



NEWSLETTER

International Federation of Automatic Control

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7th Triennial IFAC World Congress (Helsinki, Finland. 12–16 June 1978) Local Organizer of the Congress, Finnish Society of Automatic Control

Scope of the Congress

The scope of the Congress covers Science and Technology of Control in the broadest sense in all systems in both theory and application.

The sphere of interest of IFAC and its world congresses is indicated in detail by its technical committees: Applications, Biomedical Engineering, Components and Instruments, Computers, Economic and Management Systems, Education, Manufacturing Technology, Mathematics of Control, Social Effects of Automation, Space, Systems Engineering, Terminology and Standards, and Theory.

The technical sessions will be collected in coordinated series around topics of special interest. The proposed special interest sessions are the following:

Applications

- Control of Power Plants and Systems
- Metallurgical Process Control
- Control of Pulp and Paper Processes
- Methodology for Chemical Process Synthesis
- Design and Control of Large Complex Chemical Process Systems
- Energy and Rawmaterial Savings by Automatic Control
- Applications of Microprocessors in Process Control
- Environmental Systems
- Advanced Process Computer Applications (as computer-aided design of control systems, adaptive control and optimization).

Biomedical Engineering

- Control Automation in Health Care
- Identification of Biochemical Processes

Component and Instruments

- Application of Methods of Control and Dynamics
- Theory of the Analysis and Design of Components

Computers

- Microprocessors
- Software for Control

Economic and Management Systems

- Methodology and Applicability of Control Science in Economic and Management Systems

Education

- Manufacturing Technology
- Industrial Robotics

Mathematics of Control

- Differential Games
- Singular Perturbations
- Nonlinear Programming Applications to Control

Social Effects of Automation

Space

- Automatic Control in Space Systems
- Control and Optimization Problems in Aeronautics

Systems Engineering

- Urban, Regional and National Planning
- Large Scale Energy Systems
- Water Resources
- Transportation Systems
- Modelling and Control of Plants of Animal Production Processes

Terminology and Standards

Theory

- Multivariable Control
- Adaptive Control
- Identification and Estimation
- Optimal Control Including Stochastic Systems

Prospective contributors are invited to submit papers for the Congress. The papers shall be written and submitted according to the following rules:

Date: To assure consideration, the draft manuscripts and abstracts must be postmarked by May 1, 1977.

Mailing address: Mail four copies of manuscripts and abstracts to your National Member Organization, if none to the IFAC 78 secretariat.

Identification: Clearly state that your paper is being submitted for IFAC/78 Helsinki. Identify the primary Technical Committee area to which it belongs. If appropriate identify also one of the special interest sessions. Provide this information both with the manuscripts and the abstracts.



Languages: The organizers ask the authors to provide the manuscripts and abstracts in English which is the preferred working language of the Congress.

Important Dates and Deadlines

- Submission of manuscripts and abstracts: 1 May 1977
- Notification of acceptance: 31 October 1977
- Mailing of advance program: November 1977
- Submission of final manuscripts and abstracts: 31 December 1977
- Early registration: Before 31 March 1978
- Congress: 12-16 June 1978

Second Announcement and Call for Papers available from your National Member organization or from:

IFAC 78 Secretariat
POB 192
00101 Helsinki 10, Finland

IFAC WORKSHOP

Control of Management Systems (Varna, Bulgaria. 10-13 October 1977).

Sponsored by: IFAC Technical Committee on Economics and Management Systems, IFAC Committee on Systems Engineering, and IFORS.

Organized by National Centre for Cybernetics and Computer Techniques.

Purpose

The aim of the Workshop is to discuss experiences and exchange information on the problems connected with the *Control of Management Systems*, considering these systems as dynamic.

Attention will be given to the management system control techniques irrespective of the specific subject of the control. Speakers are invited to present papers on each of the following topics:

1. Control of large-scale management systems
2. Balance between centralized and decentralized control
3. Management structure
4. Application of pattern recognition and artificial intelligence in economics and management.

First announcement and call for papers available from:

National Centre for Cybernetics and Computer Techniques of the Committee for Science, Technical Progress and Higher Education
8 Slavyanska Street, Sofia, Bulgaria

NON-IFAC EVENTS

6th International Conference of the IMEKO Technical Committee on Measurement of Force and Mass with Special Emphasis on Industrial Weighing (Odessa, Soviet Union. 20-22 September 1977).

For first circulation and call for papers contact:

IMEKO Secretariat
H-1371 Budapest, POB 457
Hungary

Distributed Computer Control Systems (University of Aston in Birmingham, U.K. 26-28 September 1977).

Aims

It is the aim of the Conference to bring together the users, designers, and research workers of computer control systems in order to present and discuss the recent developments in the hardware, software, theory, design and application of systems in which the control functions are distributed throughout the controlled system.

Scope

The topics in the programme will deal with the characteristics and structures of distributed control systems including: Implementation using microprocessors, microcomputers and minicomputers, intercommunication, parallel working, information processing and display, programming languages, software structure, management of software design, applications, economics, reliability and maintenance, human factors, standardization of interfaces.

Further information available from:

The Institution of Electrical Engineers
Savoy Place, London WC2R 0BL
Great Britain.

EUROMICRO, Third Symposium on Micro-processing and Microprogramming (Amsterdam, Holland. 3-6 October 1977).

Organized by the European Association for Microprocessing and Microprogramming (EUROMICRO), in collaboration with the ECI and IEEE Computer Society, and with the support of the EEC Commissions and the European Research Office.

Papers covering new concepts, recent developments, and original applications are solicited.

Deadlines

Four copies of the manuscripts and 200-word abstract should be received by the Program Chairman by **March 14, 1977.**

Authors will be notified of acceptance by June 1. The final camera-ready paper will be due on June 27, 1977.

Call for papers available from:

Ted Holtwijk, Philips Elcoma,
Bldg. BAE 2, NL-Eindhoven
Netherlands

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