



**International Federation
of Automatic Control**

NEWSLETTER

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SOTAC 79 IFIP/IFAC Working Conference: Socio-Technical Aspects of Computerisation (Budapest, Hungary, January 15–19, 1979).

Local Organization:

John von Neumann Society for Computing Sciences
Computer and Automation Institute
Hungarian Academy of Sciences

Scope:

1. The definition of those social and technical characteristics, (both qualitative and quantitative) of computer-based automation, which affect the performance of the automated plant.
2. Methods of improving these characteristics.
3. The implementation of the suggested improvements.

These three themes will hopefully be developed to formulate design criteria for man-machine systems.

The criteria should help the systems meet such requirements as

- easy and acceptable use
- a satisfactory work environment
- adequate operating facilities
- job satisfaction
- reasonable training requirements for operation
- good overall performance

Method:

The Working Conference will be intensively discussion-oriented. The aim of the organizers is to

- collect existing problems and ongoing activities
- arrange joint discussions to develop solutions

Arrangements:

Attendance at the Working Conference will be *by invitation only*, restricted to a total of about 40 people.

Applicants for participation will be notified of the International Program Committee's decision on their invitation by November, 1978.

First circular available from

Ms. Z. Rethelyi
Computer and Automation Institute,
Hungarian Academy of Sciences
H-1502 Budapest,
Kende utca 13-17, Hungary

IFAC Symposium on Computer Applications in Large Scale Power Systems (Bangalore, India, August 16–18, 1979)

The objective of the Symposium is

- to provide a forum for presenting research and development work in the areas pertaining to applications of computers in planning, operation, control and management of large scale power systems.

Among the topics to be covered are:

Modelling of large scale power systems, energy modelling and load forecasting, computers in power system planning and systems studies, power system security and real time computer control, optimization techniques in large scale power systems, power system dynamics and stability, management of electric power systems, computers in distribution systems and rural electrification schemes, diakoptics and sparse matrix techniques in power systems, and computer control of power stations, e.g. nuclear, thermal, etc.

- to provide state-of-art lectures in the latest trends in several facets of computer applications in power systems.
- to organize a tutorial course in the area of "Real-time computer control of power systems" OR "Computers in planning of large scale power systems".

Time Table:

Last date for submission of abstracts	August 15, 1978
Last date for approval of abstracts	September 30, 1978
Submission of final papers	December 31, 1978
Acceptance of papers	February 15, 1979
Last date for advance registration	May 31, 1979

Further information from

The Institution of Engineers (India)
8 Cookhale Road,
Calcutta-700020, India

Abstracts of papers are to be mailed to

Prof. M. A. Pai
Dept. of Electrical Engineering
India Institute of Technology
Kampur 208016
India

IFAC/IFIP Conference on Systems Approach and Computer Applications for Development
(Shiraz, Iran, May 28–30, 1980)

Organized by:

Iranian Society of Automatic Control Engineers

Purpose:

The aim of this conference is to investigate the applications of systems, control and computer engineering in various *facets of developing countries*. Special attention will be given to implemented projects and case studies completed or under planning.

Topics:

Industrial Problems: Oil, petrochemical, metallurgical, paper, cement, electronic, communication, etc.

Energy Problems: Nuclear, solar, oil reserves conservation, coal and uranium reserves management.

Agricultural Problems: Water resources, irrigation systems, food, crops management and control.

Social Problems: Environmental pollution, traffic, healthcare, economic planning management, housing, urban and rural development.

Educational Problems: Automatic control laboratories, curricula development, computer applications, control education, university/industry relations, relevant research/teaching methods of control.

Language:

The official language of the conference will be English. No simultaneous translation will be available.

Abstracts:

Authors are invited to submit five copies of a 200–400 word abstract in English on the above topics. The abstracts should reach the Chairman of the International Program Committee no later than August 1, 1979.

Time Schedule:

Abstract submission	August 1, 1979
Preliminary selection	October 1, 1979
Full paper submission	December 15, 1979
Final acceptance	March 1, 1980
Advance registration	April 1, 1980
Conference	May 28–30, 1980

Correspondence: (Abstracts and Papers)

Professor M. Mansour,
Chairman of IPC/IFIP – IRAN 1980
ETH – Zentrum,
CH-8092 Zürich, Switzerland

Others:

Secretary of IFAC/IFIP Conference, IRAN 1980
P.O. Box 737,
Shiraz, Iran.

Computer Applications in Chemical Engineering (Montreux, Switzerland, April 8–11, 1979)

12th Symposium sponsored by the European Federation of Chemical Engineering.

The general theme of the Symposium will be:

Some subsidiary themes:

Integrating the development process through the use of computers, advances in model building, the development, design and planning of batch

processes, education in the use of computers to aid engineering decisions, process synthesis and new flowsheeting methods, preliminary project evaluation – accounting for uncertainty, reliability, etc., computer applications to safety and hazard analysis.

Time Table:

Titles and abstracts (250 words) of proposed papers will be required by June 30, 1978. Full text of accepted papers (in English, French or German) must be submitted by November 30, 1978.

Technical enquiries and suggestions may be made to the joint chairmen:

Dr. Ing. R. Lierau
F. HOFFMANN-LA ROCHE & CO. AG.
Grenzacherstrasse 124
CH-4002 Basel

Prof. Dr. D. W. T. Rippin
Technisch-Chemisches Labor
E.T.H. – Zentrum
CH-8092 Zürich

9th IFIP Conference on Optimization Techniques (Warszawa, Poland, September 4–9, 1979)

Organized by:

Systems Research Institute, Polish Academy of Sciences

Purpose:

The aim of the Conference is to present recent advances in the theory of optimization and its applications to the solution of theoretical and practical problems in various fields with a particular emphasis to economics.

Topics:

Theory and computational methods of optimal control, stochastic control, differential games, optimization of problems governed by partial differential equations.

Mathematical programming – theory and methods of nonlinear programming including complementarity problems and global minimum seeking, integer programming, large-scale linear programming, multiobjective problems.

Problems of mathematical economics including modelling and optimization.

Applications of modelling and optimization techniques to

environmental and energy systems, technological systems, urban problems, biomedical and disease control problems.

Time Schedule:

Summary of the paper received	February 15, 1979
Acceptance of the paper	April 30, 1979
Submission of full paper	November 30, 1979

Language:

The official language of the Conference is English.

Correspondence:

All correspondence should be addressed to:

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Optimization Techniques,
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