

NEWSLETTER

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PROFESSOR ROBERT TRAPPL

PRESIDENT'S REPORT 1986/88

ROBERT TRAPPL

During my term I was able to accomplish the following goals:

- 1. Substantially increase the number of member organizations. When I started we had three members and now we have a total of 17.
- 2. Improve the flow of information among members. I put together a bulletin which I mailed out at least twice a year.
- 3. Enable affiliate members to participate in the decision-making process by inviting them to the board meetings.
- 4. Encourage ongoing IFSR activities. I tried to support the Fuschl Meetings, Systems Research, Newsletter, etc. not only financially but also by establishing or maintaining contacts with governmental organizations, publishers, the press, etc. You are cordially invited to see the voluminious correspondence which that entailed.
- 5. Raise additional funds for the IFSR. I had previously managed to obtain an annual grant of 200 000 Austrian schillings (about 16.500 U.S. dollars) from the Austrian Federal Government. During my term, the full members paid their dues for the first time! I succeeded in getting a contract from the Austrian
 - Federal Ministry for Science and Research to compile and edit "Basic and Applied General Systems Research."
- 6. The considerable amount of labor which was necessary to keep the organization running smoothly was performed free-of-charge. I was, however, richly rewarded for my efforts since I enjoyed working with the board members. I got to know many new colleagues, several of whom I now regard as my friends.

At our board meeting on April 4, 1988 we elected the new officers and defined their roles and responsibilities. The president is Prof. Gerrit Broekstra (Netherlands), the vice-president Prof. Franz Pichler (Austria) and the secretary-treasurer Bela Banathy (USA).

Franz Pichler, Vice-President: will supervise the Newsletter and maintain contacts with UNESCO. Please send all information regarding the IFSR-Newsletter to him: Prof. Dr. Franz Pichler
Department of Systems Science.
University of Linz
A-4040 Linz
AUSTRIA
Electronic Mail: K 323290 a aearn. Bitnet

Bela Banathy, Secretary-Treasurer: is in charge of members, both old and new ones. Please send him all the information regarding your organization, e.g. changes

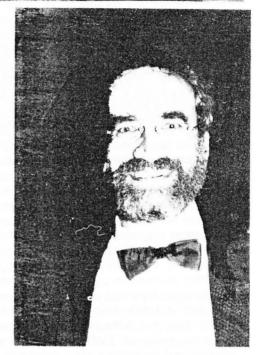


Foto Sokoloff

of address, new president, etc. You should also provide Franz Pichler with a copy of such notices for the Newsletter.

Prof. Dr. Rola Banathy

Prof. Dr. Bela Banathy
Far West Laboratory
1855 Folsom Street
San Francisco, California 94103
U.S.A.

Secretariat in Vienna: is in charge of 1) the finance of the organization, 2) forwarding letters and 3) correspondence with Austrian governmental institutions.

For those who want to contact our new president during his sabbatical leave, especially regarding the activities of the IFSR, here are his address and phone numbers:

Prof. Dr. Ir. Gerrit Broekstra,

J.L. Kellog School of Management Northwestern University Leverone Hall 2001 Sheridan Road Evanston, Illinois 60201 U.S.A.

Phone: (312) 491-3470

Home number: (312) 743-5941.

Finally, I would like to extend my best wishes to the members of the new Executive Committee, I hope you will be very successful in all of your endeavors.

IMPRESSIONS OF EMCSR '88

HAROLD CHESTNUT

The ninth European meeting on cybernetics and systems research in 1988 was the first conference I attended in which both of these disciplines were combined. Therefore it provided me with fresh insights concerning the contemporary progress in these fields. I was impressed by the willingness of the organizers to encourage presentations on a wide breadth of applications ranging from post-modern culture and art to artificial intellligence, biology and medicine, peace research, and parallel distributed processing. We heard the ideas of persons from countries of the East and the West. This is in keeping with the current world mood of openness and restructuring, glasnost and perestroika, and it enabled many viewpoints to be brought out. There was even a special exhibition, prepared by Prof. Roy Ascott, on the subject "To Make the Invisible Visible".

Typical of the changes that are taking place in the realms of equipment and systems is the advent of the much more extensive use of small personal computers and far-ranging communications networks; this is making possible the realization of new and heretofore unheard of com-

puter and communication capabilities. The role of the observer as a creative force for dynamically changing the system was emphasized. Since the kinds of results that can be produced from a system are strongly influenced by the tools available to the designer, people currently involved in cybernetics and systems research can develop new and previously inconceivable systems that can interact with persons far removed from a human operator. Although it would appear that many of the participants of EMCSR '88 were from a university environment, more than a few of the papers were devoted to such topics as systems design, computer-aided systems theory, robotics and flexible manufacturing. Applications of cybernetics were described for a wide range of topics such as architecture, medicine and biology, socio-economic systems, and management.

Professor Robert Trappl and his organizing committee are to be complimented for the two volumes of "Cybernetics and Systems '88" containing over 1200 pages of printed text which were available at the beginning of the meeting of EMCSR '88.

All in all I came away from this conference with the feeling



that people working on cybernetics and systems researchere today engaged in a wide range of activities. It would appear that the two year time cycle for this conference has been well chosen and fits the needs of its organizers, its authors, its sponsors, and its attendees.

FACTS ABOUT THE MEETING:

The four plenary lectures were on:

- 1) The Post-Modern Culture: Art, Cybernetic and Telematic Systems (Roy Ascott).
- 2) Brainstyle Computation (David Rumelhard),
- 3) Managing Social Complexity: from Pitfalls to Thinking in Networks (Gilbert Probst) and
- 4) What is an Intelligent Machine? (Robert Trappl). Space permitting, excerpts from these lectures will appear in future issues of the Newsletter.

The Proceedings include 160 papers (209 were submitted). The authors are from 29 countries located on 5 continents; 125 from Europe (only 18 from Austria!), 19 from the Americas, 14 from Asia, 1 from Africa and 1 from Australia.

PROFESSOR GEORGE KLIR

SYMPOSIUM ON GENERAL SYSTEMS METHODOLOGY AT THE NINTH EUROPEAN MEETING ON CYBERNETICS AND SYSTEMS RESEARCH

GEORGE J. KLIR, CHAIRMAN OF THE SYMPOSIUM

Since the first European Meeting on Cybernetics and Systems Research in 1972, the Symposium on General Systems Methodology has been a permanent feature of this important biennial conference. It has been a sort of barometer of methodological trends in systems research.

Sixteen papers were presented in the Symposium this year, eight of which were authored or coauthored by contributors to the same Symposium at previous European Meetings. The award for the best one was given to G. Gernert, University of Technology in Munich, in his article "Cellular-space models for processes of measurement", he proposes



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cellular automata as a methodological tool for studying processes of measurement, particularly at the level of quantum physics. The sixteen papers covered a wide variety of topics related to general systems methodology. Two issues, each of which emerged independently from

several of the presentations, dominated the Symposium this year: (i) the methodological significance of the interrelated concepts of uncertainty, information, and complexity, and (ii) the need of systems methodology to go beyond the classical machine paradigm.

EMCSR '88

CYBERNETICS IN BIOLOGY AND MEDICINE

STEPHEN SOKOLOFF

In what ways can cybernetics contribute to the progress of the biological and medical sciences? The 29 lectures which were held at the symposium elucidated many exciting possibilities. About a fifth of these presentations involved models of the activities of single neurons (nerve cells) or nerve networks. The award for the best paper of the whole EMCSR meeting went to A. Buonocuore (University of Naples) for a study of this kind, entitled "On some Numerical and Algorithmic Problems in Single Neuron's Activity Modelling". Buonocuore is particuarly interested in the development of models which take account of oscillatory inputs or changes of the neuron's 'threshold resulting from periodic internal or external perturbations.

One of the most exciting current topics is the modelling of neural networks. Cyberneticists hope to eventually construct computers that function like human brains. Information will be stored within the network itself and the computer will, like an intelligent organism, learn from past encounters and trials.

Some experience-based learning systems already do exist. Francesco E. Lauria, the author of a symposium paper, tested the one he designed as a controlling device for an arm with three joints which can pursue a free-flying target. His results (presented elsewhere) seem quite encouraging.

Other speakers dealt with the nature of learning. In the symposium "Humanity, Architecture and Conceptualisation" Turk maintained that languages are often acquired by using evolutionary instead of rule-based (grammatical) methods. The new speaker learns by trial and error, continually molding his usage to more closely fit the patterns set by current practitioners. This approach could be applied to machine as well as to human learners.

ECOLOGY

Some of the lectures, such as that of Alex M. Andrew.

related to more global problems. The author described his model system in which Lovelock's hypothesis - that the totality of living things in the biosphere acts like one large animal to regulate environmental variables - is realized. Organisms are known to exert a considerable influence upon their surroundings. Free oxygen, for example, was first released into the Earth's atmosphere by photosynthetic microbes. In Andrew's system the spread of different colored flowers serves to regulate the temperature of the environment. The black daisys absorb heat, whereas the white ones reflect it; the bare ground has a degree of reflectance intermediate between those of both kinds of plants. In this model, the daisys modify the temperature of their environment, shifting it towards a value which is optimal for their growth.

OTHER STUDIES

M. Ruda is attempting to work out a strategy for plant fertilization that minimizes the extent of ecological damage. Jiang Jianming presented a new, non-invasive method for measuring the fetal heart rate. The problem she had to overcome is that the heart sounds from the fetus are much weaker than the background "noise" (maternal heartbeat, etc.). The interference must therefore be computationally subtracted. Baaske and Hussain are concerned with incorporating a consideration of behavioral and social factors into health care strategies. It is generally know that certain psychological conditions such as mental stress and bereavement - and not only biological causes - are associated with higher frequencies of illnesses.

Of course I realize that my discussion of the symposium papers is incomplete. I hope, nevertheless, that this brief survey will suffice to illustrate the point, that cybernetic methods are currently being used to study a considerable array of problems in biology and medicine. A good cross-section of the work of this kind which is now going on was presented at the EMCSR '88.

CAST (COMPUTER AIDED SYSTEMS THEORY) WORKSHOP '88

FRANZ PICHLER

Under the auspices of the University of Linz Institute of System Science the Cast Workshop 1988 was held at the Haus Waldheimat, Gallneukirchen, Upper Austria from 11-13 April 1988. It was sponsored and, to a substantial extent, financed by the IFSR. 24 participants from Austria (8), the Federal Republic of Germany (8), the German Democratic Republic (2), Hungary (1), Poland (3) and the U.S.A. (2) attended. They heard sixteen lectures on various areas of CAST research. Three discussion groups were also formed and there was a plenary meeting concerning the planning of future CAST-conferences. In the following report I would like to summarize the results of these four special sessions.

1. CAST-THEORY GROUP CHAIRED BY FRANZ PICHLER, LINZ, AUSTRIA

theory; a large body of literature (books and other documentation) concerning this field already exists. The users are adherents of various applied disciplines; very often they are engineers. We must, however, acknowledge that at present there is a gap between the theory and its applications. The degree of acceptance of systems theoretical methods in practical engineering is still low; only a few of the most important ones are currently being used. With CAST we are trying to encourage the increased employment of such methods by providing powerful and easy-to-handle computer implementations.



Cast Workshop 1988 Participants

CAST deals with the building of interactive method banks for the use of systems theory. To achieve this, one has to select the proper theories, construct frameworks of CAST systems and specify their software and hardware requirements. The development of CAST is the task of systems theorists, but the support of software engineers is necessary if we are to avail ourselves of the full power of modern programming paradigms in its implementation.

The questions was raised as to whether CAST should be employed in practical or in theoretical systems research. Both kinds of application were considered advisable. In order to provide the best possible tools for users it was agreed that domain specific CAST systems should be implemented. These method banks should be coupled to domain specific CAD-software.

2. CAST-IMPLEMENTATION GROUP CHAIRED BY PROF. ROZENBLIT, TUCSON, ARIZONA

In this group, the following questions were discussed:

- What should method banks which support systems theoretical concepts look like?
- What kind of support can we expect from them?
- What languages/machines should we target as an implementation environment?

A CAST system is, generally speaking, a method bank for system analysis and system synthesis. Therefore it is necessary that we have:

- efficient methods for the specification of objectives, requirements and constraints,
- efficient methods for the definition of systems
- system transformations for the computation of alternative system specifications and other possible representations (sequential machines, linear machines, Petri Nets, etc.)
- methods for the simplification and refinement of systems
- methods for the validation of systems
- methods for the evaluation of systems which are analytical and make use of simulation.

The most important methods are:

- -general methods for decompositions and model evaluation
- methods for transforming various alternative systems specifications.

The development of a proper man/machine interaction should be a primary objective. It would be advantageous to develop graphical inputs (windows, mice, menus) and eventually natural language inputs/outputs.

Any software/hardware implementation can, as a result of technological changes, become obsolete. Therefore the search for standards is important. Quite a few unwritten ones are being developed, such as UNIX, ULTRIX, X-Windows, Common Lisp, GKS etc. CAST tools should be kept highly modular, expandable and structured.

It was generally agreed that powerful, modern workstations and contemporary programming techniques (LISP, object oriented methods) are the ones most suitable for CAST.

3. CAST APPLICATION GROUP, CHAIRED BY DR. JACAK, WROCLAW, POLAND

CAST software is intended to provide tools for building the functional (behavioral) architecture of systems, beginning at a high general systems level. Therefore it should be applied prior to engineering development and implementation tools such as the CAD software for the structural and geometrical architecture. An important aim of CAST research is to link CAST software tools to standardized CAD software such as that installed in workstations.

4. PLENARY DISCUSSION ABOUT THE ORGANIZATION OF FUTURE CAST MEETINGS

We discussed the following topics:

-What is being done today in the field of CAST? Who are the individuals involved in all of these studies and how much money are they spending? It was generally agreed that everybody should continue to work on his

own particular research and that it would not be advisable to form a single, universal CAST-project.

- -How should CAST implementations be distributed? Before arriving at a decision, we should consider the questions of standards.
- How can information (papers) be disseminated?

The workshop participants were in favor of organizing another, larger CAST-conference. The purpose of that meeting is to bring together researchers from universities and industrial laboratories as well as individuals who are interested in applying the results of CAST-studies to

particular domains. It was proposed that EUROCAST' 89,an international CAST-workshop, be held in May 1989 at Las Palmas, Canary Islands (Spain). It will be organized by Prof. Roberto Moreno-Diaz of the Polytechnical University of Las Palmas. Persons interested in participating should contact:

Prof. Franz Pichler
Dept. of Systems Science
University of Linz
A-4040 Linz, Austria
Electronic Mail: K 323290 @ aearn, Bitnet

NEW PUBLICATION

CONFERENCE PROCEEDINGS

Fuchs-Kittowski, K.; Gertenbach, D. (Editors):

SYSTEM DESIGN FOR HUMAN DEVELOPMENT AND PRODUCTIVITY: PARTICIPATION AND BEYOND.

Proceedings of the International Federation for Information Processing (IFIP) TC9/WG9.1 Conference on "System Design for Human Development and Productivity: Participation and beyond", Berlin, GDR, 12 - 15 May 1986. Berlin: Akademie der Wissenschaften der DDR, Zentrum für gesellschaftswissenschaftliche Information, 1987.

A COMPLEMENTARY VOLUME CONCERNING THIS SAME CONFERENCE IS BEING COMPLIED BY THE NORTH HOLLAND PUBLISHING Co.

THEMES:

Philosophical, Theoretical and Methodological Foundations of Systems Design for Human Development and Productivity

Goals and Strategies of Trade Unions and other Social Groups in Systems Design for Human Development and Productivity

Methods and Tools in Systems Design for, with and by the Users

Experience with Participation: Modelling and Using of Systems

Experience with Participation: Application in Office and Health Care

Participation in the Design of Knowledge Processing Systems

Work Design and Participative System Design

Date of publication: October 1987

Pages: circa 300 pp. Price per copy: US \$ 25

To order: Please transfer the above amount to the account 6836-20-20792, Code 520 000, Deutsche Außenhandelsbank AG, Berlin, DDR, 1086, on receipt of the invoice of ZGL.

Order code: System Design

Address for Information:

Akademie der Wissenschaften der DDR, Zentrum für gesellschaftswissenschaftliche Information, Abteilung KI, Leipziger Straße 3/4, Berlin, DDR, 1086 Telefon Nr. 2 23 63 26

Telex: 011 468 Akademiewissenschaft Berlin ZGI

EDITORIAL

THE IFSR NEWSLETTER - YOUR BIMONTHLY COMMUNICATION BULLETIN

STEPHEN SOKOLOFF

The photo accompanying this text was taken at the EMCSR-88 meeting in Vienna. It shows three leading international scientists engrossed in a discussion. But what are they talking about? If you want to find out, look closely at the publication in Gordon Pask's hand. It's the last IFSR-NEWSLETTER, of course!

The Newsletter is bimonthly now. It is a leading medium for informal discussion and communication in the system sciences. If you're not a dropout, if you don't want to be left behind, jump on the bandwagon while you still can. Read and contribute to your NEWSLETTER.

In the future we would like to present BOOK REVIEWS instead of the publishers' advertising. To do that, we need

your help. (The journal "System Research", with which we cooperate, also would be interested in that kind of material; any items we receive will be made available to them too.)

We also want to publish essays of opinion and articles about new developments in systems and allied fields. Conference reports are welcome too. All stories should have serious intellectual content and should appeal to our general readership (as opposed to a special group).

If you are planning a meeting — even if it's still years away - tell us right now! We are going to publish an extended calender, at least in some of our issues. This is a new service we are offering to help you plan your conference hopping far in advance.

WRITE!



PROFESSOR FRANZ PICHLER (left) GORDON PASK (middle) and WAYNE WYMORE (right, with necktie)

Foto. Sokoloff

LIST OF MEMBERS OF IFSR - UPDATED MAY, 1988

I. NORTH AMERICA

American Society for Cybernetics Dr. Laurence D. Richards President Department of Decision Sciences George Mason University Fairfax, VA 22030 USA Tel: (703) 323-2738

Society for General Systems Research Systems Science Institute Dr. Bela H. Banathy, President University of Louisville, Louisville, Kentucky 40292 USA

II. LATIN AMERICA

Asociacion Mexicana de Sistemas y Cibernetica, a. c.

Dr. J.L. Elohim President Antonio Sola 45 Col. Condesa C.P. 06140 Mexico D.F.

Asociation Argentina de Teoria General de Sistemas y Cibernetica Dr. Charles Francois, President Libertad 742 1640 Martinez Republica Argentina

III. ASIA

The Society of Management Science and Applied Cybernetics (SMSAC) (50) Secretary: Prof. Dr. A. Ghosal O. R. Unit, C. S. I. R. Complex, N. P. L. Campus New Delhi 110012 India

IV. NORTHERN EUROPE (UK + Benelux)

United Kingdom Systems Society Dr. Nimal Jayaratna, Chairman Staff Flats, Broomgrove Hall 9 Broomgrove Road Sheffield S 10 2Lw England

The Cybernetics Society (U. K.)
Dr. Brian Warburton
Vice-Chairman
c/o School of Pharmacology
Brunswick Square
London WC 1
England

Systeemgroep Nederland Secretariat: Dr. K.A. Sondyn Katholieke Hogeschool Tilburg Hogeschoollaann 225 Tilburg The Netherlands

SOGESCI — B.V.W.B. Prof. Chr. de Bruyn General Manager Rue de la Concorde 51 B 1050 Bruxelles Belgique

V. CENTRAL EUROPE

College de Systemique de l' AFCET Dr. Robert Vallee ex-President 156, boulevard Pereire 75017 Paris France

Gesellschaft für Wirtschafts- und Sozialkybernetik (GWS) Prof. Dr. B. Schiemenz, Direktor General Am Plan 2 D 3550 Marburg 1, FRG Österreichische Studiengesellschaft für Kybernetik (ÖSGK) Prof. Dr. Robert Trappl, President Schottengasse 3 A 1010 Wien Austria

VI. SOUTHERN EUROPE

Sociedad Espanola de Sistemas Generales Dr. Rafael Rodriguez Delgado, President Dr. Gomez Ulla, 4 28028 Madrid Spain

Greek Systems Society Dr. Michael Decleris Managing Director 82 Fokionis Negri Street Athens 11361 Greece

VII. EASTERN EUROPE

Polskie Towarzystwo Cybernetyczne (Polish Cybernetical Society) Professor Dr. Wojciech Gasparski Design Methodology Unit Dept. of Praxiology Polish Academy of Sciences Nowy Swiat Str. 72 00-330 Warsaw Poland

John v. Neumann Society For Computing Sciences Dr. Balint Domolki Bathori U. 16 (p.f. 240) H 136 Budapest 5 Hungary (Phone: + 329349, + 329390) (Telex: + 22-5369)

MEETINGS and COURSES

Title	Date 1988	Place	Deadlines	Further Information
Systems Prospects: The next ten years of systems Research (Conference)	13 — 15 July	Hull U.K.	Abstracts 31. March	M.C. Jackson Dept. of Management Systems and Sciences University of Hull HU 6 7 RX, United Kingdom
International Conference on System Science and Engineering (ICSSE '88)	25 — 28 July	Beijing (Peking) People' s Republic of China	Abstracts 15 Sept. 1987 Papers: 15. Febr. 1988	Prof. Wei-Min Cheng, Chairman International Programme Committee of ICSSE '88 Department of Automation Tsinghua University Beijing 100084, China
European Conference on Artifical Intelligence	1 — 5 August	Munich F.R. Germany	15 Febr.	Prof. Dr. Bernd Radig Technische Universität München ECAI-88 Institut für Informatik Postfach 20 24 20 D 8000 München 2, F.R. Germany
Working Conference on Office Information Systems The Design Process	15 — 17 August	Linz Austria	15 Febr.	Roland Wagner Johannes Kepler University A 4040 Linz, Austria Papers: Dr. Barbara Pernici Diparttimento di Elettronica Politecnico di Milano Piazza Leonardo da Vinci, 32 I 20133 Milano, Italy
4th International Conference on Systems Research, Informations and Cybernetics	15 — 21 August	Baden Baden F.R. Germany	Full paper 22 May	Prof. George E. Lasker Conference Chairman School of Computer Science University of Winsor Windsor, Ontario N9B3P4 Canada
4th IFAC Symposium Computer Aided Design in Control and Engineering Systems	23 — 25 August	Beijing (Peking) People' s Republik China	15 April 1987	Prof. Chen Zhen-Yu Cadcs '88 Secretariat Application Committee of the Chinese Association of Automation P. O. Box 919 Beijing, PRC
FAC/IFORS Symposium Identification and System Parameter	27 — 31 August	Beijing (Peking) People' s Republic of China	15 April 1987	Prof. Chen Han-Fu Institute of Systems Sciences Academia Sinica Beijing 10080, P. R. China
13th Symposium on Operations Research	7 — 9 Sept.	Paderborn F. R. Germany	15 Febr.	SOR-PB Universität — GH Paderborn D 4790 Paderborn, F. R. Germany
3rd International Symposium on System Analysis and Simulation	12 - 16 Sept.	Berlin DDR (East Germany)	Abstracts: 1. Dec. 1987 Papers: 1. May 1988	Mrs. Böttcher Zentralinstitut für Kybernetik und Informationsprozesse Kurstraße 33 1086 Berlin, DDR
Computer Learning in Engineering: Different Perspectives (Workshop)	16 Sept.	Detroit Mi, USA (Wayne State University)	Registration 16 August	Dr. T. Ariciozewski Intelligent Computers Center Civil Engineering Department College of Engineering Wayne State University Detroit, Mi. USA Tel. (313) 577-3766
33rd Institute for Medical Informatics Conference Topic: Expert Systems and Decision Support in Medicine	26 - 29 Sept.	Hannover F. R. Germany		Ms. U. Piccolo Medical School Hannover Institute for Medical Informatics P. O. B. 61 01 80 D 3000 Hannover 61, F. R. Germany Tel. (0511)-532-2540

Title	Date 1988	Place	Deadlines	Further Information
3rd International Workshop on Spectral Techniques	4 - 6 Oct.	Dortmund F. R. Germany	2 April	Claudio Moraga Dept. Computer Science University of Dortmund P. O. Box 500500 D 4600 Dortmund 50, F. R. Germany
Sixth Symposium on Empirical Foundations of Information and Soft- ware Science (EFISS)	19 — 21 October	Atlanta GA, USA	Abstracts 15 March Accepted Papers 1. August	Professor Pranas Zunde EFISS Symposium Organizing Committee School of Information and Computer Science Georgia Institute of Technology Atlanta, Georgia 30332 USA
XXVth International Con- ference of the Applied Econometrics Association- International Commodity Market Modelling	27 — 28 October	Washington D. C. USA (World Bank)	Papers and Pre- Registration 21 March	AEA-Commodities J.B. Lesourd ESIPSOI Université de Droit, d'Economie et des Science d'Aix-Marseille Centre de Saint-Jerôme F-13397 Marseille Cedex 13 France Tel. (33) 91983389 ext 45 Telex FACSTJE 402876F
Conference on Support, Society and Culture- mutual uses of Cybernetics and Science	Date 1989 27 March to 1 April	Amsterdam, Netherlands		Ms. Joop Muller Co-ordinator, Programma Ondersteuning, Overleving en Cultuur IWA Grote Bickerstraat 72 Amsterdam 10013 KS, The Netherlands Tel. Amsterdam (20) 525-1250
Beijing International Conference on System Simulation and Scientific Computing	15 - 18 August 1989	Beijing (Peking) People' s Republic of Ch	Abstract or Paper 15 March nina 1988	Chinese System Simulation Council Beijing Institute of Aeronautics and Astronautics Beijing, China
I. International Congress on Systems for Development	19 — 22 September	Murcia Spain	Final Papers 28 February 1989	5. International Congress SESGE Escuela Universitaria de Informática Universidad de Murcia San Cristo 1 E-3001 Murcia Spain Tel. (968) 833190 or 833908 Ext. 190 or 204
6th World Congress on Medical Informatics	16 - 20 October 1989	Beijing (Peking) People' s Republic of China	Final papers (Camera ready) 10 January 1989	Ms. Shan Huiquin Medinfo 89 - Secretariat 29 Xueyuan Nanlu Haidian District Beijing, China Tel. 892565, 898516 Cable: 2400
8th International Congress of Cybernetics and Systems	Date 1990 11 - 14 June 1990	New York NY, USA	Organization of Sections or Symposia September 1989	Prof. Constantin V. Negoita Congress Chairman Dept. of Computer Science Hunter College City University of New York 695 Park Ave New York. N. Y. 10021 USA

Offenlegung: Der "IFSR Newsletter" erscheint alle zwei Monate in englischer Sprache unter der Redaktion von Dr. Stephen Sokoloff. Die Zeitschrift dient der Information über die Aktivitäten der IFSR. Sie wird köstenlos an Mitglieder ihrer insgesamt. 17. Mitgliedsorganisationen in 14. Landern versandt. Die Kösten werden von der IFSR aus den Beitragen der derzeit 17. Mitgliedsorganisationen getragen.

Prasident der IFSR ist für 1985/90 Prof. Dr. Gerrit Broekstra. (Niederlande). Vize-prasident. Prof. Dr. Franz. Pichler (Osterreich). Sekretar-Schatzmeister. Dr. Bela Banathy (U.S.A.). Alle Funktionen werden ehrenamtlich ausgeübt.

Drück. CIWA-Grafik, 4040 Linz-Puchenau.

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