Contraction – A New Rubber to Play with
by Prof. Otto E. Roessler, University of Tuebingen, Germany

The General Theory of Evolution
by Prof. Donald O.Rudin, MD, Annapolis, MD, USA

Theatre Olympics: A Case of Intellectual Olympics
by Prof. Akira Ishikawa, Aoyama Gakuin University, Tokyo, Japan
Symposium on Systems Research in the Arts: Music, Environmental Design and the Choreography of Space
Chairs: Dr. James Rhodes, Department of Mathematics and Computer Science, Shorter College, Rome, Georgia, USA and Professor Jane Lily, Interior Design, Lamar Dodd School of Art, The University of Georgia, Athens, Georgia, USA

Session 1

Time and Space in Music and Architecture
by Professor Radoslav Zuk
School of Architecture, McGill University, Montreal, Canada

Music, Architecture, and Space-Time
by Alissa Rupp, The Portico Group, Seattle, Washington, USA and Dr. Tom Baker, University of Washington, Seattle, Washington, USA

Movement, Space and Time: the Articulation of Art, Architecture and Dance
by Professor Nancy Blossom, Interior Design, The George Washington University, Washington DC, USA

A Symphony in Brick and Glass: The Integration Of Music Analysis and Architectural Design
by Heidi Kristin, Department of Architecture, Miami University, Oxford, Ohio, USA

Session 2

Movement and Arrival in Graves’ Disney Architecture
by Professor Roberto Rengel, School of Human Ecology, University of Wisconsin, Madison, Wisconsin, USA

Interstitial Music
by Dr. Tom Baker, University of Washington, Seattle, Washington, USA

The Byzantine Dome: The Sound Dome and Wassily Kandinsky
by Theodore Lotis, Department of Electroacoustic Composition, City University of London, United Kingdom

Perspective, Space and Time in Music Notation: Underlying Assumptions
by James Ingram, Stockhausen-Verlag, Cologne, Germany

Composing Symmetry
by Dr. Larry Solomon, The Center for the Arts, Pima College, Tucson, Arizona, USA
The Second International Workshop on Software Engineering and Multimedia Applications (SEMA-2000)

Session A: Object Oriented Software Modeling and Testing
Chair: Chun-Chia Wang, Kuang Wu Institute of Technology and Commerce, Taiwan

From UML Models to Object Oriented Code: A Transformational Approach
by Liliana Favre, Liliana Martinez, and Claudia Pereira, Argentina

Cyclic Inheritance Detection by Inheritance Matrix
by Chi-Ming Chung, Timothy K. Shih, Jich-Yan Tsai, and Ming-Chi Lee, Taiwan

Using a Petri Nets-Based Approach to Testing Behavior of SET Payment
by Chun-Chia Wang, Lun-Ping Hung, and Ding-Jung Chiang, Taiwan

Session B: Internet Multimedia Applications
Chair: Carsten Griwodz, Darmstadt University of Technology, Germany

Prototyping Web Applications: Requirements and Tools
by Mario Bochicchio, Roberto Paiano, and Paolo Paolini, Italy

Development of a Remote Diagnosis and Maintenance System
by Chia-Hsiang Lee, Ching-Kong Chen, Jung-Tang Huang, and Ting-Chiang Tsai, Taiwan

Modeling Snapshot Browsing for Web-based Integrated Surveillance Services
by Shu-Ching Chen, Sheng-Tun Li and Mei-Ling Shyu, Taiwan

Development of a Planar CAM Design Software in Java
by Ching-Kong Chen, Tsai-Hui Chien, and Ching-Wen Li, Taiwan

LUNCH BREAK

Session C: Distributed Computing and Content-Based Image Retrieval
Chair: Ivica Rimac, Darmstadt University of Technology, Germany

A Fast Filter of Spatial Video Retrieval
by Chin-Chen Chang and Yung-Kuan Chan, Taiwan

A Fast Filter for Image Retrieval Based on Color-Spatial Features
by Chin-Chen Chang and Yung-Kuan Chan, Taiwan

Segmentation-based Mesh Design for Motion Compensation
by Lijun Chen, Chon Tam LeDinh, and Demin Wang, Canada

Session D: Interactive Multimedia Visualization
Chair: Abdulmotaleb El Saddik, Darmstadt University of Technology, Germany

3D Block Application with Animation, Video and Rendering Capabilities
by Seah Boon Keong and Abdul Rahman Abdullah, Malaysia

The Design, Development and Implementation of a new PC-Based CAD System
by Seah Boon Keong and Abdul Rahman Abdullah, Malaysia

Database and Display Algorithm of S-ARC System for Interactive Visualization
by Abdul Rahman Abdullah, Yuwaldi Away, and Riza Sulaiman, Malaysia

Software Reusability and Interactive Visualization Learning Modules
by Abdulmotaleb El Saddik and Ralf Steinmetz, Germany
Symposium on Informatics / Logic Systems Research (Keynote Addresses)
Chair: Prof. Michele Malatesta, Universita di Napoli, Italy
Prof. Felipe Lara-Rosano, Natl. University of Mexico (UNAM), Mexico D.F.

A Formal System to Represent Rules and Laws
by Prof. C.B. Balogh & Prof. M.E. Balogh, Portland State University, Portland, OR, USA

Classical Logic as a Formal Transcultural System:
The Case of Agglutinate Languages – Japanese
by Prof. Michele Malatesta, Universita di Napoli, Italy

Philosophical Interpretation of Logical Tensors
by Prof. Jorge Carera, National University of Mexico (UNAM), Mexico D.F.

Petri Nets Modeling for Fuzzy Conceptual Models
by Prof. Felipe Lara-Rosano, Natl. University of Mexico (UNAM), Mexico D.F.

CARFIR: A New Methodology for the Automatic Construction of Rules in
Fuzzy Inductive Reasoning
by Prof. Francisco Mugica & Prof. Carlos Gamez, Instituto Politecnico Nacional, Mexico D.F.
and Prof. Angela Nebot, Univ. Politec. de Catalunya, Barcelona, Spain

LUNCH BREAK

Systems’ Predictiton Using CARFIR – Methodology
by Prof. Angela Nebot, Univ. Politec. de Catalunya, Barcelona, Spain, and
Prof. F.Mugica & Prof. C. Gamez, Instituto Politecnico Nacional, Mexico D.F.

The Practical Example of Fuzzy Approach in Classification-
The Measurement of Success of Fuzzy Classification.
by Ing. Mikulas Gangur & Dr. Miroslav Plevny, Univ. of West Bohemia, Cheb, Chech Republic

Logical Decisions for Automata Problems
by Prof. Jorge Carrera, Natl. University of Mexico (UNAM), Mexico D.F., Mexico, and
Prof. Michel Naranjo, Blaise Pascal University of Clermont Ferrand, France

Is a Quandary-Free System of Laws Possible?
by Prof. C.B. Balogh & Prof. M.E. Balogh, Portland State University, OR, USA

Computer Simulation of Motivational Processes – Some Validation Attempts
Within Instructional Settings
by Prof. Hermann Astleitner, University of Salzburg, Austria

Enhancing Formal Techniques with Requirements Engineering Models
by Ing. Virginia Manco, Ing. Carmen Leonardi, Prof. Liliana Favre & Dr. Laura Felice
Universidad Nacional del Centro de la Pcia. de Bs. As., Argentina
Special Focus Symposium on Collaborative Decision-Support Systems
Chair: Prof. Jens Pohl, Collaborative Agent Design (CAD) Research Centre, Cal Poly, San Luis Obispo, CA, USA

08:30 to 12:00  SESSION 1:  Ontological Considerations/System Notions and Approaches

08:30  Generating Concept Representations from Examples, Using Set-Based Notation
by Dr. Per Galle, Department of Planning, Technical University of Denmark, Denmark

09:00  Reusables Ontologies, Design Patterns and Intelligent Reservoir Characterization
by Dr. Paulo Camargo Silva, COPPE/Federal University of Rio de Janeiro, Brazil

09:30  Structured Argumentation for Analysis
by Drs. Andres C. Rodriguez, J.D. Lowrance, and I.W. Harrison, SRI International, USA

10:15  Use of Neural Nets to Capture Complex Person-Environment Relationships: a Prelude to ‘soft-wired’ Microspecification Modules for Complex Adaptive System Modeling
by Prof. Jesse Voss, Dept. of Architecture, Univ. of Wisconsin-Milwaukee, USA

10:45  The Method of Visualizing Design Process for a Decision-Making in a Public Project
by Drs. Riken Homma, Kazuhisa Iki and Mitsuo Morozumi, Dept. of Architecture and Civil Engineering, Faculty of Engineering, Kumamoto University, Japan

11:15  TIRAC: A Toolkit for Decision-Support Systems
by Kym Pohl, CAD Research Center, Cal Poly, San Luis Obispo, CA, USA

LUNCH BREAK

13:00 to 16:15  SESSION 2:  Performance /Tools and Learning Paradigms

13:00  Supporting Collaborative Design via Integrated Building Performance Computing
by Prof. Ardeshir Mahdavi, School of Architecture, Carnegie Mellon University, USA

13:30  Complexity and Architectural Practice
by Prof. Ansgar Killing, Stuttgart, Germany

14:00  An Environmental Noise Advisor for the Development of Urban Sites
by Hatem Ibrahim, Acoustics Research Unit, University of Liverpool, England

14:45  RADA: The Development of a Room Acoustics Design Advisor
by Drs. David J. Oldham and S. M. Felmban, School of Architecture and Building Engineering, University of Liverpool, England

15:15  An Intelligent Agent with Linguistic Skills for the Web-Search of Production Manufacturers
by Prof. Vladimir Fomichov, Department of Information Technologies, K.E. Tsiolkovsky Russian State Technological University - MATI, Russia

15:45  Technology Based Teaching and Learning Environment: An Evolving Paradigm
by Prof. Nitya L. Karmakar, Faculty of Management, University of Western Sydney, Australia and Dr. Swapan K. Ghosal, Department of Physics, University of North Bengal, Darjeeling, India
Symposium on Sustainable Development of the Global Community (Keynote Addresses)
Chair: Prof. Kensei Hiwaki, Tokyo International University, Kawagoe, Saitama, Japan

Environmentally-Oriented Strategies, Applied-Research and Education
by Mrs. Ayten Aydin, Civil Engineer, Former UN/UFO Adviser, Rome, Italy

A Long-run Approach to International Trade for Sustainable Development
by Prof. Kensei Hiwaki, Tokyo International University, Kawagoe, Saitama, Japan

Sustainable Development and the Thought-Producing Self of the Young Child
by Dr. Olga Fomichova, Moscow Children and Teenagers Palace for Creative Work,
Prof. Vladimir Fomichov, Lomonosov Moscow State University, and
Dr. Lioudmila D. Oudalova, Retired Senior Researcher, Moscow, Russia

Common Conception to Resolve the Limits of Perspective for Sustainable Development of the Global Community
by Prof. Robert J. Taormina, Massey University, Auckland, New Zealand

The Information System Design for Sustainable Regional Planning
by Prof. Masao Hijikata, Waseda University, Tokyo, Japan

Without Productive Entrepreneurship Sustainable Development will Turn to Sustainable Poverty
by Prof. Miroslav Rebernik, University of Maribor, Maribor, Slovenia

LUNCH BREAK 12:00 - 14:00

Danish Indications on Democracy and Sustainable Development
by Dr. Torben Larsen, Health Economist, Odense SV, Denmark

Can Regionalism Develop into Globalism
by Prof. Joonho Kim, Tokyo International University, Kawagoe, Saitama, Japan

Thinking about Sustainable Development
by Prof. Harry Schwarzlander, Syracuse University, Syracuse, NY, USA

Systems Analysis of Global Processes: Relationships Between Technology and Social Sciences
by Prof. Wiktor Adamkiewicz, Univ. of GdaZsk & Merchant Marine Academy, Gdynia, Poland

The Choice of Globalization Development as Recognition or Imposition?
by Anas Karzai, Ph.D. Student, Department of Sociology, York University, Toronto

Ethics of Employers and Managers in Russia in the Period of Value Change
by Prof. Vladimir I. Maslow, Moscow State University, Russia

Sustainable Growth - A Universal Constant
by Dr. Bernard Teiling, Nestle, Vevey, Switzerland
Special Focus Session on Cybernetics, Knowledge & Human Factors
Chair: Prof. Alexei Jdanko, Hebrew University, Jerusalem, Israel, and
         Prof. Stuart Umpleby, The George Washington University, Washington D.C., USA

A Contribution of Norbert Wiener to the Development of Social Cybernetics (Keynote Address)
by Prof. Alexei Jdanko, Hebrew University, Jerusalem, Israel

Did Norbert Wiener Have a Theory of Language? (Keynote Address)
by Prof. Pere Juliβ, CSIC/IEA, Univ. de les Illes Balears, Palma de Mallorca, Spain

Cybernetics in a Knowledge Society (Keynote Address)
by Prof. Stuart Umpleby, The George Washington University, Washington D.C., USA

Cybernetics-Based Interpretation of History
by Prof. Alexei Jdanko, Hebrew University, Jerusalem, Israel

Toward More Human ‘Human-Computer’ Interaction
by Dr. Wojciech St. Moscibrodski & Dr. Bogdan Wiszniewski, Technical University of Gdansk, Poland

Adaptation of a Company Under Global Market Conditions
by Dr. Hanna G. Adamkiewicz, Gdynia Maritime Academy, Gdynia, Poland

Knowledge Space Management
by Dr. Andrzej Zaliwski, Cracow University of Economics, Krakow, Poland

BPR Project Success Factors
by Prof. Samo Bobek, University of Maribor, Slovenia
TOWARDS A CULTURE OF PEACE: 
EXPLORATIONS IN THE HUMANITIES, THE ARTS AND THE SCIENCES

Chair: Prof. Jay G. Garrott, AIA, Hammond School of Architecture
Drury University, Springfield Missouri, USA

Challenges • Opportunities • Vision • Attitude
Mr. Jay G. Garrott, Drury University, Springfield, Missouri, USA

Placemaking of Peacemaking: Environmental Elements that Promote the Culture of Peaceful Manifested Community
Mr. Ari Georges, Frank Lloyd Wright School of Architecture, Scottsdale, Arizona, USA

Thinking Tribally, Living Globally: Learning to Enact a Culture of Peace
Mr. Jason Michal, Drury University, Springfield, Missouri, USA

NOVATECTURE: A Search for Meaning in Our Personal and Professional Roles to Achieve a Culture of Peace
Mr. Paul Burnette, Paul Barnette Consulting, Laurel, Maryland, USA

Walling In or Walling Out: Robert Frost in a Beijing Architecture Seminar
Dr. Miles X. Liu, Holyoke College, Holyoke, Massachusetts, USA and Mr. Jay G. Garrott, Drury University, Springfield, Missouri, USA

Artful Participation in a Culture of Peace: The Personal Practices of Peace
Dr. Ben Sims, SIMSINK Educational Consulting, Knoxville, Tennessee, USA

A New Interpretation of Islamic Ideology in Iran? Khatami’s Political Philosophy and Implications for Iran’s Domestic and International Affairs
Dr. Hooshang Pazaki, Drury University, Springfield, Missouri, USA

Spreading Gandhi’s Legacy Across Campuses and Continents
Mr. Michael Kojis, Stockton, California, USA
TOWARDS A CULTURE OF PEACE:
FACILITATING THE EMERGENCE OF A PEACE CONSCIOUSNESS

Chair: Prof. Ayten Aydin, Civil Engineer, Former Senior Advisor of UN/FAO, Rome, Italy and Prof. Harry Schwarzlander, Syracuse University, Syracuse, NY, USA

Aesthetic Consciousness: A Hidden Hand in Raising Peace Consciousness
by Dr. Ayten Aydin, Civil Engineer, Former Senior Advisor of UN/FAO, Rome, Italy

Thought-Frame Enhancement for Peace Consciousness
Prof. Kensei Hiwaki, Tokyo International University, Kawagoe, Saitama, Japan

A System Theory Model of Peace as an Adjunct to Universal Education in “Peace Consciousness”
by John E. LaMuth, Divorce and Family Mediation Counselor and Author, Lucerne Valley, CA, USA

Coming to Grip with the Problem of Achieving a World that is At Peace
by Prof. Harry Schwarzlander, Syracuse University, Syracuse, NY, USA

Collaborative Peace Consciousness Development: Commercialization and Democracy
by Prof. William Graham, CAUT, Ottawa, and University of Toronto, Canada

Peace Consciousness Development and Spirituality
by Mag. Georgine Lansky, HBLA f. Kunstgewerbe, Linz, Austria

Kitsch and Power: The Flexible Kitschman
by Dr. Hiltrud Schinzel, Duesseldorf, Germany

The Biochemistry of Belief and the Social Placebo Theory of Deadly Conflict
Dr. Donald O. Rudin, Department of Molecular Biology, Eastern Pennsylvania Psychiatric Institute, Philadelphia, PA, USA

Using Simulation to Model and Manage Conflict
by Dr. Holmes Miller, Muhlenberg College, Allentown, PA USA and Prof. Kurt Engemann, Iona College, New Rochelle, NY, USA
Symposium on Systems Research in the Arts: Music, Environmental Design and the Choreography of Space
Chairs: Dr. James Rhodes, Department of Mathematics and Computer Science, Shorter College, Rome, Georgia, USA and Professor Jane Lily, Interior Design, Lamar Dodd School of Art, The University of Georgia, Athens, Georgia, USA

Session 3

Cyber-Ideation and its Application for Creative Problem Solving
by Professor Kathleen Gibson, Department of Design and Environmental Analysis, Cornell University, Ithaca, New York, USA

Space as Compositional Determinant
by Dr. John Dack, Centre for Electronic Art, Middlesex University, Cat Hill, Barnet Hertfordshire, United Kingdom

The Theatre of Mixed Means in the Age of Information Technology
by Dr. Sophia Lycouris, Art and Design, Department of Visual and Performing Arts, The Nottingham Trent University, Nottingham, United Kingdom

The Environmental Discourse. Cultural Geographies, Fictional Utopias, and Alternative Non-verbal Space
by Professor Gillian Davies, Interior Design, Savannah College of Art and Design, Savannah, Georgia, USA

Session 4

Shaker Music Theory: New Rules For a New Faith
by Dr. Vicki Bell, Department of Music, Asbury College, Wilmore, Kentucky, USA

Towards Idiomatic Instrumental Writing: A Constraint Based Approach
by Dr. Mikael Laurson, Sibelius Academy, Helsinki, Finland

Set-Class Similarity Comparisons
by Tuire Kuusi, Sibelius Academy, Helsinki, Finland

Some Structural Properties of Cyclic Sets From George Perle’s Theory of Twelve-Tone Tonality
by Dr. Gretchen Foley, School of Music, Eastern New Mexico University, Portales, New Mexico, USA
Session E: Multimedia Scheduling & Security
Chair: Sheng-Tun Li, Natl. Kaohsiung First Univ. of Science and Technology, Taiwan

Multimedia Scheduling with Flexibility Threshold
by Jana Dospisil and E. Kendall, Australia

A Robust Intellectual Property Rights Protection Scheme for Digital Images
by Chin-Chen Chang and Chwei-Shyong Tsai, Taiwan

An Image Protection Scheme Based on Discrete Cosine Transformation
by Chin-Chen Chang and Hsien-Chu Wu, Taiwan

A Pure-Play IP Approach to Universal and Ubiquitous Access to Enterprise Messaging
by Sheng-Tun Li and Jonathan Chu, Taiwan

Session F: Electronic Commerce
Chair: Whe Dar Lin, National Chung Hsing University, Taiwan

A Proxy Blind Signature using in EC Applications
by Jinn-Ke Jan and Whe Dar Lin, Taiwan

An EC-based Architecture for the Internet Protocol
by Whe Dar Lin, Taiwan

Servlet-based E-Commerce Infomediary in Cargo Tracking
by Sheng-Tun Li, Ken-Mu Tsai, and Li-Yen Shue, Taiwan

LUNCH BREAK 12:00 - 14:00

Special Session: Web-based Multimedia Systems for Distance Learning
Chair: Herng-Yow Chen, National Chi Nan University, Taiwan

Content Modeling and Summarization of Video Databases for Distance Learning on the WWW
by Guang-Ho Cha and Chin-Wan Chung, South Korea

Prototyping of a Two-Mode Web-based Multimedia Distance Learning System
by Ing-Chau Chang, Ja-Kwan Jiang, Yu-Ping Liou, Chan-Ju Chen, Ing-Jer Huang, and Li-Hsin Shu, Taiwan

Learning Model
by Tih T. Lee, Taiwan

Design of a SMIL Gateway for Web-based Distance Learning
by Chun-Chuan Yang, Herng-Yow Chen, and Yi-Zheng Yang, Taiwan
Symposium on Informatics-General Session (Keynote Addresses)
Chair: Prof. Peter Jarratt, University of Birmingham, Edgbaston, U.K.
Prof. Z. Chen, University of Nebraska, Omaha, NB, USA

Data, Model, and Reality
by Dr. Per Galle, Technical University of Denmark, Lyngby, Denmark

Increasing of Information Quality
by Prof. Tatjana Welzer, University of Maribor, Slovenia

Qualitative Modeling for Knowledge-Based Systems
by Dr. Marjan Drucev & Prof. T. Welzer, University of Maribor, Slovenia

The ‘Focusing Drawing’ in CAD-Based Project Communication
by Dr. F. Westergaard, Techn. University of Denmark, Lyngby, Denmark

Co-ordinating Risk Management Across Large Organizations: Case Study of an Integrated Approach
by Prof. Sophia Langley, IIAS and CARMA, Ltd. and Prof. Peter Jarratt, Univ. of Birmingham, Edgbaston, U.K.

Perspectives of Dynamic Programming in F.A.O. Management
by Dr. Arturo Graziano Grappone, Metalogicon, Rome, Italy

Algorithm Detecting the Order of Point on Eliptic Curve
by Prof. Boris S. Verkhovsky, New Jersey Institute of Technology, Newark, NJ, USA

Session on Data Warehousing and Data Mining
Chair: Prof. Z. Chen, University of Nebraska, Omaha, NB, USA
Prof. Peter Jarratt, University of Birmingham, Edgbaston, U.K.

Accessing Spatial Data Using Branch-Grafted R-Tree Implementation
by M. Khanijio, Z. Chen & Q. Zhu, Univ. of Nebraska, Omaha, USA

Imaginary Ordering R-Tree; Proposal of a New R-Tree Variant
by Profs. X. Zhang, Z. Chen & Q. Zhu, Univ. of Nebraska, Omaha, USA

Aggregates Calculation Using Pre-Constructed Data Structures in Data Cubes
by Dr. M. Chen, University of Nebraska, Omaha, NB, USA

Predicting Data Mining Costs: Additive Approach
by Dr. Bojtjan Brumen, University of Maribor, Slovenia

The BDSIM CPP Cognitive Modeling Environment and Its Relation to Cognitive Dynamic Unit of Analysis
by Prof. Erminia Vaccari, Universita di Bari, Italy
Symposium on Informatics, Artificial Intelligence & Engineering Cybernetics
Chair: Prof. Vladimir Mašik, Czech Technical University, Prague, Czech Republic, and
Prof. C.B. Balogh & Prof. M.E. Balogh, Portland State University, Portland, OR, USA

Multi-Agent Systems and Coalition Planning (Keynote Address)
by Profs. Vladimir Mašik, Michal Pechouček and Olga Vítovková,
Czech Technical University, Prague, Czech Republic

Integration of Purposeful Agents that Use Different Ontologies (Invited Paper)
by Prof. Adolfo Guzman, Jesus Olivares, Araceli Demetrio and Carmen Dominguez,
Centro de Investigacion en Computacion, Instituto Politecnio Nacional, Mexico D.F.

Variety Capturing Capabilities of the Steering Models of Complex Production Processes, Its Input Elements & the Final Decision Information Hereby Utilized (Keynote Address)
by Dr. John Fogelholm, Helsinki University of Technology, Espoo, Finland

Validation of the Knowledge Based Controller (Invited Paper)
by Prof. Oto Tezak, University of Maribor, Maribor, Slovenia

Forecasting Without Preconditions
by Dr. Hanns Sommer, Gesamthochschule Kassel (GHK), Kassel, Germany

Hypertext: Some General Aspects and Considerations (Invited Paper)
by Dr. Kamel Hussein Rahouma, Prof. Peter Zinterhof & Prof. Hermann Astleitner,
Salzburg University, Austria

From RAISE Specifications to Object Orientd Code: A Reusable Component Model
by Profs. Liliana Favre, Laura Felice, Virginia Mauco & Carmen Leonardi,
Universidad Nacional del Centro de la Pcia. De BS. AS., Argentina

Permutation Generating Algorithm
by Prof. Boris S. Verkhovsky, New Jersey Institute of Technology, Newark, NJ, USA

RSA Public-Key Cryptosystems with Multiple Private Keys
by Prof. Boris S. Verkhovsky, New Jersey Institute of Technology, Newark, NJ, USA

Sequential Machines and Public-Key Cryptography (Keynote Address)
by Prof. Youichi Kobuchi, Ryukoku University, Seta, Japan

The New Type of Fractals Generated by Parameter Modulated Generator
With Piecewise Bilinear Parameter Field
by Dr. Ing. Ladislav Lukáš, University of West Bohemia, Plzen, Czech Republic
International Symposium on Mobile Agent Applications - MAA’2000
Chair: Dr. Jana Dospisil, Monash University, Melbourne, Australia
       Prof. E. Kendall, Monash University, Melbourne, Australia

10:00 Separation of Concerns in Mobile Object Programs:
The Case of Supporting Mobility and Concurrency
by Lukito E. Nugroho, Bala Srinivasan, Monash University, Australia
and A.S.M. Sajeev, University of Newcastle, U.K.

10:30 SafeT: A Secure Agent Framework Environment for Telecommunication
by Shamsi Moussavi Aghdam, GTE Lab. Inc., Waltham, MA, USA

11:00 Design of the J-SEAL2 Mobile Agent System
by Walter Binder, CoCo Software Engineering, Wien, Austria

11:30 Mobile Agent – Demonstration of Capabilities
by Patrik Mihailescu, Chandana Gamage, and E. Kendall,
Monash University, Australia

LUNCH BREAK

14:00 Chiron: a Framework for Mobile Agent Systems
by Ulisses Ferreira, University of Dublin Trinity College,
Dublin, Ireland

14:30 A.N.T: A Distributed Problem-Solving Framework Based on Mobile Agents
by S. Fenet and S. Hassas, INSA & Universite Lyon I, France

15:00 A Mobile Agent Architecture for Searching the WWW
by D.J. Grey, University of Hull, U.K. and
P.Dunne, and R.I. Ferguson, University of Sunderland, U.K

DISCUSSIONS
A Categorical Framework for Genetic Algorithms
by Profs. A Zanetti, F. Braudenberger & Paolo Blauth Menezes,
Instituto de Informatica da Universidade Federal do Rio Grande do Sul, Porto Alegre, RS-Brazil

Impact of Time of Day Electric Energy Pricing on Commercial Consumers
by Prof. D.O. Koval, J.C. Salmon, R. Aridi & L. Hiemer,
University of Alberta, Edmonton, Canada

Estimating the Frequency of Utility Voltage Sags at Computer Sites
by Prof. Don Koval, Kai Yas & Wilsun Yu,
University of Alberta, Edmonton, Canada

BPR Project Success Factors: Case Research in a Medium Size Bank
by Prof. Samo Bobek, University of Maribor, Slovenia

Multimedia Telecommunications Using a High Speed Broadband Backbone Network
Beyond All Aspects of the Current Internet
by Prof. Takao Ichiko, Yamagata National University, Japan,
Prof. Masaki Yamamoto, Tezukayama Gakuin University, Japan, and
Prof. Motochika Hanano, Osaka Sangyo University, Osada, Japan

Servuction for the Positioning New Agroindustrial Products in the Global Market
by Profs. A.M. Castagnino, J.P. Pane, Univ. Nacional del Centro de la Pcia. de Bs. As. and
Prof. P. Sastre-Vazquez & J.L. Us.: Domânech, Univ. Jaume I, Castell.:., Spain
Symposium on Adaptive, Cooperative and Competitive Processes in System Modeling, Design and Analysis (Invited Papers)
Chair: Dr. Alexandru Murgu, University of Jyväskylä, Jyväskylä, Finland

Reliability Settlement Estimation of the Basic Characteristics of Errors of Virtual Measuring Circuits
by Prof. I. Brusakova, St. Petersburg Electrotechnical University, Russia

Comparative Analysis of Methods for Determining the Order of Linear Systems
by Dr. Y.V. Chebrakov, St. Petersburg Technical University, Russia

Interval Estimation of Ordered Means for Dynamics of Normal Populations
by Dr. Alexandru Murgu, University of Jyvaskyla, Jyväskylä, Finland

Kalman Filtering of Mixture Systems with Interval Dynamics
by Dr. Alexandru Murgu, University of Jyvaskyla, Jyväskylä, Finland

Optimal Selection in Active Medium
by Prof. Dr. Vadim N. Romanov, North-West Polytechnic Institute, St. Petersburg, Russia

Stochastic Model Fault Detection and Diagnosis Using a Batch of Competitive Kalman Filters
by Prof. Dr. Innokenti V. Semoushin and Dr. Julia V. Tsyganova, Ulyanovsk State University, Ulyanovsk, Russia

An Efficient Way to Evaluate Likelihood Functions in Terms of Kalman Filter Variables
by Prof. Dr. Innokenti V. Semoushin and Dr. Julia V. Tsyganova, Ulyanovsk State University, Ulyanovsk, Russia

Suspicion-Contest Based Model Fault Detection for the LQG Stochastic Control
by Prof. Dr. Innokenti V. Semoushin, Dr. Julia V. Tsyganova and Dr. Leonid V. Kalinin, Ulyanovsk State University, Ulyanovsk, Russia

Adaptive Estimation of Parameters: Theory and Applications
by Dr. V.V. Shmagin and Dr. Y.V. Chebrakov, St-Petersburg University of Aerospace Instrumentation, St-Petersburg, Russia

Integrated Environment for Investigation of LQG Stochastic Control Systems
by Dr. Julia V. Tsyganova, Ulyanovsk State University, Ulyanovsk, Russia and Dr. Andrew V. Tsyganov, Ulyanovsk State Pedagogical University, Ulyanovsk, Russia
Symposium on Database Technology & Software Engineering
Chair: Prof. W. Gerhardt, Technical University Delft, The Netherlands

Session on Business Objects & E-Commerce

13:00  A Formal Foundation for Electronic Commerce Transactions;
       Prof. S. Ehikioya, University of Manitoba, Winnipeg, Canada

13:30  Development of Business Objects and Multi-Tier Software Architecture;
       Profs. M. Heriko, S. Beloglavec, A. Ivkovic, M.B. Juri, I. Rozman,
       University of Maribor, Slovenia

14:30  Business Objects and Standards
       Ir. M. Abolhassani, TU Delft, The Netherlands

Session on Data Warehouses & Multi-Dimensional Data Models

15:30  Formal Design and Verification of Web-based Data Warehouses;
       Prof. S. Ehikioya, University of Manitoba,
       Prof. Y. Indratmo, University of Manitoba,
       Winnipeg, Canada

16:00  Multidimensional Data Structures for Sport Data;
       Prof. H. Thoma, IBM Global Services Base, USA

16:30  Comparing Relational Databases and Data Warehouses;
       Ir. R. Roddeman, Cap Gemini Nederland b.v.,
       Prof. W. Gerhardt, TU Delft, The Netherlands

17:00  Designing an Object Data Warehouse;
       Prof. W. Gerhardt, TU Delft, Dr. M. Sim, Bitbybit, The Netherlands
Symposium on Health, Healing and Medicine (Keynote Addresses)
Chair: Prof. Dr. Med. Helmut Sauer, IIAS, Waldbronn-Reichenbach, Germany
        Prof. Julia J. Tsuei, M.D., Foundation for East-West Medicine, Taipei, Taiwan

by Prof. Alfred Roessle, Vice-President, Collegium Humanum, Niederurnen, Switzerland and Beverly Hills, FL, USA

Ancient Theories and Genomic Information
by Markus T. Rojewski, Medical Clinic of Berlin Free University, Berlin, Germany

Information Medicine (Bioenergetic Medicine): Theory, Practice and Health Delivery
by Prof. Julia J. Tsuei, M.D., President, Foundation for East-West Medicine, Taipei, Taiwan, R.O.C.

Biocybernetics and Ultrafine Bioenergetics in Psychosomatic Medicine - Diagnosis and Therapy
by Prof. Inga Kràtli, M.D., Ph.D., President, Collegium Humanum, Niederurnen, Switzerland and Beverly Hills, FL, USA

Homeopathy: An Energetic Method of Healing
by Prof. Dr. Med. Helmut Sauer, IIAS, Waldbronn, Germany

Wave Explanation to Classical Homeopathy
by Prof. Kuo-Gen Chen, Ph.D., Soochow University, Taipei, Taiwan, R.O.C.

Logic of Genetic Diseases
by Prof. Ta^-na Ma^<Pkov<, M.D., Charles University, Prague, Czech Republic

Informational Medicine: Synergistic Effects of Information on Health and Healing
by Prof. George E. Lasker, IIAS, University of Windsor, Windsor, Ontario, Canada

Physiological, Psychological and Sociological Implications of Serotonergic Medications and Chemicals
by Dr. Ann Blake-Tracy, West Jordan, Utah, USA

Thermographic Image Processing in Natural Medicine
by Prof. Dr. Med. R. Berz, Director of Health Care, Daimler-Chrysler, Ulm, Germany

Arsenic and Old Lace
by Markus Thomas Royewski, Eckhard Thiel & Hubert Schrezenmeier,
Medical Clinic of Berlin Free University, Berlin, Germany
Special Focus Symposium on World Wide Web as Framework for Collaboration
Chair: Prof. Thomas Fowler, IV., Cal Poly State University, San Luis Obispo, CA, USA

8:30 Learning in Web-based Collaborations:
by Nancy Cheng, Dept. of Architecture, Univ. of Oregon, Eugene, Oregon, USA

9:00 A Communication Model for Productive Web-Based Design Collaboration:
Mitsuo Morozumi, Department of Architecture and Civil Engineering,
Kumamoto University, Kumamoto City, Japan

9:30 DYNAMO in Action. Development and Use of a Web-based Design Tool for Architecture:
by Ann Heylighen, and Herman Neuckermans, University of Leuven, Belgium

10:15 Internet Based Collaborative Design System Integrated with CAD System:
by Yong-seong Kim, Ph.D., Kookmin University, Seoul, Korea

10:45 A Multi-institutional Initiative for Distributed Collaborative Performance-based Building Design:
by Ardeshir Mahdavi, and Mustafa Emre Ilal, School of Architecture, Carnegie Mellon University,
Pittsburgh, Pennsylvania, USA; Khee Poh Lam & Nyuk Hien Wong, Faculty of Architecture, Building and Real Estate, National University of Singapore; Kim Kai Chan & Kian Seng Au, Temasek Polytechnic, Singapore

11:15 A Web Environment to Support User Participation in the Development of Apartment Buildings:
by Sheng-Fen Chien, and Shen-Guan Shih, Department of Architecture, National Taiwan University of Science and Technology Taipei, Taiwan

LUNCH BREAK    11:45 - 13:00

13:00 Online Distance Learning in 3D Modeling Interactive vs. Non Interactive Instruction: by Hsu-Jen Haung, and Chad Warner, cwarner@scad.edu, Savannah College of Art and Design, Savannah, Georgia, USA

13:30 The Web as Framework for Capturing the Collaborative Design Process: Analog Digital Language of Vision Workshop: by Thomas Fowler, IV, Architecture Department, Cal Poly, San Luis Obispo, California, USA; Julio Bermudez, University of Utah, Graduate School of Architecture, Salt Lake City, Utah, USA; Bennett Neiman, Roger Williams University, Bristol, Rhode Island, USA
Conference Plenary Session and Symposium on Culture of Peace (Keynote Addresses)

Chair: Prof. Janusz Symonides, Director, Division of Human Rights, Democracy and Peace, UNESCO, Paris, France, and
       Prof. Ayten Aydin, Former UN/FAO Senior Adviser, Rome, Italy

United Nations Declarations and Program of Action on the Culture of Peace
by Prof. Janusz Symonides, UNESCO, Paris, France

Privatization and War: Towards a Culture of Peace
by Prof. William Graham, President, Canadian Association of University Teachers, Ottawa, and University of Toronto, Canada

A Culture of Peace – The Language Factor
by Prof. Pere JuliB, CSIS/IMEA, Univ. de les Illes Balears, Palma de Mallorca, Spain

Global Issues and Intergrative Education
by Prof. Winfried K. Rudloff, Governors State University, Univ. Pk, IL, USA

Emptiness: Science, Spirit and the Search for In-Between
by Prof. Brian R. Sinclair, Ball State University, Indiana, USA

Networks of Peace Paradigm Centers: Pilot Scheme in the Mediterranean Region
by Prof. Ayten Aydin, Former UN/FAO Senior Adviser, Rome, Italy

DISCUSSION

Thursday, August 3, 2000

AWARD CEREMONY

In recognition of excellence and to honour meritorious achievements, distinguished service, and outstanding scholarly contributions of our colleagues who have been nominated and selected by the Award Committee for the year 2000 Awards
Symposium on Systems Research in the Arts: Music, Environmental Design and the Choreography of Space
Chairs: Dr. James Rhodes, Department of Mathematics and Computer Science, Shorter College, Rome, Georgia, USA and Professor Jane Lily, Interior Design, Lamar Dodd School of Art, The University of Georgia, Athens, Georgia, USA

Session 5

An Inquiry Into System Language Within Spatial Design and Music
by Professor Cigdem T. Akkurt, Department of Art and Design, Iowa State University, Ames, Iowa, USA and Hasan Akkurt, Akkurt and Akkurt Design, Ames, Iowa, USA

The Undulatory Music: A System for Analysis, Composition, and Music Cognition
by Aldo Lizausaba, Universite de Provence, Aix-en-Provence, France

The Interaction of “Inner” and “Outer” Forms
by Dr. Eric McKee, School of Music, Pennsylvania State University, State College, Pennsylvania, USA

The Value of Value: Directionality in Edward T. Cone’s Judgments of Musical Success
by Dr. Yuh-Wen Wang, Department of Music, National Taiwan University, Taipei, Taiwan

Session 6

Mathis Lussy and Expressive Performance
by Dr. Mines Dogantan, School of Arts and Sciences, Yedilepe University, Uskudar, Istanbul, Turkey

A Research System for Music Psychology
by Dr. Gertina van Schalkwyk, Department of Psychology, University of Pretoria, South Africa

Aesthetic Expressions of Human Understanding: a Prospective Basis for Space Design
by Dr. R. Ben Sims, Choral Music, Fulton High School, Knoxville, Tennessee, USA
Symposium on Systems Research in Neurocybernetics (Keynote Addresses)
Chair: Prof. Felipe Lara-Rosano, Director, Centro de Instrumentos, National University of Mexico (UNAM), Mexico D.F., Mexico

On the Topology of Primate Vision
by Prof. Gerhard X. Ritter, University of Florida, Gainesville, FL, USA

Patterns of Cerebral Electroencephalographic Activity Characteristic of Distinct Affective-Cognitive States
by Profs. I. Barahona da Fonseca, J. Barahona da Fonseca & J. Simoes da Fonseca
University of Lisbon, Portugal

Language Recognition with Neural Networks and Fuzzy Logic
by Dr. Ray Smilgius & Prof. Winfried Rudloff,
Governors State University, Univ. Dk., IL, USA

An Extended Model of a Fuzzy Neuron
by Profs. Jose Luis Perez-Silva, Felipe Lara-Rosano, Alberto Herrera, M. Angel Banuelos, Sergio Quintana, Jose Castillo, Alejandro Padron, Antonio Garces & Andrea Miranda;
Centro de Instrumentos, National University of Mexico, Mexico D.F., Mexico

Casual Maps and Neural Networks: Matching the Representation to the Model
by Prof. Sophia Langley, IIAS, and CARMA, Ltd., U.K.

Neuro-Predictive Control Policy for a Simplified Employment-Price-GDP Growth Model by Genetic Algorithm
by Prof. Yukio Ito, Osaka University of Economics, Osaka, Japan

Evolution on Formal Language
by Prof. Tadashi Ae, Hiroshima University, Higashi-Hiroshima, Japan
Chair: Dr. Jacques Blanc-Talon, CTA/GIP, Arcueil, France and
Dr. Dan Popescu, CMIS/CSIRO, Canberra, Australia

Session A1: Signal and Image Processing

Signal Magnification Using Discrete Orthogonal Wavelet Transform
by F. Nicolier, F. Truchetet, Univ. of Burgundy, Le Creusot, France

Decomposition of Oriented Texture into a Sum of Ridge Functions
by I.G. Kazantsev, I. Lemahieu, Ghent University, Ghent, Belgium

A Framework for Understanding Renormalisation - Type Methods in Computer Vision
by W. Chojnacki, M.J. Brooks, A. Van Den Hengerl, Univ. of Adelaide, Australia

Session A2: Image enhancement

An Objective Quality Measure for the Assessment of Aliasing and Sharpness in Halftones
by D. Van De Ville, K. Denecker, W. Philipps, I. Lemahieu, Ghent University, Belgium

Signed Spectral Amplitude: Unique Representation and Image Restoration
by J. Alfandary, L. Binyamini, Y. Shapiro, M. Porat, Technion, Haifa, Israel

An Application of a Wavelet-Based Denoising Method to Temporal Radar Imagery
by A. Pizurica, N.E.C. Verhoest, W. Philips, F.P. De Troch, J. Duskunovic, M. Acheroy, Gent University, Belgium

Curvature-driven Min/Max Flow and Anisotropic Diffusion in Image Enhancement
by A. Paplinski, Monash University, Melbourne, Australia

Session A3: Segmentation

Neural Network Based Image Sequence Segmentation
Using Multiple Features and Edge Fusion
by J. Kim, T. Chen, Colorado State University, Fort Collins, CO, USA

Motion Segmentation Algorithm and Object Tracking
by S. Venegas-Martinez, M. Rendon, G. Stamon, R. Horak, Univ. of Paris, France

Segmentation of Arteries in 2D B-spline Multiscale Mode
by S.R. Kinkingnehun, A. Casasco, C. Marsault, M. Frudit, J. Blanc-Talon, B. Peroche, Siemens & CTA/GIP, Arcueil, France
Special Focus Symposium on
Decision Technology and Intelligent Information Systems

Chair: Professor Kurt J. Engemann, Iona College, United States

Focus of the Symposium

This special one-day focus symposium will provide a venue for high quality discussion of recent advances in Decision Technology and Intelligent Information Systems. A variety of traditional and contemporary decision methodologies and models are being combined with new technologies to provide innovative solutions to important and complex problems in a myriad of application areas.

Invited Papers

A Decision Methodology Using Belief Structures with Interval Probabilities
by Prof. Kurt J. Engemann, Iona College, New Rochelle, NY, USA
Prof. Holmes E. Miller, Muhlenberg College, Allentown, PA, USA, and
Prof. Ronald R. Yager, Iona College, New Rochelle, NY, USA

Multimode Optimization in Logistics
by Prof. Walter Habenicht, University of Hohenheim, Stuttgart, Germany

Artificial Intelligence and Emotional Intelligence:
Strangers or Partners in Decision Making Processes?
by Dr. Iva Smit, E&E Consultants, Inc., Netterden, The Netherlands

Solving the Minimum Expected Makespan Flow-Shop Problem Subject to Breakdowns
by Prof. David Alcaide, Prof. A. Rodriguez-Gonzalez, and Prof. J. Sicilia, Universidad de La Laguna, La Laguna, Spain

Automated Negotiation with Agents
by Prof. Jana Dospisil, Monash University, Frankston, Australia

Interactive Analytic Decision Support in Policy Planning
by Prof. Giampiero E.G. Beroggi, Swiss Federal Institute of Technology, Zürich, Switzerland

An Agent Model of Decision Support for Software Project Management
by Prof. Rory O'Connor and Prof. Tony Moynihan, Dublin City University, Ireland

Procedural Support for Cooperative Negotiations: Theory and Implementation
by Prof. Matthias G. Raith, University of Bielefeld, Bielefeld, Germany

Strategic Planning and Operational Management Supported by Analytic and Decision Databases:
An Integrated DSS Paradigm
by Prof. N-S Koutsoukis, Prof C. Lucas, and Prof G. Mitra, Brunel University, Middlesex, United Kingdom

Tolerance Solutions for Group Decision Making
by Prof. Josè A. Moreno Pòrez. and Prof. Clara M. Campos Rodríguez, Universidad de La Laguna, La Laguna, Spain
Symposium on Environmental Systems Research
Chair: Prof. Camilo Rosales, Florida International University, Miami, FL, USA
Prof. Charles Middleton, Ryerson Polytechnic University, Toronto, Canada

Advancing Living Systems Theory to the 9th Level (Keynote Address)
by Prof. Robert J. Taormina, Massey University, New Zealand

Design on a Blank Sheet: Are There any Borders? (Keynote Address)
by Prof. Charles Middleton, Ryerson Polytechnic University, Toronto, Canada

Reflection on the Dynamics of Autopoietic Networks (Keynote Address)
by Prof. Vasco Mancini, Florida State University, Tallahassee, FL, USA

Place, Culture and Ecology (Keynote Address)
by Prof. Christopher Jarrett, Georgia Institute of Technology, Atlanta, GA, USA

An American “Yard” as Space Mediator and Connector (Keynote Address)
by Prof. Camilo Rosales, Florida International University, Miami, FL, USA

New Concepts in Quality of Advanced Human-Computer Interaction
by Dr. Wojciech St. Moscibrodzki and Dr. Bogdan Wiszniewski
Technical University of Gdansk, Poland

Community Development: Examples and Cases
by Dr. Martha Vahl, Lincoln Research Center, Lincoln, U.K.

Development of the Affordable Warmth Index for U.K. Housing
by Dr. Steve Todd, University of Salford, U.K.

Saint Matthew Law and Bonini Paradox in Textual Theory of
Ecological Models (Keynote Address)
by Prof. J. L. Uso-Domenech & Dr. J. Mateu, Univ. Jaume I. Castellon, Spain
Prof. P. Sastre-Vasquez, Univ. National de la Pcia. De B.Aires, Argentina
Dr. Ondina Uso-Olcina, Universitat de Valencia, Valencia, Spain

Stochastic Process in Determination of Flow Equations in Ecological Models
by Profs. Patricia Salvador, J. Mateu & J.L. Uso-Domenech,
Universitat Jaume I., Castellon, Spain

The Notion of Animals’ Local Selectivity from an Exterior of
Mechanical Framework
by Shusaku Nomura & Dr. Yukio-Pegio Gunjii, Kobe University, Japan
Symposium on Advances in Ecosystems Research and Applied Informatics
Chair: Dr. Elisa B.P. Tiezzi, Dept. of Mathematics, University of Siena, Italy
       Dr. Margherita Panzieri, Dept. of Chemical and Biosystems Sciences and Technology, University of Siena, Italy

13:30  Reasoning on the Evolutions of (Eco)Systems
       by Prof. G. Michele Pinna, & Dr. Elisa B. P. Tiezzi,
       Dept. of Mathematics, University of Siena, Italy

14:00  (Eco)Systems as Real-Time Systems
       by Dott. Elisa B. P. Tiezzi, & Prof. G. Michelle Pinna,
       Dept. of Mathematics, University of Siena, Italy

14:30  Alice Beyond Wonderland: Towards the Creative Chaos
       by Prof. Rita Micarelli, Politecnico of Milano, Italy

       COFFEE-BREAK

15:30  Perceived Landscape, Created Landscape
       by Prof. Giorgio Pizziolo, University of Florence, Italy

16:00  Comparison and Integration of Alternative Methods
       for the Assessment of Sustainability
       by Prof. Simone Bastianoni, Dott. Valentina Niccolucci, & Prof. Enzo Tiezzi, Dept. of Chemical and Biosystems Science, University of Siena, Italy

16:30  Use of a Mathematical Model to Study Bioaccumulation of PCBs in Fish Within the Oak Ridge Reservation in East Tennessee (USA)
       by Dott. Margherita Panzieri, Dept. of Chemical & Biosystems Sciences, and
       Dr. Elisa B.P. Tiezzi, Dept. of Mathematics, University of Siena, Italy
Symposium on Database Technology & Software Engineering
Chair: Prof. W. Gerhardt, Technical University Delft, The Netherlands

Session on Information Systems

09:00 Automatic Workflow Schema Design-A Use Case Approach;
Prof. P-H. Chen, and Prof. R. Carlson,
Illinois Institute of Technology, Chicago, IL, USA

09:30 A Transaction Based Modeling and Software Engineering;
Dr. J. Barjis, and Prof. J.L.G. Dietz, TU Delft, The Netherlands

10:00 Database Support for a Cooperative Engineering Information Systems;
Prof. K. Messa, Loyola University, New Orleans, LA, USA

Session on Generic Database Aspects & Software Engineering

11:00 Database Security meets Mobile Requirements;
Dipl.-Ing. A. Lubinski, Rostock University, Rostock, Germany

11:30 Applying Software Metrics to Databases;
Profs. C. Calero, M. Piattini, M. Genero,
University of Castilla-La Mancha, Ciudad Real, Spain

12:00 Derived Data Decrease Stability of the Conceptual Schema;
Ir. L. Wedemeijer, ABP Pension, Heerlen, The Netherlands

14:00 Processing of Documents with XML Annotations Based on a Semantic Database Model;
Prof. B.C. Czejdo, Loyola University, New Orleans, LA, USA

14:30 DAVG-ID3: Retrieving Key-Information Using Graph and Classification Algorithms;
Dr. A. Fatholahzadeh, Supelec, Metz, France

15:00 A Partial View Maintenance Approach for Object Databases;
Ir. I. Sz<nt.:, TU Delft, Ir. P. Kist, Bitbybit, Delft, The Netherlands

16:00 Configurable Object Presentation;
An Approach to Separate Presentation and Content Aspects;

16:30 Providing Web Browsers with Object Database Manipulation Functionality;
Thursday, August 3, 2000 09:00-12:00 Hall H

**Symposium on Health, Healing and Medicine (Keynote Addresses)**
Chair: Prof. Dr. Med. Helmut Sauer, IIAS, Waldbronn-Reichenbach, Germany
      Prof. Julia J. Tsuei, M.D., Foundation for East-West Medicine, Taipei, Taiwan

**Systems Research, Informatics, & Cybernetics, and the Human Body:**
**The Infinite Challenge (Keynote Address)**
by Dipl.-Ing. Eberhard W. Eckert, Director (ret.), DABEI, Bonn, Germany

**The Role of Information and Symbols in Our Society and Their Powers and Potential for Healing**
by Ir. Otto van Nieuwenhuijze, Amsterdam, The Netherlands

**Humanistic Impact of Information Technology - Documenting Classical States of Meditative Maturation**
by Dr. Torben Larsen, Odense, SO, Denmark

**The FieldScreen Research Project: Application in Telemedicine, Telemedicine Education and Emergency Medicine**
by Drs. Gilbert Riedelbauch, John Reid, Malcolm G. Pettigrove & Ramon Donnell
The Australian National University, Canberra, A.C.T., Australia

**Workshop on Qi and QiGong**
Chair: Prof. Julia J. Tsui, President, Foundation for East-West Medicine,
      Prof. Kuo-Gen Chen, Soochow University, Taipei, Taiwan, R.O.C.
Friday, August 4, 2000 10:00-12:00 TBA

GENERAL ASSEMBLY
A Joint Discussion Session of the IIAS and IBBF on Culture of Peace and the Dialogue of Civilizations for the Third Millennium

Friday, August 4, 2000 14:00-16:00 TBA

MEETING OF THE BOARD OF DIRECTORS
of The International Institute for Advanced Studies in Systems Research and Cybernetics

Friday, August 4, 2000 08:30 – 12:00 Hall A

Symposium on Systems Research in the Arts: Music, Environmental Design and the Choreography of Space
Chairs: Dr. James Rhodes, Department of Mathematics and Computer Science, Shorter College, Rome, Georgia, USA and Professor Jane Lily, Interior Design, Lamar Dodd School of Art, The University of Georgia, Athens, Georgia, USA

Session 7

Sound Objects or Sounding Objects: Electroacoustic Music and the Location of Musical Meaning
by Dr. Luke Windsor, Department of Music, University of Leeds, Leeds, United Kingdom

An Alzheimer’s Ballet: The Choreography of Spatial Elements and Behavioral Concomitants
by Melinda LaGarce, Department of Architecture and Interior Design, Southern Illinois University, Carbondale, Illinois USA

Cybernetics and the Pedagogy of Music Theory: Insight into the Choreography of Space in a High Tech Classroom
by Jean Hellner, School of Music, University of North Texas, Denton Texas, USA

Timbre: The Digital Revolution and its Effect on Aural Skills Performance
by Dr. Ted Vives, Gainesville, Florida, USA

Form Follows Formula, Objects Defined by Mathematics
by Gilbert Riedelbauch, Computer Art Studio, Canberra School of Art, The Australian National University, Canberra, Australia

The Utilization and Application of Information Networks in the Visual Arts; A Case Study in Television and Print Mass Media
by Mr. John Reid, Canberra School of Arts, Australian National University, Canberra, Australia
Symposium on Advanced Concepts for Intelligent Vision Systems
Chair: Dr. Jacques Blanc-Talon, CTA/GIP, Arcueil, France and
Dr. Dan Popescu, CMIS/CSIRO, Canberra, Australia

Session B: Syntactic and Structural Techniques

Representing Image Partitions with Four Colors
by A.J. Pinho, University of Aveiro, Portugal

Feature Based Retrieval of Diatoms in an Image Database Using Decision Trees
by S. Fisher, M. Binkert, H. Bunke, University of Bern, Switzerland

Structural Object Matching
by E. Bardinet, S. Fernandez Vidal, S. Damas, G. Malandain, INRIA, France
N. Perez De La Blanca Capilla, Univ. of Granada, Spain

A Syntactic Approach for Numeral Recognition
by M. Prundaru, I. Prundaru, Siemens, Germany

Session C: Image compression

Optimal Windowed DCT of ImageCompression
by F.Z. Nacer, E. Ademovic, A. Merigot, Univ. de Paris Sud, Orsay, France

Fast Fractal Compression With Spatial Correlation
by J.H. Jeng, M.L. Hsieh, IEEE, USA

Video Compression Using Vector Quantization
by M. Porat, Technion, Haifa, Israel

Session D: Vision Systems and Scene Understanding

Visual and Haptic Interaction in a Virtual Environment
by D. Popescu, C. Gunn, CSIRO, Camberra, Australia

Complex Natural Scene Analysis with the Fractal Embedding Method
by J. Vicente, P. Cuillemant, UMR CNRS 6595, Marseille, France

Testing a Computational Model of Visual Complexity in Background Scenes
by L.N. Patel, P.O’Brian Holt, Heriot-Watt University, Edinburgh, U.K.

Evolving Flies for Stereovision and 3D Reconstruction
by J. Louchet, L. Castillon, J.-M. Rocchisani, ENSTA, France
Symposium on Digital Architecture and Design  
Chair: Prof. Yew-Thong Leong, Ryerson Polytechnic University, Toronto, Canada

Architecture and Virtual Reality: From Experience to Essence (Keynote Address)  
by Prof. Greg Andonian, Carlton University, Ottawa, Canada

Place, Culture and Ecology  
by Prof. Christopher Jarrett, Georgia Institute of Technology, Atlanta, GA, USA

Data-Driven Form: A Reinterpretation of the Design Synthesis  
by Christopher Ferguson, Grad. Student in Architecture,  
Dal Tech, Dalhousie University, Halifax, Nova Scotia, Canada

Rising from the Grave to a Virtual Monument  
by Prof. Herman Gruenwald, University of Oklahoma, Norman, OK, USA

Cyberspace Floweth Over: Professor Moriarty’s Tip  
Through the Holodeck and Other Contemporary Tales  
by Prof. Yew-Thong Leong, Ryerson Polytechnic University, Toronto, Canada

Sessions on Human Communication

Stereotypes in Communication: Significance in Arts  
by Prof. Terry A. Postero, State University College at Buffalo, NY, USA  
Prof. John Hiller, Univ. of New South Wales, Sydney, Australia

Understanding a System by Mapping the Relationship of Objects and Processes of the System  
by Dr. Robert M. Justin, Information Systems Technologies,  
Dearborn, Michigan, USA
**Symposium on Education**
Char: Prof. Felipe Lara-Rosano, National University of Mexico (UNAM), Mexico D.F.
Prof. Winfried Rudloff, Governors State University, Univ. Pk, IL, USA

**Language – Power – Education: How Do They Connect? (Keynote Address)**
by Dr. Waltraud Boxall, University of Liverpool, Liverpool, U.K.

**A Human Approach to Teaching**
by Prof. Jose Luis Perez-Silva and Prof. Felipe Lara-Rosano
Centre for Instrumentation Research, Natl. University of Mexico (UNAM), Mexico D.F., Mexico

**Analysis of the Role of Computers as Auxiliary Tools in the Teaching of Experimental Physics**
by Prof. Fernando Gamboa, Centre for Instrumentation Research, National University of Mexico (UNAM), Mexico D.F., Mexico

**Educational Aids to Grasp the Concept of Algorithm: A Proposal**
by Prof. Alberto Herrera, Centre for Instrumentation Research, National University of Mexico (UNAM), Mexico D.F., Mexico

**Experience with Building Virtual University at the University of Technology in Ko%ice, Slovakia**
by Dr. Ladislav Samuelis, University of Technology, Ko%ice, and Dr. Franti%ek Jakab, Elfa s.r.o, Ko%ice, Slovakia

**Philosophy, Psychology and Computer Science**
by Dr. Nydia Lara-Zavala, Prof. Jos% Luis P%rez-Silva, and Dr. Felipe Lara-Rosano, Centro de Instrumentos, National University of Mexico, Mexico D.F., Mexico

**Accelerated Learning: Basic Principles and Methodologies**
by Prof. George E. Lasker, IIAS, University of Windsor, ON, Canada

**DISCUSSION**
Focus Symposium and Workshop on Globalization of Education: Problems and Practical Solutions of Long Distance Education
Chair: Prof Winfried Rudloff, Governors State University, Univ. Park, IL, USA
Co-Chair: Prof. Felipe Lara Rosano, National University of Mexico (UNAM), Mexico D.F., Mexico

Global Issues and Integrative Education (Keynote Address)
by Prof. Winfried Rudloff, Governors State University, Univ. Park, IL, USA

Expanding Humanity’s Vision of God, a Vehicle for Globalization: Can we Have a More Comprehensive, More Exploratory, More Peaceful Humanity?
by Prof. Mohammed Kishta, Governors State University, Univ. Park, IL, USA

Encryption in Global Communication, Its Potential and Its Problems
by Ray Smilgius, Governors State University, Univ. Park., IL, USA

Electronic Mass Media’s Legacy in Fostering the ‘US’ and ‘THEM’ Worldview
by Prof. Eli Segal, Governors State University, Univ. Park, IL, USA

Language Translation with Neural Networks and Fuzzy Logic
by Prof. Winfried Rudloff & Ray Smilgius, Governors State University, Univ. Park, IL, USA

Long-Distance Learning: Video Excerpts of a Course in Computer Science
by Prof. Winfried Rudloff, Governors State University, Univ. Park, IL, USA

A Multimedia Based Physics Tutorial
by Profs. José Luis Párez-Silva, Andrea Miranda, Fernando Gamboa, Francisco Caviedes, Antonio Garces and Nydia Lara, Centre for Instrumentation Research, National. Univ. of Mexico (UNAM), Mexico D.F., Mexico

On Problem Solving, Creativity and Distance Education
by Prof. Jorge Barojas-Weber, Centre for Instrumentation Research, National University of Mexico (UNAM), Mexico D.F., Mexico

The FieldScreen Research Project: Outcome 2000
Profs. Gilbert Riedelbauch, John Reid, Dr. Malcolm G. Pettigrove & Ramon Donnell, The Australian National University, Canberra, ACT, Australia

NOTE: It is tentatively planned to experiment with a three-way telecommunication workshop between GSU in USA, Baden-Baden/Germany, and Taiwan. At this time, however, it is still uncertain if such a simultaneous connection can be established since there are three time zones involved and the technical problems have as yet to be resolved.