



# IFAC

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**International Federation  
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*For immediate release*

## **Fifth World Congress of IFAC**

The preparations for the 5th IFAC Congress to be held in Paris from June 12 to 16, 1972, are in full swing. The final programme will include information on the Opening Ceremony to be held on Monday morning, June 12, as well as the names of the session chairmen, commentators and last not least of the authors of the papers which will be discussed.

Twelve survey papers will be presented by outstanding experts coming from various countries dealing with the most interesting scientific and technological problems of modern automatic control. Nine Round Table discussions will be devoted to selected topics.

All the sessions will be held in the UNESCO House where excellent facilities are available, including equipment for simultaneous translation (English, French, German, and Russian).

The registrations received until now are surprising in so far as there are more registrants who have indicated that they preferably wish to attend the sessions of theoretical subjects than those registrants who are interested in applications or components. This may be due to the fact that only such theoretical papers were sought which demonstrate the possibility of practical application. On the other hand, the statistics drawn up on the preferred interests of the congress participants have compelled the organizer to exchange the three halls in which the sessions will be held. Insofar the information as given in the Provisional Programme is not valid any more.

In parallel with the congress sessions, technical visits within Paris and in other parts of France are being offered, and a number of IFAC committee meetings, partly on the days before and after, partly during the congress itself, will be held either in UNESCO House or mostly in the "Centre Universitaire Dauphine" where the staff of AFCET, the French Member of IFAC, is located being in charge of preparing and running the Congress. Requests for further information should be addressed to AFCET, Place Maréchal de Lattre de Tassigny, Paris 16e.

In the afternoon of Wednesday, June 14, the General Assembly of IFAC will be held. The member organizations of IFAC have been invited to send up to three

delegates to the General Assembly in order to elect the Executive Council and to rule the activities of IFAC for the next three years.

## **Excellent International Cooperation**

IFAC, together with IFIP, IFORS, IMEKO and AICA, is one of the members of the "Five International Associations Coordinating Committee", FIACC, which was established in 1970 (see IFAC Inf. Bull. Nos. 60 and 64). The Committee held its third meeting, chaired by Prof. *H. Zemanek*, President of IFIP, on April 10 and 11, 1972 in Vienna, Austria, in order to discuss the further co-operation mainly in the organization of future congresses and symposia, for which rather long lists were presented, starting with the 5th IFAC Congress, Paris, June 1972, ending with meetings to be held in 1975.

In those many cases in which common interest of two or even three federations was shown, the leading federation will invite the interested federations to co-sponsor the meeting. This means active participation in the preparation of the meeting, especially in drafting the scientific programme. The Conference Calendar as prepared by the FIACC Secretary Prof. *G. Striker*, Budapest, will provide a means to avoid unpleasant coincidence of dates.

Special attention was given to the activities of the federations for the benefit of developing countries. Prof. *I. Malecki*, who attended the Vienna meeting in his capacity of Director of the UNESCO Department of Science Policy and Promotion of Basic Sciences, suggested activities in geographical regions of countries belonging to the same language group and culture. A special FIACC Development Committee headed by Prof. *A. Jensen*, Copenhagen, President of IFORS, was created to formulate a common policy for regional co-operation.

Other items discussed in Vienna included the Social Impact of Automation and Information Processing as well as Education for which topic a second IFAC Workshop is planned for 1974. All discussions at the Vienna meeting were borne by the strong desire of friendly and affective co-operation.

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## Dynamic Modelling and Control of National Economies

This IFAC/IFORS International Conference is organised by the Control and Automation Division of the Institution of Electrical Engineers in association with the Control Centre and School of Economics, University of Warwick, and the United Kingdom Automation Council. The Conference will be held at the University of Warwick which is located in the countryside between Coventry and Warwick, about an hour north of London by convenient train. Residential accommodation will be available at the University and there are good hotel facilities in the area.

The Conference will cover the application of systems engineering and control theory to the dynamic analysis and control of macro-economic models.

Primary topics include prediction, planning, and parameter estimation for national economies and social systems, with emphasis on the concepts of dynamics, control, and system identification.

Secondary topics include analyses of partial models in economic sectors such as consumption and investment systems, and studies of the inter-actions of technological, economic, and social forces.

The Organising Committee invite offers of contributions for consideration for inclusion in the Conference Programme. Those intending to offer a contribution should submit a synopsis with title (approximately 500 words) to the

IFAC/IFORS Conference Secretariat,  
IEE Conference Department,  
Savoy Place, London WC2R 0BL./England

not later than 1st June 1972. On a separate sheet of paper, the following items should be stated: (1) Number of Programmes/Registration Forms required. (2) Title of contribution offered. (3) Whether or not residential accommodation at the University is required. (4) Name and address.

Authors whose synopses are selected will be notified by the Conference Secretariat during July 1972.

Potential attendees (non-authors) should also write to the Conference Secretariat and make their statements according to Points (1), (3) and (4) above.

Registration Forms and further Programme details will be sent a few months before the event to all who make a request.

Social events and activities, including a programme for excursions for ladies and other guests, will be arranged.

## Control of Water Resource Systems

Under this title an IFAC Symposium dealing with the control of water resources, storage, distribution, utilization, pollution and desalination will be held in Haifa, Israel, from September 17 to 21, 1973. The IFAC Technical Committees on Applications and on Systems Engineering are sponsoring the symposium with the

co-operation of the International Commission on Water Resources Relations and Systems of the International Association of Hydrological Sciences. The organization is in the hands of the Israel Committee for Automatic Control, National Member Organization of IFAC.

The following fields will be covered:

**PLANNING THE DEVELOPMENT AND CONTROL OF WATER RESOURCES:** Surface waters - ground water - surface-aquifer systems.

**WATER STORAGE:** Optimal operating rules - multi-structure multi-purpose systems - automatic control of reservoirs.

**WATER DISTRIBUTION SYSTEMS:** Automatic operation of major conduits - control of discharges in open channels - pipelines and pressure conduits.

**UTILIZATION OF WATER:** Operation of irrigation systems - control of urban supply networks - integration of water systems in industrial processes.

**WATER QUALITY CONTROL:** Application of control theory to maintenance of quality standards - operation of water treatment plants - regional planning of water quality control systems.

**DESALINATION OF SALINE WATER:** Automatic operation of desalination plants - integration of desalination plants within existing water systems - control of desalination processes.

Emphasis will be placed on the methodology used in controlling water resource systems (this may include engineering, economic and social components) as well as on specific case studies of the application of control theory in water resource systems. Proposed topics for consideration in the fields mentioned above are:

- methodology for planning and design
- development of software for systems control
- adaptation of hardware to water resource systems case histories.

Potential authors are invited to submit an abstract (in four copies, English or French language, 200-300 words) by June 30, 1972, to the Chairman of the International Programme Committee,

Prof. N. Buras  
Technion,  
Israel Institute of Technology,  
Haifa, Israel.

## Automatic Control in Glass

An IFAC Symposium in this field will take place at Purdue University, Lafayette, Indiana, USA, from September 25 - 28, 1973. It is sponsored by the IFAC Technical Committee on Applications in co-operation with the American Automatic Control Council (National Member Organization of IFAC), the Purdue University (Laboratory for Applied Industrial Control, and Automatic Control Center), the Glass Industry Committee of the Institute of Electrical and Electronics Engineers (IEEE), and the Instrument Society of America (ISA).



The symposium is directed toward applications of control systems and instrumentation in the glass industry. Papers are invited on the following topics:

- Process Modelling and Simulation
- Electric Melters and their Control
- Automation Techniques
- Computer Control Systems
- Automation of Laboratories and Pilot Plants
- Instrumentation Systems (Temperature Measurement, Radiation Pyrometry, Automatic Inspection, Automatic Gauging).

Offers of papers with title and abstract (in English) for preselection review should be submitted by November 1, 1972 to:

Symposium on Automatic Control in Glass  
Division of Conferences, Room 116, PMC  
Purdue University  
Lafayette, Indiana 47907 / U.S.A.

The subsequent submission and presentation of the papers should also be in English. There will be no simultaneous translation planned for the symposium.

Requests for further information should be directed to the Organizing Committee at the address given above.

### 6th IMEKO Congress

The International Measurement Confederation will hold its 6th Congress in Dresden, German Democratic Republic, June 17 to 23, 1973, with the participation of IFAC, IFORS (International Federation of Operational Research Societies), IFIP (International Federation for Information Processing) and AICA (International Association for Analogue Computation). The theme of the Congress is Acquisition and Processing of Measurement Data for Automation and the topics of the programme are:

- Theory of Measurement Systems
- The Automation of Instrument Design, Manufacture and Testing
- Means and Methods for Measurement and Computer Interfacing
- On-line Measurement in Continuous Processes
- Measurement for the Automation of Piece and Batch Processes
- Measuring Systems for the Control of Pollution
- Testing, Calibration and Evaluation of Industrial Sensors and Measuring Systems.

Potential authors desirous of offering a paper should immediately contact the IMEKO Member Organization in their country or the

IMEKO Secretariat  
P.O.B. 457  
Budapest 5, Hungary

who will provide the detailed Call for Papers together with an application form to be returned by the author with his abstract (one typewritten page, in three copies, English language preferred, if possible also in the other three IMEKO languages French, German and Russian). The deadline for the submission is June 1, 1972. Full papers are required by February 28, 1973.

### New IFAC Publications

**DIGITAL COMPUTER APPLICATIONS TO PROCESS CONTROL** - This is the 3rd ISA published proceedings volume of IFAC symposia on that topic and it relates to the 3rd IFAC/IFIP (International Federation for Information Processing) Conference held in Helsinki, Finland, June 1971. The volume contains 66 papers in the areas of power plants and systems, pulp and paper processes, metallurgical processes, chemical processes, mineral and cement processes, soft ware, environmental, warehousing, hardware. Also included in the proceedings volume are transcriptions of discussions, opening and closing speeches, and transcriptions of panel sessions.

Edited by *W. E. Miller* and *A. Niemi*. 650 pages, hard cover. Price: US \$ 42. Orders should be addressed to: Instrument Society of America (ISA), 400 Stanwix Street, Pittsburgh, Pa. 15222/USA; or (for purchasers in Europe) to: Pertel Ltd., Cursitor Str., Chancery Lane, London E.C. 4/U.K.; or (for purchasers in Japan) to: Taisay Koheki Comp. Ltd., Higashinakano 1-46-19, Nakano-ku, Tokyo/Japan.

**AUTOMATIC CONTROL IN SPACE** - The proceedings of the 4th IFAC Symposium on the topic, Dubrovnik, Yugoslavia, September 1971, is now available for sale. The volume not only contains seven more technical papers than included in the preprints but also a Foreword by the Chairman of the Organizing Committee *Dr. M. Vukobratović*, as well as his survey paper, a contents list, and an insert with corrections requested by a number of authors. 69 papers altogether deal with subjects such as roving vehicles, walking systems, manipulators; reentry and soft landing; attitude control; orbital control; satellite system; underwater control; optimization methods; optimal filtering; stabilization; space systems. 790 pages, soft cover. Price: US \$ 40. Orders should be addressed to: „TEHNIKA”, Kneza Milosa 7/III, Belgrade, Yugoslavia.

### Two New Journals on Automatic Control

**AUTOMATIC CONTROL THEORY AND APPLICATIONS (ACTA)** is a Canadian control journal encouraging the publication of papers from all countries on all facets of automatic control in English or French. The Editor is *Dr. M. H. Hamza* of the University of Calgary, Alberta, Canada. An international staff of Associate Editors is presently being formed.

Generally, articles may be of two basic types:

- Original contributions, surveys or tutorial papers.
- Letters to the Editor, discussions of published papers, brief contributions.

Information about meetings and new books on control is given in each issue.



Initially, ACTA will be issued three times per year. The annual subscription rate for individuals is Canadian \$ 12.00; and for libraries, government departments or industrial establishments, Canadian \$ 24.00.

Subscriptions and further information may be obtained from:

ACTA Press,  
P.O.Box 3243,  
Postal Station B,  
Calgary, Alberta, Canada.

**PROBLEMS OF CONTROL AND INFORMATION THEORY** - The Presidium of the Academy of Sciences of the USSR and of the Hungarian Academy of Sciences have established a new scientific organ "Problems of Control and Information Theory". The Editors-in-Chief are *B. N. Petrov* (Moscow) and *F. Csaki* (Budapest).

This international periodical affords publicity for studies on recent research, for surveys on research programs and reports on the latest results. It is primarily a publication forum of the two countries but also papers of international interest from other countries are welcome. The papers should be written preferably in English or Russian.

The periodical is planned to start with four issues a year making up a volume of some 320 pages. Orders should be sent to a bookseller or in case of difficulty to KULTURA Hungarian Trading Company for Books and Newspapers, P.O.B. 149, Budapest 62. Subscription rate annually: \$ 16.00, DM 64,-, £ 6.80.

### Systems Theory and Applications Course

The Rensselaer Polytechnic Institute at Troy, N. Y., USA, offers the following two courses which may be taken either separately or as a sequence:

- Digital Signal Processing Fundamentals / Implementation and Applications; July 17 - 21, 1972
- Online and Systems Applications of Digital Processing; July 24 - 28, 1972

Both courses are planned primarily for engineers in design, development, research or applications, or for technically oriented middle management with responsibility for supervision in these fields.

Contact address for additional information:

Rensselaer Polytechnic Institute,  
Office of Continuing Studies,  
Troy, New York 12181, USA.