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Informal Meeting of the IFAC Presidents



As is already a tradition in IFAC, a meeting of the IFAC Presidents was again held this year in Laxenburg, from May 29 to 31. Prof. M. Thoma, President of IFAC, Prof. B.D.O. Anderson and Mr. W. E. Miller, Vice Presidents, Prof. B. Tamm, President Elect and Prof. T. Vamos, Past President participated in this meeting at the IFAC Secretariat with Prof. M. Mansour, IFAC Treasurer and Gusztáv Hencsey, IFAC Secretary being present as well. The meeting had the purpose of preparing the next

Council and Related Meetings in Zurich, Switzerland, this August as well as strengthening the personal ties in the IFAC family.

Opportunity was given to meet representatives of the Austrian Academy of Sciences, the Austrian NMO as well as of IIASA on the occasion of a dinner given by the IFAC President. Prof. Thoma stressed the importance of the good relations between our Federation and the Austrian authorities, as well as IIASA.

News from Sister Federations

The 11th Triennial World Congress of the International Measurement Confederation IMEKO "Instrumentation for the 21st Century" will be held in Houston, Texas, from October 16—21, 1988.

The aim of this Congress is to report and appraise developments and in particular to consider the interrelations between new hardware developments and new theoretical concepts over the whole spectrum of modern science and industry. The technologies and

applications discussed at IMEKO XI will certainly be the foundation of measurement science for many years to come.

Prospective contributors are invited to submit papers dealing with the use of new technologies and with new techniques of measurement. For details write to:

IMEKO Secretariat
POB 457
H-1371 Budapest
Hungary



PLEASE NOTE
Forthcoming events 1987-1989

Title	1987	Place	Deadlines	Further Information
IMEKO/IFAC Conference Advances in Biomedical Measurement	May	Bratislava, CSSR	*	Dr. P. Kneppo Inst. of Measurement and Measuring Technique Electro-Physical Research Institute of the Slovak Academy of Sciences Dubravka cesta 9 842 19 Bratislava, CSSR
X. IFAC WORLD CONGRESS	July 27-31	Munich FRG		Eng. H. Wiefels VDI/VDE Gesellschaft Meß- und Regelungstechnik GMR Postfach 1139 D-4000 Düsseldorf 1, FRG
IMACS/IFAC Int. Symposium Modelling and Simulation of Distributed Parameter Systems	October 6-9	Hiroshima J	Nov. 1, 1986	Dr. T. Futagami Dept. of Civil Engineering Hiroshima Inst. of Technology Miyake, Itsukaichi, Saeki Hiroshima, 731-51, Japan
Title	1988	Place	Deadlines	Further Information
IFAC/IFIP Symposium Software for Computer Control — SOCOCO '88	April 26-28	Johannesburg ZA	*	Prof. I. M. Macleod Dept. of Electrical Engineering, University of Witwatersrand 1 Jan Smuts Ave Johannesburg 2001, ZA
IFAC/IFIP/IEA/IFORS Conference Analysis, Design and Evaluation of Man-Machine Systems (MMS '88)	June 14-16	Oulu SF	*	B. Wahlström Technical Research Centre of Finland Electrical Engineering Lab., Otakaari 7B 02150 Espoo, Finland
IFAC Symposium Trends in Control and Measurement Education	July 20-22	Oxford UK	*	Prof. J. O. Gray Dept. of Electrical Engineering University of Salford Salford M5 4WT., UK
IFAC/IFORS Symposium Identification and System Parameter Estimation	August 27-31	Beijing PRC	August 1, 1987	Prof. Chen Han-Fu Institute of Systems Science Academia Sinica Beijing., 10080, P. R. China
IFAC Symposium Modelling and Control Applications for Power Systems Operation	Sept.	Brussels Belgium		J. Debelle Vice President of IBRA Rue Ravenstein 3 B-1000 Brussels, Belgium
Title	1989	Place	Deadlines	Further Information
IFAC/IFIP/IEA/IFORS Conference Analysis, Design and Evaluation of Man-Machine Systems (MMS '89)	Sept.	Xian PRC	*	Prof. Wang Ying Luo Xian Jiaotong University Xian, Shaanxi, PRC
IFAC Symposium Adaptive Control and Signal Processing	—	Glasgow UK	—	Prof. M. J. Grimble Dept. of Electronic & Electr. Engineering Industrial Control Unit University of Strathclyde 204 George Street, Glasgow G11XW, UK

* Deadline not yet known

Automatic Control in Petroleum, Petrochemical and Desalination Industries

IFAC Workshop

Kuwait, 6-8 January 1986

The workshop was sponsored by IFAC, the Developing Countries Committee (DECOM), the Application Committee (APCOM), the Systems Engineering Committee (SECOM), and the Economic and Management Committee (EMSCOM). It was organized by six Kuwaiti organizations.

The workshop consisted of seven technical sessions, two panel discussions, and one poster session. Four invited papers were presented. Papers dealt with instrumentation, control, optimization and computer management of the process industry in general. Workshop papers and panel discussions presented a balanced mix of contributions from scientists in the academic domain and experts from industry. Several papers included recent developments in robustness and decentralized systems, and in practical applications of control theory, digital techniques and artificial intelligence.

The workshop was opened under the patronage of the Crown Prince and Prime Minister, Sheik Saad Al-Abdallah Al-Salem Al-Sabah, who deputed the Minister of Education, Dr. Hassan Al-Ibrahim, to give his opening address. Khaled Buhadra, Deputy Director of the Kuwait National Petroleum Company, addressed the Workshop on behalf of organizing parties. Professor Jose Cruz gave the IFAC address on behalf of Professor Thoma, President of IFAC. Dr. Jafar Assiri spoke on behalf of the international steering and organizing committees.

155 participants from 20 countries in four continents attended the workshop. The workshop drew its main participation from the oil companies in Kuwait and the Gulf. This is a direct reflection of the enthusiasm of the

management of the oil companies that organized the workshop and their conviction of its relevance to their activities.

The first panel discussion dealt with the recent experiences of executives at the Kuwait National Petroleum Company in modernizing and upgrading two refineries. An executive from Kuwait Petroleum Corporation discussed the future strategies of Kuwait in oil refining and a manager of KISR talked about the R&D that should go along with such developments. The panel discussion highlighted the main decisions related to technology selection and contracting.

The second panel discussion addressed the question of how much control is needed in the process industry. Focus in the discussion was on the implementation of new control ideas and computer control in existing processes. The discussion dealt with such important issues as economics, reliability, training requirements and transfer of technology of modern control systems.

A field visit was made to the industrial park, the Shuaiba Oil Refinery and Ahmadi Oil Refinery, south of Kuwait City where participants visited three control centers in two refineries. The visits contrasted differences between an old control center built in the late sixties, and two new ones fully commissioned last year. Visitors were able to witness the developments and experiences of the new control center.

Overall reaction to the workshop was positive among speakers and participants. Several requests were received for the workshop proceedings, which will be published by Pergamon Press shortly. The workshop

attracted the attention of the electronic media, radio and television, and the newspapers, well after its conclusion.

Dr. Jafar Assiri
Chairman NOC
Dr. Samir Kotob
Editor



Prof. J. Cruz delivering the speech on behalf of the President of IFAC.

Systems Analysis of Problems in Irrigation, Drainage and Flood Control

2nd International Workshop

Rabat, Morocco, February 10-28, 1986

The 2nd International Workshop on Systems Analysis of Problems in Irrigation, Drainage and Flood Control, co-sponsored by the International Commission on Irrigation and Drainage (ICID) and the International Federation of Automatic Control (IFAC) and organized by the Moroccan National Committee of ICID (ANAFID) was held in Rabat, Morocco from 10 to 28 February 1986.

The objective of the workshop was to give lectures and presentations of case studies of real life problems to promote the further training of engineers from developing countries so as to increase their confidence in applying this approach to problems in irrigation, drainage and flood control.

27 Moroccan and international experts in systems analysis, operation research, water engineering — presented the state-of-the-art in the field of systems analysis applied to water systems.

The programme of the workshop included general lectures, case studies and micro-computer applications. The first week of the workshop was devoted to general lectures in systems analysis, operation research and advanced engineering statistics which were organized with a view to enhancing the participant's capabilities to understand the applications.

During the second week, several applications of systems analysis drawn from Moroccan and foreign experiences in water management were presented.

During the last week participants had the opportunity to apply several computer packages especially on microcomputers. This was aimed at encouraging a larger diffusion of systems analysis and optimization approaches among them — finally, two lectures were devoted to the socio-economic aspects of the systems analysis approach to water management problems which stressed the necessity of taking into account these dimensions to improve and apply the methodologies.

News from NMOs CHINA

The Chinese Association of Automation (CAA), IFAC's Chinese NMO, had her Fourth National Congress during November 6—8, 1985 in Wuhan, China. 150 participants from all over the country gathered and discussed the activity report and the report on the amendment to the Constitution of the CAA. A new Council consisting of 100 members was elected, among them 21 were elected as members of the Executive Committee which includes the following leadership

President:

Hu Qiheng (Beijing)

Vice-Presidents:

Yang Jiachi (Beijing)

Huang Taiyi (Beijing)

Sun Buolin (Beijing)

Lu Yongzai (Hangzhou, Zhejiang)

Prof. Song Jian, former President of the CAA and IFAC Council member, being the Chairman of the State Science and Technology Division, still keeps his membership in the Executive Committee and is responsible for the related IFAC affairs.

The Secretariat of the CAA is located at the Institute of Automation, Academia Sinica, headed by Secretary-General Huang Taiyi.

Technical Committees on

- Application
- Biomedical Engineering
- Computer-Aided-Design and Computer Graphics
- Components and Instruments
- Computer and Application
- Economic and Management Systems
- Electrical Automation
- Office Automation
- Pattern Recognition and Machine Intelligence
- Robotics
- Simulation
- Space
- Systems Engineering
- Telecontrol
- Theory

and Working Committees for

- Education
- Popularization
- Terminology

were set up during the Congress.

Editors of the CAA journals "Acta Automatica Sinica", "Information & Control" and "Automation" were also appointed during the Congress.

The Chinese Association of Automation (CAA) was founded in 1957, and was one of the founding NMOs of IFAC at the very beginning. Since then, especially after the reorganization in 1978, the CAA has been taking a more and more active part in IFAC affairs. Some IFAC conferences have been held in China during the past years. Some of the forthcoming IFAC events in China are:

IFAC Workshop on Modeling, Decision and Games with Applications to Social Phenomena (Aug. 11—15, 1986)

IFAC Symposium on Power Systems and Power Plant Control (Aug. 12—15, 1986)

8th IFAC/IFORS Symposium on Identification and System Parameter Estimation (July 1988)

Deadline not yet known

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Papers from the Next Issue — Sept. 1986

Papers

Optimal Ride Height and Pitch Control for Championship Race Cars
(D. Metz, J. Maddock)

A Self-Tuning Robust Controller
(H. K. Song, S. L. Shah, D. G. Fisher)

A Linear Programming Regulator Applied to Hydroelectric Reservoir Level Control
(P.-O. Gutman)

Optimal Experiment Designs with Respect to the Intended Model Applications
(M. Gevers, L. Ljung)

Estimation and Direct Adaptive Control of Delay-differential Systems
(R. Johansson)

From Time Series to Linear System, Part I: Finite Dimensional Linear Time Invariant Systems
(J. C. Willems)

Brief Papers

An Application of Multivariable Self-Tuning Regulators to Drum Boiler Control
(J. Fessler)

Robust Digital Dead Time Compensator Controller for a Class of Stable Systems
(Z. J. Palmor)

Reduced-Complexity LQR Design Using Canonical Correlation Analysis
(U. B. Desai, S. Banerjee)

Square Root Filtering via Covariance and Information Eigenfactors
(Y. Oshman, I. Y. Bar-Itzhack)

The Asymptotic Stochastic Stability in Large of the Composite Stochastic Systems
(L. Socha)

Technical Communiques

Book Reviews

Parametric Random Vibration by R. A. Ibrahim (B. de Jong)

Control of Electrical Drives by W. Leonhard (I. Nagy)

Introduction to Robotics by A. J. Critchlow (P. C. Hills)

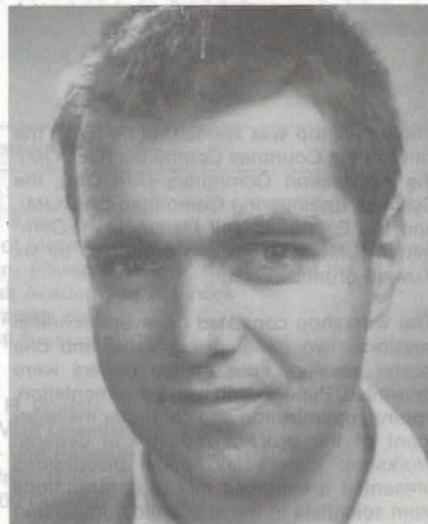
4th IFAC/IFIP Symposium on Computer Aided Design in Control and Engineering Systems (July 1988)

CAA is going to welcome more and more scientists and engineers from all over the IFAC world to exchange their research achievements and experiences in China, thus to promote social and technological progress and to benefit China's modernization as well as all mankind.

Further information about CAA services and activities can be obtained from:

Chinese Association of Automation
c/o Institute of Automation,
Academia Sinica
Beijing, China
Tel.: 284294; Cable: BEIJING 5261

WHO IS WHO IN IFAC



Prof. L. F. Pau,
Technical Board Vice-Chairman

Prof. L. F. Pau was born in Copenhagen, Denmark. From 1971—73 he held his first academic position there as an assistant and later as associate professor at the Technical University of Denmark. In 1974 he was appointed professor at the Ecole Nationale Supérieure des Télécommunications in Paris, which position he held until 1982. In 1977 he founded the Department of Electronics and Systems; Prof. Pau was also head of this department, which, in 1982 had a staff of 35. From 1975—1977 he, moreover, was visiting associate professor at the Massachusetts Institute of Technology (Department of Electrical Engineering and Computer Science) with teaching and research commitments. From 1980—1982 he held the position of adjunct professor at the University of Maryland (Department of Computer Science). Between 1982 and 1986 Prof. Pau was senior scientist at the Battelle Memorial Institute (Switzerland and the USA) with the responsibility for contract research for industry in 16 countries. Only recently Professor Pau was appointed research professor at the Technical University of Denmark.

His main fields of activity are related to knowledge-based systems (software, hardware and architecture), thus extending control theory with major aspects of artificial intelligence, microelectronics and computer architecture. Main applications have been in failure detection and systems monitoring, signal and image recognition, economic modelling and algorithmic problems in dynamic game theory.

Professor Pau has published four books, edited 5 more and published more than 100 papers. In addition he holds several patents. He has received high recognition awards from governments and professional societies in the USA and Europe. Professor Pau was also awarded a fellowship from the Japan Society for the promotion of science. His work is also the basis of a large Eureka project. Professor Pau has been organizer and chairman of a dozen international conferences, symposia and workshops.

Within IFAC Professor Pau served as Chairman of the Technical Committee of Economic and Management Systems from 1981—1984. At present he is Vice-Chairman of the Technical Board.