FAC International Federation of Automatic Control Secretariat: Schloßplatz 12, A-2361 Laxenburg, Austria – Phone (02236) 71447, Telex 79248 ifac a



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Annual IFAC Meetings in Boston * Forthcoming Events

10th IMEKO World Congress

* 1st IFAC Workshop on Experience with the Management of Software Projects

Papers from the Next Issue of Automatica

Who is Who in IFAC nonnote A statement of the statement o

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Annual IFAC Meetings in Boston, Mass.

Almost every meeting room was occupied during these days at the Marriott Copley Plaza Hotel in Boston, where the IFAC Council, Boards and Committee Meetings were held in conjunction with the 1985 American Control Conference.

The following IFAC bodies held their sessions before the Council Meeting on June 22: Technical Committees APCOM, EMSCOM, EDCOM, MOC, SECOM and its WG on SWIIS, SPACE; the IPC for the 1987 IFAC World Congress in Munich; Policy, Publications and Finance Committees; Publications Managing Board; Automatica Editorial Board; Technical Board and Executive Board.

The reports of the President, the Treasurer, the Secretary, the Technical Board Chairman and the Executive Board Chairman were unanimously accepted at the Council Meeting together with IFAC's budget for 1986.

A decision was taken about the foundation of new awards in order to strengthen IFAC's relations with industrial specialists, young scientists and those working in the field of education. The preparation of the guidelines for the award of the "Application Paper Prize", "Young Author's Prize" and "Education Prize" is in progress.

Two Committees were appointed by IFAC's President: the Election Committee for the appointment of officers for the term 1987— 1990 with B. D. Anderson as Chairman and B. Tamm and S. Kahne as members, and the Quazza Medal Selection Committee with T. Vamos as Chairman and B. D. Anderson and J. F. Coales as members.

The organizers informed on the efforts being made for the next IFAC Congresses. The arrangements for the 1987 Munich Congress are well in hand, as was proved by the IPC meeting. B. Tamm and B. D. Anderson reported on the preparations of the 1990 Congress in Tallin and the 1993 Congress in Sydney respectively.

Five countries volunteered for organizing the 1996 IFAC Congress. The Council will consider this question at its 1986 meeting. The Chairman of the Publications Committee reported on the preparations of the new guidelines ("Procedure for the Organization of IFAC Technical Events", "Presentation of Scientific Papers") to go to press soon.

The Chairman of the Publications Managing Board stated that 1984 really was a successful year considering IFAC publications and also mentioned that the updated Automatica Agreement has been signed.

The Council authorized the President to sign the extended contract with Pergamon Press.

It was agreed that the next meeting of the Council will be held in Zürich, Switzerland, on August 31, 1986, in conjunction with the IFAC Symposium on Large Scale Systems.

IFAC Congratulates Harold Chestnut

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who was awarded the Richard E. Bellman Control Heritage Award presented annually by the American Automatic Control Council for a distinguished lifetime carreer of contributions to the field of Automatic Control.

RTHCOMING EVENTS F

IFAC

Title	1985	Place	Deadlines	Further Information
4th IFAC Workshop Safety of Computer Control Systems (SAFECOMP '85)	Oct.	Como m Kam I Prot Jaam Waller	ny (Dr. E. DeAgostino Senior Research Engineer ENEA — Dip. Reattori Termici, CRE-Casaccia Via Anguillarese 301 I-00060 Rome, Italy
IFAC/IFORS Symposium Systems Analysis Applied Water and Related Land Resources	Oct. 2-4	Lisbon, Portugal	Triennial World for ID 21el Cer 10-21	Prof. Luis Valadares Tavares APDIO Av. Rovisco Pais 1000 Lisbon, Portugal
13th IFAC/IFIP Workshop Real Time Programming	Oct. 7-8	West Lafayette, Ind., USA	actic	Prof. T. J. Williams Purdue Laboratory for Applied Industrial Control 334 Potter Center, Purdue Univ., West Lafayette, Ind. 47907, USA
IFAC Workshop Adaptive Control in Chemical Processes	Oct. 21—22	Frankfurt FRG	Hotel in Bone Motel in Bone Motelschool	H. Wiefels VDI/VDE GMR P.O. Box 1139 D-4000 Düsseldorf 1, FRG
IFAC Symposium Robot Control	Nov. 6-8	Barcelona, E	Ling County County	Secretariat of SYROCO '85 Institute de Cibernètica Diagonal, 647 E-080828 Barcelona, Spain
IFAC Workshop Automatic Control in Petroleum, Petrochemical and Desalination Industries	Nov. 18—20	Kuwait	M. MOC, SEDBA Bither (PG-16m) ass in Municht Financeto Generation ang Bonetical Bither Technolcal B	Dr. Jaafar Assiri c/o Dr. Samir Kotob TED/ASD Kuwait Institute for Scientific Research P.O. Box 24885, Safat, Kuwait
IFAC Symposium Modelling and Control of Biotechnological Processes	Dec. 11-13	Noordwijker- hout, NL	Dutput Fuzzy G a Applications Ninteen) nº orli to ahead hose orli (notice di svituoexil en bolgepos yleuon	Prof. Dr. A. Johnson Lab. voor Fysische Technologie Prins Bernhardlaan G 2628 BW Delft The Netherlands
Title	1986	Place	Deadlines	Further Information

5th IFAC/IFIP/IMACS/IFORS Symposium Information Control Problems in Manufacturing Technology	April 22 — 25	Yerevan, SU	ion was tablen in mote lo <u>o</u> rder, is and those w on. The prepart	Organizing Committee of the 5th Symposium ICPMT 65, Profsojuznaja Str. Moscow, 117342, USSR	duced in who We encourse network and control period	
2nd IFAC Symposium Stochastic Control	Мау	Vilnjus, — SU		USSR National Committee or Automatic Control 65, Profsojuznaja Str. Moscow, 117342, USSR	control juznaja Str.	
IFAC Workshop Reliability of Instrumentation Systems for Safeguarding and Control	May 12-14	The Hague, NL	nt the Election ment of Theorem III, K. D. Anden mand S. Fabric Matal Select	Mr. J. P. Jansen Shell Intl. Petroleum Mij. Carel von Bylandtlaan 30 2596 HR Den Haag, NL		
IFAC Workshop Methods for the Management of Software Projects	May 14—16	FRG	os as Chairmean R. Coales-ta ma procroitik vinet riganizera infor made for the ne	H. Wiefels VDI/VDR GMR POB 1139 D-4000 Düsseldorf 1, FRG		
4th IFAC/IFIP Symposium Software for Computer Control (SOCOCO)	May 20—23	Graz, A	Sept. 1, 1985	SOCOCO '86 att. Ms. R. Hammer, IIG Schießstattgasse 4a A-8010 Graz, Austria		
14th IFAC/IFIP Workshop Real Time Programming	May 25 — 27	Balaton, H	niy raqe <u>s</u> nikh niyina valura ni IRAC Guage	Prof. J. Szlanko Central Institute for Physics POB 49 H-1525 Budapest, Hungary	anu i vitrati num A tempini dana	

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FORTHCOMING EVENTS (ctd.)

Title	1986	Place	Deadlines	Further Information
IFAC Workshop Use of Technology incl. Systems Cooperation for International Conflict Resolution	June	OH, USA	bin of IMEKO In off ors were also bened: M. George Tour	Dr. Harold Chestnut SWIIS Foundation Inc. 1226 Waverly Place Schenectady, N.Y. 12308, USA
IFAC Workshop Digital Image Processing in Industrial Applications	June 10-12	SE the Orientero	animati umati or animati umati umati umati	Mr. Martin Ollus Technical Research Centre of Finland Otakaari 5 I SF-02150 Espoo, Finland
IMEKO/IFAC Symposium Intelligent Measurement		Jena, GDR v lainneitt uneo tets ant rot	The true the time	Prof. D. Hofmann Friedrich-Schiller University Section Technology GDR-6900 Jena
National Economics	June 17—20	Budapest, H	n Bos	Dr. Margit Ziermann Institute of Economic Planning Roosevelt tér 7—8 H-1051 Budapest V, Hungary
4th IFAC Symposium Control of Distributed Parameter Systems	June 30 July 3	Pasadena, USA	Sept. 1, 1985	Mr. G. Rodriguez Jet Propulsion Laboratory 3800 Oak Grove Drive Pasadena, CA 91109, USA
5th IFAC/IFIP/IFORS International Conference Control in Transportation Systems		Vienna, A	8. Series (no 8. Series de mus 1844 nuiteraise 1944 nuiteraise	ÖPWZ, Mr. W. Stejskal POB 131 A-1014 Vienna, Austria
IFAC Workshop Adaptive Systems in Control and Signal Processing	July 1-3	Lund, S	Oct. 15, 1985	Prof. K. J. Åström Dept. of Automatic Control Lund Institute of Technology Sweden
IFAC Symposium Microcomputer Application in Control	July 22—25	Istanbul, TR	enange anotherun Ingel dat fi Jadgie Ingel (Lgele Mind	Prof. E. Adali P. K. 175 Levent-Istanbul, Turkey
IFAC Workshop + State Space Modelling of Hydrological Systems	July (1 day)	Budapest,		Dr. A. Szölläsi-Nagy VITUKI Pf. 27, H-1453 Budapest Hungary
IFAC Workshop Modelling, Decisions and Games with Applications to Social Phenomena	11-15	Beijing, PRC	Andersen, S. B. In The Tree Brand Masser Habits Card Chairmarf Aparta Habits	Prof. Zhang Si-Ying Dept. of Automatic Control Northeast Inst. of Technology Shenyang, Liaoning Province, PRC
IFAC Symposium Automation in Aquaculture	August 18—20	Trondheim, N	niff Dishistow Systems Intelestent-Duble	Prof. J. G. Balchen Norwegian Inst. of Technology N-7034 Trondheim NTH, Norway
5th IFAC Symposium Automation in Mining, Mineral and Metal Processing		Tokio, J	mpot telefina delaritari delaritari delaritaritari delaritaritari delaritaritari delaritaritari delaritaritari delaritaritari delaritaritari delaritaritaritari delaritaritaritaritari delaritaritaritaritari delaritaritaritaritari delaritaritaritaritaritaritaritaritaritarit	Prof. Y. Yoshitani Technological University of Nagaoka Dept. of Control Engineering Kamitomioka Nagaoka 949-54, Japan
4th IFAC/IFORS Symposium Large Scale Systems: Theory and Applications	August 26—29	Zurich, CH	Sept. 1, 1985	Prof. M. Mansour IFAC/IFORS Symposium ETH Zentrum CH-8092 Zurich, Switzerland
IFAC/IFIP/IFORS Symposium Economics and Artificial Intelligence	September 2-4	Aix-en- Provence	dynasgan <u>N.</u> Vin Xianasa Piladi Xiani Y. Isologi	Ms. E. Fayola & Ms. C. Frachon AFCET 156 Bd. Péreire F-75017 Paris, France
2nd IFAC Workshop Modelling and Control of Electric Power Plants		Philadelphia PA, USA		Dr. H. G. Kwatny, Prof. of Systems Engineering Drexel University Dept. of Mechan. Engg. & Mechanics Philadelphia, PA 19104, USA
IFAC/IMACS Symposium Simulation of Control Systems	22-26	Vienna, A	Dec. 1, 1985	Dr. P. Kopacek Technical University Karlsplatz 13 A-1040 Vienna, Austria
IFAC Workshop + Fault Detection and Safety in Chemical Plants	September	Kyoto, J	Part A List (Addition	Prof. T. Takamatsu Dept. of Chemical Engineering Kyoto University Kyoto 606, Japan

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ic Control

News from Sister Federations 10th IMEKO World Congress

Experts in measurement and instrument engineering from 31 countries gathered between April 22 and 26, 1985, in Prague, CSSR. The Congress title was "New Measurement Technology to Serve Mankind". 329 papers were presented at four plenary sessions, 32 section meetings and 6 poster sessions. 12 round table discussions dealt with subjects of special interest.

MEACO '85 — an exhibition of measuring instruments, automation devices and computers was held concurrently with the Congress, with exhibitors from 8 countries.

The Congress Proceedings — ACTA IMEKO 1985 — will be published in 5 volumes (more than 3000 pages) by the end of the year.

1st IFAC Workshop on Experience with the Management of Software Projects May 14-16, 1986 in Heidelberg, FRG.

The Workshop is sponsored by the International Federation of Automatic Control (IFAC), Technical Committee on Computers, and by the International Federation of Information Processing (IFIP), Technical Committee 5, Computer Applications in Technology.

The purpose of the Workshop is to provide a forum for the exchange of experience between engineers involved in the management of software projects. There will be three types of contributions:

- invited papers, giving overviews or stressing controversial viewpoints
- submitted papers, describing specific experiences of individuals or teams
- guided discussions, in which it will be attempted to formulate conclusions or recommendations.

Topics will include:

- Experience with software development tools
- Special forms of management of software teams
- Quantitative data on productivity under varying conditions
- Software life cycle management
- Rules and their use
- Influence of the organizational environment

Papers shall describe real experience (good or bad!) with the management of software projects, the use of tools etc.

Prospective authors are invited to submit abstracts (500 words) in English not later than

October 1st, 1985

to the chairman of the International Program Committee

Dr. Peter Elzer Brown, Boveri & Cie Abt. SN/ME Postfach 1309 D-6802 Ladenburg/FRG.

* deadline not yet known

During the congress week the General Council of IMEKO held its 28th session. New officers were elected for the next threeyear period:

Mr. George Toumanoff (USA) --President

Dr. Tamás Kemény (Hungary) – Secretary General

Prof. Jean Weiler (Switzerland) — Treasurer.

IMEKO XI — the 11th Triennial World Congress "Instrumentation for the 21st Century" will take place from October 16—21, 1988, in Houston, Texas, USA,



Federation of Automatic Control

Papers	from	the	Next	Issue -	Sept.	1985
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Attitude Estimation and Control of Manoeuvering Space Craft

(T. Zwartbol, R. F. Van den Dam, A. P. Terpstra, P. Th. L. M. Van Woerkom)

Inferential Centrol Applications (J. R. Parrish, C. B. Brosilow)

An Efficient Single Output Fuzzy Control Algorithm for Adaptive Applications (T. R. Andersen, S. B. Nielsen)

Evidence Measures Based on Fuzzy Information

(D. Dubois, H. Prade)

Uniformly Optimal Control of Linear Feedback Systems

(A. Feintuch, B. A. Francis)

Optimum/Near-Optimum Incentive Policies for Stochastic Decision Problems Involving Parametric Uncertainty (D. H. Cansever, T. Basar)

Market Equilibrium in Multistage Commodity Network

(A. Haurie, M. Breton)

Reliable Stabilization Using a Multi-Controller Configuration

(M. Vidyasagar, N. Viswanadham)

The Extended Periodic Lyapunov Lemma (S. Bittanti, P. Bolzern, P. Colaneri)

On Near Optimal Decentralized Control (K. D. Young)

Stepping Motors and Their Microprocessor Controls by T. Kenjo (C. S. Shen)

Mr. Babbage's Secret, the Tale of a Cypher and APL by O. I. Franksen (T. Vamos)

Adaptive Filtering, Prediction and Control by G. C. Goodman and K. S. Sin (P. Ioannou)

Automation in Control and Transport (2nd edition) by F. T. Barwell (H. R. Van Niekerk)



Prof. Karl Johan Åström IFAC Council Member

Prof. Karl Johan Åström was born in Östersund, Sweden in 1934. He was educated at the Royal Institute of Technology (KTH) in Stockholm where he received his MS in Technical Physics in 1957 and his PhD in mathematics and control in 1960. From 1955 to 1960 he held various teaching positions at KTH. He also worked on inertial guidance for the Research Institute of National Defense in Stockholm. A navigation system based on a new principle for Schuler tuning developed by Prof. Åström was built by Philips and successfully flight-tested.

In 1961 Åström joined the IBM Nordic Laboratory to work on theory and applications of computerized process control. In 1962 and 1963 he worked on optimal and stochastic control as a visiting scientist at IBM Research Laboratory in Yorktown Heights and San Jose.

In 1965 Åström was appointed professor to the chair of Automatic Control at the Lund Institute of Technology/University of Lund where he has been responsible for building up the department. He has been a visiting professor of applied mathematics at Brown University in Providence RI in 1969/70 and has also held shorter visiting appointments at the University of Southern California, University of Chicago, Washington University, Imperial College in London, University of Manchester, University of Warwick and ETH in Zurich.

Prof. Åströms main research areas are stochastic control, system identification, adaptive control, computer control and computer aided control engineering. He has published three books, and contributed to several other ones. He is the author of many papers and holds two patents.

Prof. Åström is editor of survey papers for Automatica and associate editor of several other journals as well as consulting editor of the IEEE Transactions on Automatic Control.

Prof. Åström has been a member of the Swedish Academy of Engineering Sciences since 1972 and a member of the Royal Physiographical Society since 1967. He is a member of the Scientific Council of the Swedish board of Technical Development.

In 1979 he became a Fellow of IEEE and in 1980 he was awarded the Callender silver medal from the Institute of Measurement and Control, London. In 1983 he was given the Wilhelm Westrup prize from the Royal Physiographical Society, Lund.

Prof. Åström has for many years been active in IFAC, serving as vice chairman of both Theory and Advisory Committee. In 1981 he was elected ordinary member of the IFAC Council.

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