



NEWSLETTER

No. 3 July, 1976

**International Federation
of Automatic Control**

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2800 Lyngby, Denmark

Fourth IFAC Symposium on Multivariable Technological Systems (Fredericton, N.B. Canada, 4-8 July, 1977)

The aim of the Symposium is to discuss recent results in the development and application of analysis and design techniques for the control of multivariable systems.

Topics included within the above theme are such aspects as: the modelling and identification of multivariable processes, comparisons of various types of design technique, computer aided design, multilevel and hierarchical control, and adaptive control; work describing applications of the above methods in the design of controls for industrial processes, prime movers, nuclear reactors, electrical power plants, electrical drivers, surface transportation, aerospace and space vehicles, walking systems, manipulators and biomedical applications.

Second announcement and final call for papers available from:

The Secretary, IFAC MVTSS Symposium
Electrical Engineering Department
University of New Brunswick
Fredericton, N.B.
Canada, E3B 5A3

First IFAC Symposium on Discontinuous Computer Control Systems (Prague, Czechoslovakia, 19-23 September, 1977)

The organizer is the Institute for Application of Computing Technique in Control, Prague, with the cooperation of the Department of Automatic Control of the Faculty of Mechanical Engineering, Technical University of Prague and the Institute for Industrial Management Automation INORGA, Prague.

Basic topics covered by the papers are broadly divided into:

- Concepts and methods
- Structures of control systems
- Decomposition of large-scale problems
- Rationalized projecting methods
- Computer-aided projecting of control systems

- Standardization and unification of control algorithms
- Instrumentation systems
- Application of discontinuous control systems
- Practical experiences in control of technological processes
- Automation education and training in the field
- Man and control systems

Interested authors and all experts are invited to offer papers on the listed topics. Offers of papers together with Abstracts in English (300-500 words) in two copies should be received no later than 15 September, 1976.

All correspondence should be addressed to:

IFAC Symposium on Discontinuous Computer
Control Systems
Organizing Committee
Suchbatarova 4
160 00 Prague 6-Dejvice
Czechoslovakia

Second IFAC Symposium on Control in Power Electronics and Electrical Drivers (Düsseldorf, FRG, 3-5 October, 1977)

Topics:

1. Control systems employing electronic power converter circuits, control procedures.
2. Requirements imposed on electrical machines by converters and by operation in control loops.
3. Converter-fed AC- and DC-drivers.
4. Application of controlled industrial drivers.
5. Controlled drivers in traction; land transportation; linear motors.
6. Solid states energy conversion (HVDC, inductive heating, electrolysis, reactive power compensation, converters for solar cells and fuel cells, particle accelerators).

Prospective contributors are invited to submit abstracts in English of 300-500 words, describing new work in any of the above areas. The abstract should clearly indicate the contribution of the proposed paper and its relevance to the theme of the Symposium.

The closing date for submission of abstracts to VDI/VDE Gesellschaft Mess- und Regelungstechnik is 31 October, 1976.

The results of pre-selection by the International Programme Committee will be communicated to the authors by 15 December, 1976.

Final versions of papers invited as a result of a study of the abstracts should reach the Düsseldorf office not later than 15 March, 1977.

These should be in English or German, max. length 15 pages, and conforming to Guidelines, supplied by this office.

The International Programme Committee (IPC) will decide on the papers for presentation and will notify authors of the decision taken by 31 May, 1977.

First announcement and call for papers available from:

VDI/VDE-Gesellschaft Mess- und Regelungstechnik
Postfach 1139
D-4000 Düsseldorf 1/FRG
Tel.: (0211) 62 14 215
Telex: 08 586 525

Second IFAC International Conference on Systems Approach for Development (Cairo, The A.R.E., 26-29 November, 1977)

The purpose of the conference is primarily to formulate certain needs and problems of Developing Countries. The technical programme will consist of survey sessions, technical sessions and round table discussions.

The following topics will be emphasized:

- Infrastructure in developing countries
- Industrial applications
- Energy problems (resources, reserves, management...etc.)
- Food and agriculture development
- Management of water resources
- Healthcare planning
- Education planning and development
- Trends in housing and construction
- Social, economic and development planning
- Urban and rural planning
- Environment and pollution
- Administration and management and other topics related to developing countries

Abstracts to be submitted must be in English and about 1000 words in length. Three copies of abstracts should be sent not later than 15 August, 1976 and all correspondence addressed to:

Eng. Sayed Abdel Kader El Sheshe
Secretary of Egyptian High Committee of
Automatic Control (E.H.C.A.C.),
6, Khalil Agha Street
Garden City
Cairo, Egypt

Cables: TANFIZ CAIRO
Telex: 2166 TANFIZUN

Papers will be provisionally selected on the basis of the abstracts. Authors will receive notice of acceptance of abstracts by 30 October, 1976 and this will be accompanied with details regarding the date of submission for the full papers.

1975 IFAC/IFIP Workshop on Real-Time Programming Edited by P.D. Griem, Jr. Proceedings

of the Workshop (Boston, MA, 21-22 August, 1975)

The state-of-the-art, innovative design and programming methods are discussed in the second Workshop on Real-Time Programming sponsored by IFAC/IFIP.

Topics:

- CAMAC
- Structured programming
- Definition language for development of software system
- Real-time programming and Concurrent Pascal
- ALGOL 60 extension on DEC system 10
- Programming packed process data
- Error detection
- Operating systems for supervision in the future and cooperating schedulers
- System construction method
- Modularity
- Parallel processes model
- Nested interrupts and controlled preemptions
- Micro processor-based communication and instrument control for distributed control systems
- Real-time basic used in distributed control network
- Daresbury computer network
- Real-time pattern recognition system on a multi-processor configuration
- Integrating remote minicomputer into a central computer's file system

Order the Proceedings from ISA's Publication Department, 400 Stanwix, Street, Pittsburg, PA 15222, U.S.A. Tel. (412) 281 3171. Purchasers in Europe order from your local bookseller or:

John Wiley and Sons Ltd.
Baffins Lane
Chichester, Sussex PO19 1UD
England

Non IFAC events: IMECO Technical Committee on Higher Education Southern Hemisphere Colloquium "The Nature and Scope of Measurement Science" (Armidale, Australia, 5-9 November, 1976)

The Institute for Instrumentation and Control, proposes to sponsor a Regional Colloquium on "Nature and Scope of Measurement Science" at the University of New England, Armidale, Australia, on 5-9 November 1976.

The objectives of the colloquium are:

to create an opportunity for exchange of ideas and experience in measurement science education among people working in this field throughout the South East Asian and Pacific regions

to consider ways of improving Measurement Science education and understanding throughout the region.

Further information from:

The Organizing Secretary
IMEKO TC1 Regional Colloquium
c/o Department of Continuing Education
The University of New England
Armidale, N.S.W. 2351
Australia