



IFAC

NEWSLETTER

No. 4 September, 1976

**International Federation
of Automatic Control**

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2800 Lyngby, Denmark

International Symposium on New Trends in System Analysis (Rocquencourt, France. 13-17 December 1976)

The Symposium is organized under the sponsorship of:

The Association Francaise pour la Cybernétique Economique et Technique (AFCET)
The International Institute for Applied Systems Analysis (IIASA)
The International Federation of Automatic Control (IFAC)

The technical programme will include six sessions:

- I Industrial Robotics and Applications of Microprocessors (½ day)
- II Applications of Systems Analysis to Energy Problems (½ day)
- III Applications of Control Theory (1 day)
- IV Pollution and Environment Problems (½ day)
- V Control of Distributed Parameter Systems (1½ day)
- VI Control of Economic Systems (½ day)

The symposium programme will only include communications presented by invited speakers.

Information and program is available from:

Public Relations Department
IRIA
Domaine de Voluceau
78150 Le Chesnay, France
Telephone: 954 90 20 Extension 600

Telex: IRIA 600033 F

IFAC Workshop on the Control Aspects of Artificial Internal Organs (Jablonna, Poland. 5-12 May 1977)

Purpose

The Workshop is regarded as a forum for constructive interaction between the representatives of the world community of scientists which contribute to the development or investigations of artificial internal organs and international cooperation in this field. Participants are expected to deliver lectures on problems with which they are presently working.

Scope

It is proposed to focus attention on the problems of kidney, lungs, heart, pancreas and liver and to include in the Workshop programme the following central topics:

1. Sensors
2. Control circuits (short and long term applied solutions)
3. Reliability and safety
4. Man-artificial internal organ interfaces
5. Economic aspects (initial cost and operation)

Time schedule

Submission of abstracts December 31, 1976

Registration January 31, 1977

Further information from

Dr Wojciech Zmyslowski
Instytut Biocybernetyki i Inżynierii Biodynamicznej
00-818 Warszawa
KRN. 55, Poland

IFAC Workshop on System Analysis Applications (Bytom, Poland. 1-6 June 1977)

The Workshop is sponsored by IFAC and the Polish Academy of Sciences.

Purpose and scope

The aim of the Workshop is to discuss recent results in the development and application of systems analysis in the area of socio-economic and technological systems.

Technical papers dealing with research, planning and technology are sought in the following areas:

multilevel and hierarchical control
optimization and mathematical modelling
systems theory in economics
large scale regional development programmes
control in large industrial processes
environment dynamics and control
management in large systems

Authors are asked to submit titles and summaries (200-300 words) in English, 3 copies, to

Dr. Krzysztof Cichocki
Program Committee
Institute of Organization, Management and Control
Sciences, Polish Academy of Sciences
55 KRN St. 00-818 Warsaw, Poland

not later than September 15, 1976

Preliminary announcement and call for papers are available from the address above.



Second IFAC Symposium on Control of Distributed Parameter Systems (Coventry, England. June 28 – July 1 1977)

Scope

Topics to be included are:

The mathematical theory of infinite dimensional systems: partial differential equations, functional differential equations, stochastic differential equations, functional analysis, theory of moments, semigroups and evolution operators.

Systems theory concepts: stability, controllability, observability, optimality, realization, identification.

Special problems for PDE 's. boundary and point sensors and controls, geometrical control (design of the shape of bodies).

Computational techniques: discretization, finite elements, hierarchial methods, identification algorithms.

Special emphasis will be given to the applications of design and instrumentation and identification techniques to real problems occurring in industrial processes, biomedical systems, fluid dynamics, transportation systems, etc.

Time schedule

Submission of abstracts	December 1, 1976
Submission of papers	January 1, 1977
Notification of acceptance	April 1, 1977

First announcement and call for papers available from

The Secretary, IFAC CDPS Symposium
Control Theory Centre, University of Warwick
Coventry, England
Telephone: Coventry 24011

IFAC Symposium on Environmental Systems Planning, Design and Control (Kyoto, Japan. 1-5 August 1977)

The symposium is sponsored by IFAC under the Aegis of the Science Council of Japan

Purpose

In view of the growing importance of environmental problems all over the world, it is the aim of the Symposium to discuss experiences and exchange information on the problems encountered in different parts of the world, and to contribute to the furtherance of the tech-

nology of planning, design and control of environmental systems.

Second announcement and call for papers from:

The Secretariat of
IFAC Environmental Systems Symposium
c/o Professor Y. Sawaragi
Department of Applied Mathematics & Physics
Faculty of Engineering
Kyoto University
Kyoto, 606 Japan
Phone: (075)-761-9377
Cable: IFAC KYOTO

IFAC Workshop on Urban, Regional and National Planning; Environmental Aspects (UNRENAP) (Kyoto, Japan. 5-6 August 1977)

The subjects in this workshop are restricted to the environmental aspects and to the questions as:

1. What kind of model can be constructed to describe environmental aspects of UNRENAP problems?
2. What kind of methodology can be used to solve the problems?

Topic of the workshop

The topics will be the relevance of system concepts to Urban, Regional and National Planning putting emphasis on the environmental aspects

First announcement and call for papers from

IFAC Workshop on UNRENAP Organizing Committee.
c/o Professor T. Hasegawa
Department of Applied Mathematics and Physics
Kyoto University
Kyoto, 606, Japan

Preprints of the Seventh IFAC Symposium "Automatic Control in Space", 17-21 May, 1976

over 1000 pp, are available for DM 110,- plus DM 3,- postal charge per set. (There will be no Proceedings).

Order from: VDI/VDE-Gesellschaft
Mess- und Regelungstechnik
P.O. Box 1139
D-4000 Düsseldorf 1/FRG

Telex: 08586525

The Royal Society: A Meeting for Discussion "The Use of Operational Research and Systems Analysis in Decision Making."

(London, England. 28 & 29 October 1976)

Details from:

J. F. Coales, F.R.S.
Tel: 01-839 5561 ext. 278
Telex: 917876