## | IFAC |

### International Federation of Automatic Control

Secretariat; Schlossplatz 12, A-2361 Laxenburg, Austria - Phone (+43 2236) 71 4 47, Fax (+43 2236) 72 8 59, e-mail ifaca @serv.univie.ac.at

1994 No. 3 June

# wsletter

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#### **Council- and Related Meetings**

Copenhagen, Denmark
4 – 8 July, 1994

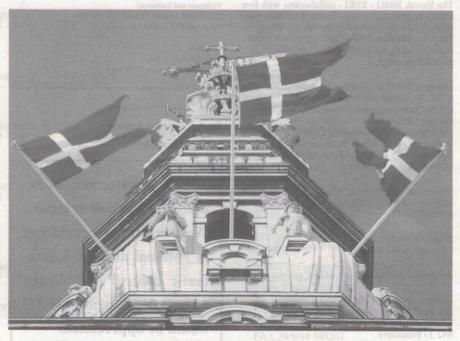
The Danish Automation Society, the Danish NMO of IFAC, has invited IFAC to hold its annual Counciland Related Meetings in Copenhagen, in conjunction with the IFAC/IFORS Symposium on Identification and System Parameter Estimation, to be held in the Copenhagen Sheraton from 4-6 July, 1994. The IFAC Council- and Related Meetings will take place in the Symbion Science Park, the seat of the NMO, just a short distance from the venue of the convention.

This will be the first Council meeting after the Sydney World Congress in July 1994. The first part of the year was dedicated to performing the postal ballot, establishing the new structure of the Technical Board in the Constitution and By-Laws. The postal ballot, having yielded a positive result, led to the revision of the Constitution and By-Laws, which is now available from the IFAC Secretariat upon request. But far beyond the purely administrative questions, the forthcoming meetings of the Executive Board, the Technical Board and the Council will examine very carefully, if the new structure is well in place and functioning all right. This was a special request by the General Assembly. From all we can see now, the new structure is working very well. The number of IFAC meetings worldwide is at least as high, if not higher than before. And it is the IFAC technical meetings by which the quality of IFAC is measured and which are the "trademark" of IFAC. So we believe that the transition from the 'old' to the 'new' Technical Board structure has worked very well indeed. But it will of course be up to the IFAC Officials and ultimately the National Member Organizations to examine the situation very carefully and to intervene if problems should occur.

Altogether, this transition period following the IFAC World Congress has been very smooth. This is due not least to the dedication of all persons involved in IFAC and the continuity guaranteed by the structure of the Federation.

In addition to the meetings of some Technical Committees, the Executive Committees and the Executive Board, the Technical Board and the Council, also the Congress IPC of the IFAC World Congress in San Francisco 1996 will meet in Copenhagen.

First preliminary considerations will be dedicated to the possible venue of the IFAC World Congress in 2005. The IFAC NMOs have already been asked and invited to consider hosting this major event.



Copenhagen - Site of the SYSID Symposium and of the IFAC Council- and Related Meetings

#### News From Our National Member Organizations

#### Slovak Society for Cybernetics and Informatics - SSKI

The Slovak Society for Cybernetics and Informatics is a National Member of the European Coordinating Committee for Artificial Intelligence. The seat of the Society is the capital of the Slovak Republic – Bratislava – at the Institute of Control Theory and Robotics of the Slovak Academy of Sciences. The main point of the Society's policy is to have the best relations to all NMOs internationally, but in particular also to the ones in its neighbouring countries, i.e. the Czech Republic, Austria, Hungary, the Ukraine and Poland.

The Slovak Society for Cybernetics and Informatics was founded in 1964. It was part of the Czechoslovak Society for Cybernetics. Its main activity earlier and now is the support of all professional events and information interchange among scientists, researchers and industrial professionals in the field of automatic control and computer science. All disciplines in the area are supported, ranging from control theory, artificial intelligence to robotics and control of technological processes in all industrial sectors.

Emphasis is also laid on interdisciplinary research, such as the approach towards problems in psychology, economics, linguistics, sociology, etc.

Many members of the SSKI participated in IFAC work in the past. We hope that we can even intensify our activities now, being an NMO of IFAC. Topics covered in IFAC by Slovak scientists have been theoretical problems of control, artificial intelligence, knowledge-based and expert systems, programming languages, man-machine interaction, robotics and image processing, parallel computer architectures and applications of the preceding disciplines in practice.

The Slovak NMO - SSKI - collaborates with five technical universities, many research institutes and production organizations in the Slovak Republic. They are distributed all over the Slovak Republic and offer very good opportunities for holding international meetings.

The next IFAC meetings to be convened are the IFAC Workshop on 'New Trends in Design of Control' to be held from September 8-10, 1994, and the 6th International Conference on 'Artificial Intelligence and Information Control Systems of Robots', to be held from September 12 - 16, 1994. Both meetings will take place in the interesting hunting castle of Smolenice.

We are looking forward to the exciting work together with all control specialists worldwide under the aegis of IFAC.

Professor Ian Mikles Chairman of the Society

Address of the Secretariat and IFAC contact person

Institute of Control Theory and Robotics Att. Prof. Baltazar Frankovic Slovak Academy of Sciences 842 37 Bratislava Slovak Republic

## IFAC Control Engineering

### Textbook Prize Call for Nominations

The Textbook Award Committee of the Education Committee (EDCOM) of IFAC calls for nominations for the triennial Textbook Award. The award is to author(s) of that control engineering textbook judged to have most contributed to the education of control engineers. The book, written in one of the official IFAC languages, must have been published between August 1987 and June 1993. The prize, consisting of a monetary award and a certificate, will be presented at the closing awards ceremony of the 1996 IFAC Congress in San Francisco.

A nomination letter must include the full title, name and address of the author(s), date of publication and name and address of the publisher. The selection committee will take into account any additional information submitted with the nomination including book reviews, letters of support, publisher's data, list of adoptions, etc. Any further information will be appreciated.

Please send nomination material to:

Professor Dr. Karl Heinz Fasol Regelungssysteme und Steuerungstechnik, IB3 Ruhr Universität Bochum D-44780 Bochum Germany

Your cooperation will be greatly appreciated. Please respond as soon as possible. To be considered, nominations must be received by June 30, 1995 at the latest. The winner(s) will be notified in due time so that advance plans can be made to attend the award ceremony.

#### Impressum:

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# Control Engineering Practice Volume 2, Number 3 June 1994

#### Preview

Control-Oriented Spark Enginer Model (V. Chaumerliac, P. Bidan and S. Boverie) Fuzzy Anti-Reset Windup for PID Controllers (A. Hansson, P. Gruber and J. Tödtli) Traffic Control Using Graph Theory (Th. Riedel and U. Brunner) Parallel Adaptive Control for a Turbogenerator (M.D. Brown, G.W. Irwin, E. Swidenbank and B.W. Hogg) Determination of Grasp Forces for Robot Hands Based on Human Capabilities (I. Kim and H. Inooka) H∞ Robust Control of Flexible Manipulator Vibration by Using a Piezoelectric-Type Servo-Damper (Won-Ho Jee and Chong-Won Lee) Multivariable Fuzzy Controller Design (R.E. King, G.D. Magoulas, A.A. Stathaki) On the Applicability of Model-Based Fault Detection for Technical Processes (R. Isermann)

#### Papers from the IFAC Symposium on Automatic Control in Aerospace (Guest Editor: E. Gottzein)

Preface to the papers from the IFAC Symposium on

Automatic Control in Aerospace (E. Gottzein) Parallel Processing Architectures for Aerospace Applications (H.A. Thompson) Space Robotics and Manipulators - the Past and the Future (J.Z. Sasiadek) Optimal Integral Control of Trim in a Reconfigurable Flight Control System (D. McLean and S. Aslam-Mir) ROSAT Flight Experience with Hardware Degradations and Software Recovery Measures (W. Schrempp, A. Böinghoff, E. Brüderle, L. Kaffer and P. Wullstein) Autonomous On-Comet Operations Aspects of the ROSETTA Mission (K. Schilling, H. Roth and B. Theobold) The NASA-LaRC Controls Structures Interaction (CSI) Technology Program (J.R. Newsom and W.W. Anderson) Control Challenges from Space- and Ground Based Astronomical Telescopes (D.C. Redding)

#### Abstracts

IFAC Symposium: Automatic Control in Aerospace 1992, Munich, Germany

Automatic Control - 12th IFAC Triennial World Congress, 1993, Sydney, Australia

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**Book Reviews** 

Conference Calendar



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## FORTHCOMING EVENTS

| Title Madrid, Septim Spain shift  | 1994             | Place                    | Deadline                       | Further Information   |
|---|------------------|--------------------------|--------------------------------|---|
| 1994 American Control Conference<br>(in cooperation with IFAC)                                  |                  | Baltimore, MD<br>USA     | Valencia<br>Spain              | Prof. Hassan Khalil<br>Electrical Eng. Dept., Michigan State Univ.<br>East Lansing, MI 48824-1226, USA<br>FAX 517-353-1980<br>e-mail: khalil@frith.egr.msu.edu                                      |
| IFAC/IFORS Symposium (10th) Identification & System Parameter Estimation SYSID '94              | July<br>4-6      | Copenhagen<br>Denmark    | Tydadhu<br>Jupan               | SYSID '94 Secretariat Danish Automation Society, Symbion Fruebjergyej 3 DK-2100 Copenhagen, Denmark FAX +45/3120 5521   |
| Asian Control Conference<br>(in cooperation with IFAC)  | July<br>27 – 30  | Tokyo<br>Japan           | Chicago                        | Prof. Yasuchika Mori<br>Dept. of Mechanical Engineering<br>National Defense Academy<br>1-10-20 Hashirimizu, 239 Yokosuka<br>Japan, FAX 468 42 6480  |
| IFAC Symposium (3rd) Advances in Control Education  | Aug.<br>1-2      | Tokyo<br>Japan           | Hong Kong                      | Prof. K. Furuta Tokyo Inst. of Technology Dept, of Control Engg. 2-12-1 Oh-Okayama Beguroku Tokyo 152, Japan FAX +81/3/3720-5269 e-mail: furuta@ctrl.titech.ac.jp                                   |
| IFAC Workshop<br>Computer Software Structures<br>Integrating AI/KBS                             | Aug.             | Lund<br>Sweden           | Grenoble<br>France             | Svenska IFAC kommitten POB 27 S-75103 Uppsala, Sweden FAX +46/18/503611   |
| ISPE/IFAC Intl. Conference<br>CAD/CAM: Robotics and Factories<br>of the Future                  |                  | Ottawa, Ont.<br>Canada   | Place<br>Deposit<br>ML USA     | Prof. M.B. Zaremba Ottawa Carleton Research Inst. Kanata, Ont., CDN, K2K 2E4 Canada, FAX 819/773 1638 e-mail:zaremba@uqah.uquebec.ca  |
| IFAC/IFIP/IFORS Symposium Transportation Systems: Theory and Application of Advanced Technology | Aug.<br>24 – 26  | Tianjin<br>China, P.R.   | Ascona                         | Prof. G.G. He, TS'94 Institute of Systems Engg. Tianjin University Tianjin 300072, China, P.R.  |
| IEE/IFAC/TUHH Conference<br>Intelligent Systems Engineering                                     | Sept. 5 – 8      | Hamburg<br>Germany       | Switspind Switspind            | Ms. Jane Chopping ISE 94 Secretariat, Conference Serv. Institution of El. Engineers Savoy Place, London WC2R OBL, UK FAX +44/71 497 3633  |
| International Conference<br>Manoeuvring and Control of Marine<br>Craft                          | Sept. 7 – 9      | Southampton<br>UK        | Hongary<br>Brussets<br>Belgium | Dr. G.N. Roberts Control Engg. Dept Royal Naval Inst. College, Manadon Plymouth PL5 3AQ, UK FAX +44/752/769039 e-mail: cegr@uk.ac.manadon   |
| IFAC Workshop<br>New Trends in Design of Control<br>Systems                                     | Sept. 7 – 10     | Smolenice<br>Slovakia    | Tenulisim                      | IFAC Workshop '94 Ms. Alena Kozakova, Fac. of El.Engg. Ilkovicova 3 SK-81219 Bratislava, Slovakia FAX: +42/1/72 97 34 e-mail: ntdcs@kasr.elf.stuba.sk   |
| IFAC/ISHS Workshop (2nd) Mathematical and Control Applications in Agriculture and Horticulture  | Sept.<br>12 – 15 | Silsoe<br>UK             | Clarmisch-<br>Parasskroben     | Prof. W. Day<br>Silsoe Research Institute<br>Wrest Park, Silsoe MK45 4HS, UK<br>FAX +44/525/860156  |
| 9631 See 349<br>Udish ten Com   | Sept. 12 – 16    | Palo Alto, CA<br>USA     | Vaganingen                     | Dr. Kenneth Lorell<br>Lockheed 92-30/250<br>3251 Hanover Street<br>Palo Alto, CA 94304, USA<br>FAX 415/424 3106   |
| IFAC Symposium<br>Robust Control Design   | Sept. 14 – 16    | Rio de Janeiro<br>Brazil | Netherlands<br>Dated           | Prof. P.M.G. Ferreira DEE, (PUC-RIO), C.P. 38063 22452 Rio de Janeiro, Brazil FAX +55/21/511 5154 e-mail: pedro@ele.puc-rio.br  |
| IFAC Symposium<br>Robot Control - SYROCO  | Sept.<br>19 – 21 | Capri<br>Italy           | Belgium<br>Ostend<br>Belgium   | Prof. S. Nicosia, SYROCO 94 Sci. Secr. DIE, Università degli Studi di Roma "Tor Vergata", Via della Ricerca Scientifica I-00133 Rome, Italy, FAX +39/6/2020519 e-mail: nicosia@tovvx1.ccd.utovrm.it |

### FORTHCOMING EVENTS (ctd.)

| IFAC Conference<br>Integrated Systems Engineering  | Sept.<br>27 – 29 | Baden-Baden<br>Germany | MOOH                               | Mr. H. Wiefels, VDI/VDE GMA<br>Graf Recke Straße 84<br>D-40239 Düsseldorf, Germany<br>FAX +49/211/6214-161  |
|--|------------------|------------------------|------------------------------------|---|
| IFAC Workshop<br>Distributed Computer Control<br>Systems - DCCS 94                                       | Sept.<br>28 – 30 | Toledo<br>Spain        | Place                              | DCCS'94 Secretariat Fundación Universidad Empresa Serrano Jover, 5/7, E-28015 Madrid, Spain FAX +34/1/547 0652 e-mail: dccs94@gic.tat.upm.es                      |
| IFAC/IFIP Symposium<br>Artificial Intelligence in Real Time<br>Control                                   | Oct. 3 – 5       | Valencia<br>Spain      | Baltimore, ME<br>USA<br>Concabagen | Prof. A. Crespo, Dept. Ingenieria<br>Universidad Politecnica de Valencia<br>POB 22012, E-46071 Valencia, Spain<br>FAX +34/6/3877579<br>e-mail: acrespo@aii.upv.es |
| International Symposium<br>Advanced Vehicle Control for Active<br>Safety and Ride Comfort                | Oct.<br>24 – 28  | Tsukuba<br>Japan       | Designaria                         | AVEC'94, Technical Activity Division<br>Society of Automotive Engg., of Japan Inc.<br>10-2 Goban-cho, Chiyoda-ku, Tokyo 102<br>Japan, FAX: +81/3/3261-2204        |
| IFAC Workshop Trends in Hydraulic and Pneumatic Components and Systems                                   | 15 – 16          | Chicago<br>USA         | oyleT<br>Magat                     | Prof. David N. Wormley Dean of Engineering Pennsylvania State University University Park, PA 16802, USA FAX 814/863-4749  |
| IFAC Workshop<br>Safety, Reliability and Applications<br>of Emerging Intelligent Control<br>Technologies | Dec.<br>12 - 14  | Hong Kong              | Tokyo                              | e-mail: dnw@oas.psu.edu  Dr. C.W. Chan  Dept. of Mech. Engg., Univ. of Hong Kong Pokfulam Road, Hong Kong FAX +852/859 7906                                       |
| INRIA/IFIP/IFAC Workshop<br>Integrated Manufacturing Systems<br>Engineering - IMSE '94                   |                  | Grenoble<br>France     | 15 July<br>1994                    | Dr. Francois Vernadat, INRIA/Rhone-Alpes<br>46, avenue F. Viallet<br>F-38031 Grenoble, France<br>FAX +33/ 76 57 47 93<br>e-mail: francois.vernadat@inria.fr       |
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| Title soil desert destroy  | 1995             | Place                                 | Deadline        | Further Information   |
|--|------------------|---------------------------------------|-----------------|---|
| SAE/IFAC 1995 Congress<br>and Expostion of the Society<br>of Automotive Engineers            |                  | Detroit<br>MI, USA                    | 1 July<br>1994  | Ms. Karin Bolcshazy Engineering Meetings Division SAE International 400 Commonwealth Drive Warrendale, PA 15096-0001, USA FAX +1/412/776 0002   |
| IFAC Workshop Advances in Automotive Control   | March<br>12 – 18 | Ascona<br>Switzerland                 | 31 July<br>1994 | Prof. L. Guzzella ETH Zentrum, LVV, MLJ 42.1 CH-8092 Zurich, Switzerland FAX +41/1/262 5207 e-mail: guzzella@lvv.iet.envt.ethz.ch   |
| CIRP/IFAC/IFIP/INNS Workshop<br>Learning in Intelligent Manufacturing<br>Systems - IMS       | April 20 – 21    | Budapest<br>Hungary                   | 31 Oct<br>1994  | Dr. Laszlo Monostori, MTA SZTAKI<br>Hungarian Academy of Sciences<br>POB 63, H-1518 Budapest, Hungary<br>FAX +36/1/166 7503   |
| IMACS/IFAC Symposium Mathematical Modelling and Simulation in Agriculture and Bio-Industries | May 9 – 12       | Brussels<br>Belgium                   | 15 Oct.<br>1994 | M'SABI'95 Symposium, c/o Lab Automatique<br>Free University of Brussels, CP 1<br>50, ave. F.D. Roosevelt, B-1050 Brussels<br>Belgium, FAX +32/2/650 2677<br>e-mail: labauto@labauto.ulb.ac.be |
| IFAC Workshop<br>Control Applications in Marine<br>Systems - CAMS 95                         | May<br>10 – 13   | Trondheim<br>Norway                   | 1 Nov.<br>1994  | AProf. Thor I. Fossen, CAMS-95 Secr.<br>Dept. of Engg. Cybernetics<br>Norwegian Institute of Technology<br>N-7034 Trondheim, Norway<br>FAX +47 /73594399<br>e-mail: tif@itk.unit.no           |
| International Conference<br>Computer Applications in<br>Biotechnology                        | May 14 – 17      | Garmisch-<br>Partenkirchen<br>Germany | 31 Aug.<br>1994 | Prof. Axel Munack Federal Agricultural Res. Center Inst. of Biosystems Engg FAL Bundesallee 50, D-38116 Braunschweig Germany FAX +49/531 596 369  |
| IFAC Workshop<br>Artificial Intelligence in<br>Agriculture                                   | May<br>29 – 31   | Wageningen<br>Netherlands             | 1 Nov.<br>1994  | Prof. A. Udink ten Cate<br>Agricultural Research Dept. (DLO-NL)<br>Centre de Born, POB 59<br>NL-6700 AB Wageningen, Netherlands<br>FAX +31/8370/24060   |
| IFAC Workshop<br>Algorithms and Architectures for<br>Real-Time Control                       | June 2           | Ostend<br>Belgium                     | 31 Oct.<br>1994 | BIRA, Desguinlei 214, B-2018 Antwerp<br>Belgium, FAX +32/3/216 06 89  |
| IFAC Workshop<br>Control Applications in Post-Harvest<br>and Processing Technology           | June<br>1 – 2    | Ostend<br>Belgium                     | 31 Oct<br>1994  | BIRA, Desguinlei 214, B-2018 Antwerp<br>Belgium<br>FAX +32/3/216 06 89  |

| FAC Conference<br>Dynamics and Control of Chemical<br>Reactors, Distillation Columns and<br>Batch Processes - DYCORD '95 | June<br>7-9     | Copenhagen<br>Denmark    | 31 Aug.<br>1994  | Danish Automation Society<br>Symbion Science Park Copenhagen<br>Fruebjergvej 3, DK-2100 Copenhagen<br>Denmark<br>FAX +45/3120 5521  |
|--|-----------------|--------------------------|------------------|---|
| FAC Workshop On-Line Fault Detection and Super- vision in the Chemical Process industries                                | June<br>12 – 13 | Newcastle<br>UK          | 1 June<br>1994   | Prof. Julian Morris University of Newcastle upon Tyne Dept. of Chem. & Process Engg. Newcastle upon Tyne, NE1 7RU, UK FAX +44/91 261 1182   |
| FAC Conference<br>ntelligent Autonomous Vehicles   | June<br>12 – 14 | Espoo<br>Finland         | 30 Sept.<br>1994 | Finnish Society of Automation<br>Asemapäällikönkatu 12 C<br>SF-00520 Helsinki<br>Finland, FAX +358/0/1461 650   |
| FAC Symposium<br>Adaptive Systems in Control and<br>ignal Processing - ACASP '95   | June<br>14 – 16 | Budapest<br>Hungary      | 1 Oct.<br>1994   | Prof. L. Keviczky<br>Computer & Automation Institute, H A S<br>POB 63, H-1518 Budapest, Hungary<br>FAX +361/1667 503<br>e-mail: h10kev@huella.bitnet  |
| 995 American Control Conference<br>n cooperation with IFAC)  | June<br>21 – 23 | Seattle, WA USA          | 15 Sept.<br>1994 | Prof. M. Tomizuka, Dept. of M.E.<br>University of California<br>Berkeley, CA 94720, USA<br>FAX 510/642 6163<br>e-mail: tomizuka@euler.berkeley.edu  |
| FAC Symposium<br>Ionlinear Control Systems Design<br>IOLCOS '95  | June<br>26 – 28 | Lake Tahoe<br>CA, USA    | 15 Aug.<br>1994  | Prof. A.J. Krener Dept. of Mathematics University of California Davis, CA, USA FAX +1/916/752 6635 e-mail: ajkrener@ucdavis.edu   |
| FAC Symposium<br>Analysis, Design, and Evaluation<br>f Man-Machine Systems - MMS '95                                     | June<br>27 – 29 | Cambridge<br>MA, USA     | 1 July<br>1994   | Prof. Thomas B. Sheridan, 3-348 MIT<br>Cambridge, MA 02139, USA<br>FAX +617/253-4196<br>e-mail: sheridan@mit.edu  |
| FAC/IFIP/IFORS/SEDC Symposium<br>Modelling and Control of National<br>and Regional Economies                             | July<br>2-5     | Brisbane<br>Australia    | 15 Sept.<br>1994 | Dr. Ljubisa Vlacic Fac. of Science and Technology Griffith University Nathan, Brisbane, Qld. 4111 Australia, FAX +61 7 875 5198 e-mail: vlacic@tomahawk.me.gu.edu.au                        |
| FAC Conference<br>system Structure and Control   | July 5 – 7      | Nantes<br>France         | 1 Aug<br>1994    | Mr. J.J. Loiseau, CNRS<br>LAN-ECN 1, rue de la Noe<br>F-44072 Nantes Cedex 03, France<br>FAX +33/40/372522<br>e-mail: loiseau@lan01.ensm-nantes.fr  |
| FIP/IFAC Conference (17th) ystem Modelling and Identification  | 10-14           | Prague<br>Czech Republic | 15 Oct.<br>1994  | Prof. J. Dolezal Institute of Information Theory and Automation, UTIA, POB 18 CZ-18208 Prague, Czech Rep. FAX +42/2/824 755 e-mail: ifip@utia.cas.cz  |
| FAC Symposium (7th) arge Scale Systems: Theory and Applications  | July<br>11 – 13 | London<br>UK             | 15 Sept.<br>1994 | Prof. P.D. Roberts Control Engineering Research Centre City University, Northampton Square London EC1V 0HB,UK FAX +44/71/477 8568   |
| FAC Conference<br>Youth Automation IYA '95   | 8 – 10          | Beijing<br>China. P.R.   | 30 Nov.<br>1994  | Dr. Li Sun, IYA '95<br>CAST Industrial Engg. Co<br>22 Baiwanzhung Street Xichengqu<br>Beijing 100037. China, P.R.   |
| FAC Conference<br>intelligent Autonomous Control<br>in Aerospace   |                 | Beijing<br>China, P.R.   | 30 Sept.<br>1994 | Prof. Guang-Rui Zou<br>Chairman of BICE<br>POB 2729<br>Beijing 100080, China, P.R.<br>FAX +861/254 3110   |
| ASME/IEEE/IFAC Intl. Conf. Recent Advances in Mechatronics   | August 14 – 16  | Istanbul<br>Turkey       | 3 Feb.<br>1995   | Prof. Okyay Kaynak<br>Bogazici University, Dept. of EE<br>UNESCO Chair on Mechatronics<br>80815 Bebek - Istanbul<br>Turkey<br>FAX +90/212/257 50 30<br>e-mail: kaynak@vs6410.cc.boun.edu.tr |
| FAC Symposium (8th)<br>Automation in Mining, Mineral<br>and Metal Processing   | Aug.<br>29 – 31 | Sun City<br>South Africa | 1 Oct.<br>1994   | MMM'95 Conference Secretariat<br>Private Bag X3015, Randburg 2125<br>South Africa, FAX: 27/11/793 2413  |
| 1995 European Control Conference<br>(in cooperation with IFAC)   | Sept. 5 – 8     | Rome<br>Italy            | 1 Oct.<br>1994   | ECC 95 Secretariat D I S, Univ. degli Studi di Roma Via Eudossiana 18, I-00184 Rome, Italy FAX 39/6/44 585367 e-mail: ecc95@itcaspur.caspur.it  |



IFAC. The Journal of the International Federation of Automatic Control

Papers From the July 1994 Issue

#### Survey Paper

A Survey of Models, Analysis Tools and Compensation Methods for the Control of Machines with Friction

(B. Armstrong-Helouvry, P. Dupont, C. Canudas de Wit)

#### Regular Papers

H(infinity) Design of General Multirate Sampled-Data Control Systems

(Tongwen Chen, L. Qiu)

Identification of Linear Dynamic Systems Using Piecewise Constant Excitations: Use, Misuse and Alternatives

(J. Schoukens, R. Pintelon, H. van Hamme) Self-Tuning PI-PID Regulators for Stable Systems

with Varying Delay

(A. Leva, R. Scattolini, C. Maffezzoni) Practical Design of Nonlinear Fuzzy Controllers with Stability Analysis for Regulating Processes with Unknown Mathematical Models (Hao Ying)

#### **Brief Papers**

Robust System Identification with Noisy Experimental Data: Projection Operator and Linear Algorithms

(Er-Wei Bai, S. Raman)

Vibrational Stabilization and Calculation Formulas

for Nonlinear Time Delay Systems: Linear Multiplicative Vibrations

(B. Lehman, J. Bentsman)

Adaptive Fading Kalman Filter With an Application (Qijun Xia, Ming Rao, Yiqun Ying, Xuemin Shen)

#### **Book Review**

Predictive Control. A Unified Approach, by R. Socierbeek (D. Clarke)

Papers From the August 1994 Issue

#### Survey Paper

Object-Oriented Programming in Control System Design: A Surve (C.P. Jobling, P.W. Grant)

#### Regular Papers

Frequency Domain Sensitivity Functions for Continuous Time Systems Under Sampled Data

(G.C. Goodwin, M. Selgado) Consistent Identification of Stochastic Linear Systems with Noisy Input-Output Data (A. Delopoulos, G.B. Giannakis)

Model-Based Causal Reasoning for Process Super-

vision

(L. Leyval, S. Gentil, S. Feray-Beaumont) All Controllers for the General H(infinity) Control Problem: LMI Existence Conditions and State Space Formulas

(R.E. Skelton, T. Iwasaki)

A Supervisor for Control of Mode-Switch Processes (R.A., J. van Amerongen, P. Lohnberg et al.)

#### **Brief Papers**

A Higher-Order Correlation Method for Model-Order and Parameter Estimation (Jeng-Ming Chen, Bor-Sen Chen) Sensitivity Model and Synthesis of Dead-Beat Algorithms in Digital Servosystems (C. Cmosija, S. Bogdan, Z. Kovacic)

#### WHO IS WHO IN IFAC



Academician Prof. L. Keviczky Council member

László Keviczky was born in Ráckeve, Hungary, in 1945. He graduated with a Higher Education Honours Degree from the Electrical Engineering Faculty of the Technical University of Budapest (TUB) in 1968, and received the doctoral degree in system identification from the same school in 1970. He was given the candidate of sciences degree in design of regression experiments in 1974 and the doctor of sciences degree in adaptive control in 1980 from the Hungarian Academy of Sciences (HAS). In 1985 he was elected corresponding member of the HAS. In 1991 he was appointed a Foreign Member of the Royal Swedish Academy of Engineering Sciences. From 1993 he has been Member of the HAS and was elected Secretary General of the Hungarian Academy of Sciences. the Hungarian Academy of Sciences.

Since 1968 he worked with the Department of Automation at the TUB, where he became the Head of the Advanced Control Group. In 1981 he joined the Computer and Automation Institute, HAS, where he was the Head of the Department of Process Control until 1985. He has been Director of the Institute since January 1st, 1986. In the spring of 1994 he is to be appointed Professor of the Department of Automation at the TUB.

His special fields of interest are system identification and proposed control of industrial and proposed control of industrial control of industrial

parameterestimation, adaptive optimal control of industrial processes, computer controlled systems, simulation and modeling, intelligent and expert controls, C3I (Control, Communication Computation, Intelligence)

Communication Computation, Intelligence)
In 1972, he spent three months on leave at the Lund
Institute of Technology in Sweden, as a post-doctoral
fellow. In 1979 he spent 4 months at the same institution
under a UN/UNESCO fellowship.In 1979/80 he spent a
9-months visiting professorship at the University of Minnesota in Minneapolis, as the principal investigator of a
cooperative NSF research program between the US and
Hungary. He was the principal investigator of another
project of the same sides between 1982-85. In 1986 he
spent a three-month Eisenhower fellowship in the USA.
Between 1981-84 he was Vice-Chairman and then Chairman
(1984-90) of the Applications Committee. In 1990 he was (1984-90) of the Applications Committee, In 1990 he was elected TB Vice-Chairman and in 1993 member of the

IFAC Council. He was an Associate Editor of the IFAC Journal Automatica between 1984-93 and served as IPC member (twice as Chairman) of several IFAC Symposia

FORTHCOMING EVENTS (ctd.)

| IFAC Workshop<br>Control Education and Technology<br>Transfer Issues   | Sept.<br>11-12   | Curitiba<br>Brazil        | 13 Jan.<br>1995  |  |
|--|------------------|---------------------------|------------------|--|
| IFAC Symposium Low Cost Automation   | Sept.<br>13 – 15 | Buenos Aires<br>Argentina | 30 Sept.<br>1994 |  |
| IFAC Workshop<br>Human-Oriented Design of<br>Advanced Robotics Systems   | Sept.<br>18-20   | Vienna<br>Austria         | l April<br>1995  |  |
| IFAC Symposium<br>Automated Systems Based on<br>Human Skill - "Joint Design of<br>Technology and Organization" | Sept.<br>25 – 28 | Berlin<br>Germany         | 10 Feb.<br>1995  |  |
| IFAC Conference<br>Supplemental Ways for Improving<br>International Stability - SWIIS                          | Sept. 27 – 29    | Vienna<br>Austria         | 1 April<br>1995  |  |
| IFAC Workshop<br>Motion Control  | Oct.<br>9-11     | Munich<br>Germany         | 31 Jan.<br>1995  |  |
| IFAC Symposium<br>Control of Power Plants and Power  | Dec.<br>4-6      | Cancun<br>Mexico          | Nov.<br>1994     |  |

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