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## IFAC/IFORS Symposium on Comparison of Automatics and Operation Research Techniques Applied to Large Systems Analysis and Control (Toulouse, France, March, 1979).

Organized by AFCET, Association Francaise pour la Cybernétique Economique et Technique

*Sponsors:*
— IFAC (International Federation of Automatic Control)
— IFORS (International Federation of Operational Research Societies)

*Aims of the Symposium:*

The operational research techniques were designed during the last world war to solve military logistical problems: They can now be applied to large systems studies: industrial, economical, etc. Automation techniques had the same evolution after the study of small size processes (fabrication units, small workshop, industrial machines, etc.), they can now be applied to large systems (factories, technical and economical systems, etc.).

Though these techniques are often the same, they have their own originality and are often complementary. Thus, it has been thought useful to organize a first common symposium which, after having reviewed the basic principles of those two sciences, will enable a direct comparison (advantages and disadvantages) of their applications in various fields (industrial, traffic, communication, economical...).

Please, address all scientific questions to:

Mr. M. Pelegrin
Président du Comité du Programme du
Symposium IFAC/IFORS
CERT — B.P. 4025, 31055 Toulouse Cedex,
France

Symposium Secretariat:

A.F.C.E.T. — 156 Boulevard Péreire
85017 Paris
France

## Second IFAC/IFIP Symposium on Software for Computer Control (Prague, June 10–16, 1979)

*Sponsored by:*
The International Federation of Automatic Control (IFAC).

*Co-sponsored by:*
The International Federation for Information Processing (IFIP).

*Organized by:*
Institute of Information Theory and Automation of Czechoslovak Academy of Sciences
IFAC/IFIP Software for Computer Control Symposium Committee

*Purpose:*
The aim of the Symposium is to discuss the present state of the software aspect in digital computer control of continuous processes. Consequently, not the automatic control theory, but its implementation in computer control software is emphasized.

*Topics:*
1. Real-time languages and operation systems for process computers and micro computers/processors
   — sentence-type languages, problem oriented languages, fill-in-blank languages
   — multiprocessing
   — standardization
2. Computer aided design for digital computer control
   — interactive software packages
   — problem oriented packages
   — standardization
   — comparison studies
3. New programmed algorithms for digital computer control and micro-computers/processors
   — optimal control
   — multivariable control
   — self-adjusting regulators
   — numerical aspects
4. Implemented case studies of digital computer control
   — process control
   — large-scale systems
   — control in power industry
   — flight control
   — environment and pollution control
   — control of experiments and testing

## Call for papers:

*Call for papers:*

Prospective contributors are invited to submit abstracts in English of 300—500 words, clearly indicating the contribution of the proposed paper and its relevance to the theme of the Symposium.

*Time schedule:*

| | |
|---|---|
| Abstracts | June 1, 1978 |
| Acceptance | October 1, 1978 |
| Papers | December 31, 1978 |
| Registration | April 1, 1979 |

Further information and all correspondence:

## VIII IFAC Symposium: Automatic Control in Space (Oxford, U.K., 2—6 July, 1979)

*Sponsored:*

International Federation of Automatic Control (IFAC)

*Organized by:*

The Institute of Measurement and Control on behalf of the United Kingdom Automatic Control Council.

*Topics:*

The IFAC Space Committee is concerned with the areas of:

automatic control
open and closed loop control and stabilization
man-in-the-loop control
remote control

Combinations of these modes in space and space related investigations and applications of which some specific fields are:

space launch and landing systems
spacecraft and satellites (incl. rendezvous problems)
space laboratories and telescopes
aerospace systems
planetary and earth/space related surface systems
use of spacecraft for terrestrial navigation
underwater systems
inertial systems for underwater positioning
manipulators, tele-operators
space experiments
navigation, guidance and control systems (including components such as sensors, effectors and power control)

*Timetable.* The key dates are:

| | |
|---|---|
| 12 May, 1978 | — Deadline for receipt of abstracts (in English) |
| 1 July, 1978 | — Full papers requested |
| 1 Dec. 1978 | — Deadline for receipt of full papers |
| January, 1979 | — Accepted papers confirmed |

All enquiries and correspondence should be sent to

## 5th IFAC Symposium on Identification and System Parameter Estimation (Darmstadt, Federal Republic Germany, September 24—28, 1979)

*Sponsored by:* IFAC

*Organized by:*

VDI/VDE — Gesellschaft Mess- und Regelungstechnik

*Topics:*

The aim of the Symposium is to present, discuss and summarize recent advances in theory and application of designing mathematical models of dynamic processes and signals by methods of identification and parameter estimation. Special emphasis will be given to the topics listed below:

### 1. Identification Methods

New ways, methods, and theories of identification may be related to:

- correlation technique
- parameter estimation methods
- state estimation methods
- probability methods
- model structure determination
- selection of test signals
- open and closed loop identification
- pattern recognition
- comparisons
- software packages

### 2. Identification Applications

Results on the identification of the following technical and nontechnical processes/systems will be highly welcome:

- chemical and petrochemical processes
- iron and steel processes
- basic industries
- power and heating systems
- transportation systems
- aero and space vehicles
- economic and ecologic systems
- biological and medical systems

### 3. Combinations of Identification and Other Methods

Since many identification methods have been developed in recent years, time has come to show, for which problems process and signal identification can be applied. Therefore papers will be preferred which show as well process identification as its combination with other methods, like:

- (computer aided) design of control systems
- adaptive and selftuning control systems
- process optimization
- process monitoring and process fault detection
- estimation of not directly measurable variables
- prediction of signals
- modelbuilding and simulation of processes

Experts in this field are invited to offer papers on the listed topics.

Abstracts of such papers in English (200—300 words) should be received by the Organizing Committee no later than September 30, 1978.

The papers will be preselected on the basis of these abstracts. The authors will be notified by December 15, 1978.

Full papers (in English only) have to be submitted by March 20, 1979. The authors will be notified on final paper acceptance by April 30, 1979.

All correspondence is to be addressed to: