



# IFAC

# INFORMATION BULLETIN

No. **64** May 10, 1971

**International Federation  
of Automatic Control**

Published by the IFAC Secretary  
G. Ruppel · Postfach 1139  
D 4000 Düsseldorf · Germany

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## **Five International Associations Coordinating Committee — FIACC**

Representatives of AICA (International Association for Analog Computation), IFAC (International Federation of Automatic Control), IFIP (International Federation for Information Processing), IFORS (International Federation of Operational Research Societies), and IMEKO (International Measurement Confederation) met in Dresden, GDR, on the 19th of March 1971. Special significance was given to this meeting by the participation of Prof. V. Parail, Director, Division of International Co-operation in Scientific Research of the UNESCO Secretariat, acting as observer.

On the basis of recommendations formulated at the first meeting in Paris 1970, the constituent sister associations had ratified and approved in the meantime the creation of this Coordinating Committee as was announced by Prof. V. Broida (France), Chairman of FIACC, President of IFAC.

The main task of this meeting was to coordinate the constituent associations in order to avoid duplication and to join forces where possible.

It was discussed in detail how the sister associations may co-operate in the organization of the 5th IFAC Congress to be held in Paris 1972, and, following this, at the 6th IMEKO Congress to be held in Dresden 1973.

On March 18, 1971, representatives of the Education Committees of the associations participating in FIACC convened in a first meeting of the FIACC Subcommittee on Education. Represented were the IFAC Education Committee, the IMEKO Education Committee, Technical Committee no. 3 of IFIP, and AICA. The fifth international organization, IFORS, was indirectly represented. Also a representative of UNESCO attended the meeting. Prof. H. Trumpold, of the Technische Hochschule,

Karl-Marx-Stadt, GDR, was elected chairman of the Subcommittee. The meeting took place in a general atmosphere of understanding and willingness to co-operate. Information was exchanged about the activities of the various associations in the field of education. A major matter of concern was how to put the organizations to work in assisting developing countries in their educational problems.

## **IFAC Workshop on Higher Education in Automatic Control**

The IFAC Workshop on Higher Education in Automatic Control, held from March 15 to 17, 1971 in Dresden, GDR, inaugurated a new format in IFAC meetings. About 60 participants joined in 11 working sessions of 1 1/2 hours each. Each session was opened by a 20- to 30-minute lecture, while the remainder of the time was devoted to discussion.

The following topics were dealt with: Postgraduate education, teaching modelling principles in automatic control, control theory and mathematics, computers in automatic control education, systems science and operations research in automatic control education, control applications and laboratory courses, education in control components and measurement techniques, control education in developing countries, continuing education in automatic control, and the future of automatic control education.

Another novel feature in the Workshop was that all participants submitted one- to three-page discussion papers on one of the Workshop themes. These discussion papers were not formally presented at the Workshop but helped a great deal in preparing the ground for the discussion.

## The Control of Distributed Parameter Systems

Sponsored by the IFAC Technical Committee on Theory and organized by the Associate Committee on Automatic Control, National Research Council of Canada, in association with The University of Calgary, the symposium on The Control of Distributed Parameter Systems will take place at the Banff School of Fine Arts and Centre for Continuing Education, Banff, Alberta, Canada, June 21-23, 1971 (First Announcement and Call for Papers see IFAC Bulletin No. 58). A printed Second Announcement and Conference Information including a Registration Form is available from

Dr. M.H. Hamza,  
The University of Calgary,  
Calgary 44, Alberta, Canada.

The registration fee for Symposium participants is \$ 60.00 and includes a copy of the preprints (extra copies obtainable at \$ 25.00 each), a reception on June 20 and a reception and banquet on June 22. The registration fee for accompanying persons as well as for students is \$ 10.00 and includes all social events planned during the symposium.

## The Operator, Engineer and Management Interface with the Process Control Computer

To update the announcements in IFAC Bulletin Nos. 58 and 63, here is some general information for potential participants in the IFAC Symposium on the above subject to be held at Purdue University, Lafayette, Indiana, USA, from August 3 to 6, 1971.

Apart from the scientific programme covering three survey lectures, two Round Tables and more than 30 technical papers, there will be a live exhibit of several working models of commercially available process control computers and their associated operator's and programmer's console systems. It is planned that these will be available for actual „hands-on“ use by attendees to demonstrate their several capabilities.

A Preliminary Program with Registration and Accommodation Forms may be obtained upon request from

Division of Conference and Continuation Services,  
Purdue University,  
Memorial Center, Room 116,  
Lafayette, Indiana 47907, USA.

For early registrants the registration fee is US \$ 40 if postmarked before July 15, 1971. The fee is US \$ 50 after this date. Included in the registration fee is a copy of the proceedings of the Symposium which will be available at the start of the Symposium. Prospective attendees from outside the United States are urged to investigate the several opportunities for travel cost savings in the „See America“ plans of the United States Government.

From August 10 to 13, 1971, the week following this Symposium, the annual Joint Automatic Control Conference (JACC) of the American Automatic Control Council will be held at Washington University, St. Louis, Missouri. Symposium attendees may wish to include the JACC Conference in their itineraries. For information on the JACC they should contact Prof. John Zaborszky, Chairman, Mechanical and Aerospace Engineering, Washington University, St. Louis, Missouri 63130.

## Digital Simulation of Continuous Processes (DISCOP)

This note updates information on the Symposium issued in IFAC Bulletin Nos. 55 and 62.

The preliminary programme as well as the registration and other forms relative to the IFAC sponsored DISCOP Symposium are now available and may be obtained from the

Organizing Committee  
Symposium on Simulation  
Budapest 112, P.O.B. 63, Hungary,  
Telex: 03 569 (Autinst), Budapest.

The venue of the symposium is Győr, Hungary, half-way between Budapest and Vienna. The scientific programme for September 6 to 10, 1971 will include approximately one hundred technical papers to be dealt with in sessions on topics such as general philosophy of modelling and simulation, steady state and dynamic simulation methods, simulation languages, simulation for digital control, parameter estimation for plant models, material balance calculation, simulation of large industrial complexes, simulation of diffusional operations, and various industrial applications.

A survey paper on „Modelling Continuous Plants for Process Control“ will be presented by T. J. Williams of Purdue University, Lafayette, Ind.

Round table discussions on simulation in real time, on conversational simulation techniques, on parameter estimation for plant models, and eventually on other desirable topics are planned.

Following the scientific programme, two post-symposium tours on September 11 and September 11/12 respectively are arranged.

Registration fee which includes one set of preprints to be made available a month before the symposium, amounts to US \$ 40.00 if paid prior to June 30, 1971. After that date: US \$ 50.00. Additional sets of preprints may be purchased at US \$ 10.00 per set. Registration fee for an accompanying person is US \$ 8 before June 30, 1971 and US \$ 10 after that date. Payments should be made to the following account: Hungarian Foreign Trading Bank Ltd., Budapest, Hungary, IFAC-DISCOP Symposium, Automation Research Institute.

## Automatic Control and Computers in the Medical Field

Under the sponsorship of the IFAC Technical Committee on Applications a symposium on Automatic Control and Computers in the Medical Field will be held in Brussels from September 27 to October 1, 1971. It is being organized by the Belgian member organization of IFAC, the Institut Belge de Régulation et d'Automatisme (IBRA), in cooperation with the Société Belge pour l'Application des Méthodes Scientifiques de Gestion (SOGESCI). An announcement and call for papers appeared in IFAC Bulletin No. 61. Based upon the selection of papers submitted, a provisional scientific programme is being established. Papers from authors of 15 countries promise an interesting cross-section of the activities in the countries involved. This will especially apply to the USSR with more than ten papers by authors coming from that country.

Below are some titles taken from the provisional programme which will deal with Data Acquisition, Patterns, and Data Utilization under the topic of Multi-branched Approach of Applied Automation and Data Processing Techniques, with the Medical Record, with the Optimization of the Doctor's Work to increase his productivity, and with other topics:

- Microminiaturization and reliability of intensive care systems - USSR
- Some Problems of Sensitivity of Neuronal Networks for Changes of Parameters - Poland
- A mathematical model for Flicker ERG and its application to the Diagnosis of ophtalmological Diseases - USA
- Contraintes sur les modèles de structures biologiques oscillantes - Belgium
- On a new approach of automated classification with application to clinical discrimination problems - Italy
- Automatic on line analysis of motor unit potential parameters in electromyographic examinations - Belgium
- Parameter Analysis and Automatic Control of Assisted Circulation - Japan
- Problems of the Continuous Heart Rate Analysis of E.C.G. - Bulgaria
- The use of a small computer for patient registration and collecting of laboratory data in a Central Hospital - Finland
- Automated data acquisition and processing in nuclear medicine - Austria
- A computerised cytologic mass screening system; Administrative and medical benefits - Sweden

Conference languages are English, French, German and also Dutch. Simultaneous translation will be provided.

The printed provisional programme and the registration forms will be made available shortly by the

Secrétariat de l'IBRA,  
3 rue Ravenstein,  
B - 1000 Bruxelles, Belgium.

Any correspondence should be directed to that address.

Until July 15, 1971 the registration fee will be 2.500,- Belgian Francs, after that date 3.000,- B.F. A copy of the preprint volume is included in the registration fee and will be sent free of charge to all European participants as from mid-August. Non-European participants will receive the volume at the opening of the symposium. A second volume containing the discussions will be published after the symposium.

## Special International Conference of UNIDO

With the approval of the United Nations General Assembly, a Special International Conference will be held by the United Nations Industrial Development Organization (UNIDO) in Vienna, Austria, June 1-8, 1971 which will be attended by a representative of IFAC. A main feature of the programme is a thorough study of the long-range strategy and orientation of UNIDO's activities, including the Organization's role in the 2nd Development Decade and the transfer and adaptation of technology for the industrial development of developing countries.

## IMEKO Meeting on The Characteristic Properties of Force Measuring Devices and Electro-Mechanical Weighing Machines

On this topic, the 2nd International Discussion Meeting of the IMEKO Sub-Committee „Measurement of Force and Weight“ will be held in The Hague, Netherlands, September 14-16, 1971. It is organized under the auspices of the Royal Institution of Engineers in The Netherlands. A Preliminary Programme with registration and hotel reservation forms may be obtained from the

Secretariat of the  
2nd IMEKO Discussion Meeting,  
Congress Bureau Inter Scientias,  
P.O. Box 9058,  
The Hague, The Netherlands.

Registration fee until August 1, 1971: Dfl. 175 (abt. US \$ 50); after that date: Dfl. 200 (abt. US \$ 57).

## Institute for Management in Moscow

The Institute for Management was opened in Moscow on February 1, 1971. The students including ministers, their deputies, chiefs of departments, heads of production trusts will up-date their knowledge of national economy, newest achievements and prospects of the revolutions in science and technology with advances of science, technology and production in the USSR and other countries with theoretical fundamentals and experience in scientific control of an industry by using the techniques and of economy, mathematics, and computing technology.

The first lecture on „Basic principles of automation in management of national economy with the use of computing technology, economico-mathematical methods and communication technology“ was read by Academician *V.M. Glushkov*.

## Publications

**ACTA INFORMATICA.** In 1971, one volume of this new journal consisting of four issues will be published. Price per volume: DM 108,-; US \$ 29.70 plus postage. Published by Springer Verlag, Berlin, Heidelberg, New York. The journal will be a vehicle for the publication of papers on the following subjects: Software Engineering, Tools for Programming, Information Retrieval, Management Information Systems, Real-Time Application, Simulation and its Application to Construction Computing Systems, Design of Information Systems, Operating Systems and Data Management, Interactive Systems, Programming Languages and Language Processors, Program Verification, Complexity Analysis of Algorithms, Design and Construction Methods for Application Systems, Application Systems, Hardware-Software Interface Problems, Theory of Automata and Formal Languages.

**FUNDAMENTALS OF AEROSPACE INSTRUMENTATION – Vol. 3.** 15 tutorial papers (presented at the 16th Intern. ISA Aerospace Instrumentation Symposium, May 1970, Seattle, Washington, USA) on applications and techniques of using instrumentation in the aerospace and other industries. Edited by *J.D. Chalupnik, J.E. Jorgensen, B. Washburn*. 144 pages, soft cover, illustrated. Price: \$ 9.00. Published by Instrument Society of America (ISA), 400 Stanwix Street, Pittsburgh, Pa. 15222.

+ **DYNAMICAL SYSTEM MODELS** by *A.G.J. MacFarlane*. A comprehensive text on the application of dynamical theory to physical and engineering systems. 512 pages. Price £ 6.00. Available from booksellers or G.G. Harrap & Co., Ltd., P.O.B. 70, London W.C.1, U.K.

New title for **SCIENTIFIC INFORMATION NOTES**. In view of the fact that two publications are currently issued under the title **SCIENTIFIC INFORMATION NOTES**, Science Associates has changed the title of its bimonthly journal *Scientific Information Notes* to **INFORMATION – NEWS / SOURCES / PROFILES**. The change is effective with Volume 3-1971. For details and sample copies contact the publisher, Science Associates/International, Inc., 23 East 26th Street, New York, N.Y. 10010.

**DYNAMIC SYSTEMS, MEASUREMENT AND CONTROL.** This is the title of a new journal to be issued quarterly by the American Society of Mechanical Engineers (ASME). At the outset papers will be sought particularly in the areas of bioengineering, transportation, fluidics, man-machine systems simulation and general societal problems. Studies of control and dynamic problems in all disciplines will be actively solicited. This new Journal will consist of technical papers and notes or briefs. Each issue will carry bibliographies, a forum section, meeting announcements and book reviews. Annual subscription price \$ 20.00. Orders to be sent to: ASME, United Engineering Center, 345 East 47th Street, New York, N.Y. 10017, USA.