



IFAC

NEWSLETTER

Editor:
Prof. M. Kümmel,
Dept. of Chem. Eng.
Technical University of Denmark
2800 Lyngby, Denmark

**International Federation
of Automatic Control**

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SF-00131 Helsinki
Finland

IFAC EVENTS

Second IFAC Symposium on Control in Power Electronics and Electrical Drives (Düsseldorf, Fed. Rep. of Germany, October 3–5, 1977).

Topics

1. Control systems employing electronic power converters; converter circuits, control procedures
2. Behaviour of inverter-fed electrical machines and requirements imposed by converter operation
3. Converter-fed a.c. and d.c. drives
- 4/5. Application of controlled industrial drives; controlled drives in traction; land transportation; linear motors
6. Solid state energy conversion (HVDC, inductive heating, reactive power compensation, miscellaneous)

The registration covers admission and a set of pre-prints:

Relevant works visits are planned on October 6, 1977

Reduced admission charge to INTERKAMA '77 Congress and Exhibition, October 6–12, 1977.

For programme and general information apply to the organizer:

VDI/VDE-Gesellschaft Mess-Regelungstechnik
P.O.B. 1139
D-4000 Düsseldorf 1 – Fed. Rep. of Germany
Telex: 08 586 525 – Tel.: (0211) 6214215

IFAC Symposium on Information-Control Problems in Manufacturing Technology (Tokyo, Japan, October 17–20, 1977).

Topics

The Symposium will cover the following topics:

1. Information-control issues associated with material processing such as numerical control of machine tools
2. Information-control issues associated with material handling such as robotics
3. Information-control issues associated with assembly and inspection
4. Information processing such as CAD, pattern recognition and artificial intelligence in manual-processes

5. Micro-economic modeling of manufacturing processes

Further information available from:

The Secretariat of IFAC Manufacturing Technology Symposium
c/o The Society of Instrument and Control Engineers
39 Shiba Kotohira-cho
Minato-ku
Tokyo, Japan

IFAC Publications

IFAC Information Brochure

A brochure titled *IFAC Information, Aims, Structure, Activities* is available free of charge from:

IFAC Secretariat
P.O. Box 27
SF-00131 Helsinki
Finland

Trends in Control Components – an IFAC monograph.

The authors of the book were selected by the IFAC Committee on Components. The Editor is Professor M. Natecz, Poland. The book (ca. 400 pages) contains 14 chapters written by 19 authors. Each chapter of the book is a survey paper in a particular field of control components. Two chapters deal with problems of mikrominiaturization of electronic and magnetic components, one – with electro-chemical components, two – with hydraulic components and fluidics, others – with the application of galvano-magnetic, optic and microwave phenomena in instrumentation. Three chapters present output devices such as displays and actuators. The final chapter on biological sensors and their models shows the pattern of transferring methods of control theory to biology.

This IFAC monograph has been published by North-Holland Publishing Co., P.O.B. 211, Amsterdam West, Netherlands. The price is Dfl. 80/\$30.95.

ISA Publication

1977 ISA Publications Catalog

The 48-page 1977 ISA publications catalog describes 220 preceedings, handbooks, textbooks, study guides, cassettes, films, videotapes, standards, and journals published by the Instrument Society of America. Each entry in this catalog contains detailed information on its contents, format and price. The catalog spans topics on all levels of instrumentation

and control technology from fundamentals to current design and application trends in science and industry. Areas covered include:

Aerospace	Maintenance
Analysis	Marine Sciences
Automatic Control	Measurement
Biomedical/Bioengineering	Mining & Metallurgy
Chemical & Petroleum	Modeling
Cryogenics	Power
Electrical Safety	Pulp & Paper
Environmental	Telemetering
Food	Temperature
Flow	

Request a free copy of the 1977 ISA publications catalog from

Instrument Society of America
400 Stanwix Street
Pittsburgh, PA 15222
Phone: (412) 281-3171

Modeling and Simulation, Volume 7

Two hardbound parts, 1337 pp.
ISBN (Part 1) 87664-322-5, (Part 2) 87664-323-3
List price (Each Part): \$25. Code:09

The proceedings of the 7th Annual Pittsburgh Conference on Modeling and Simulation contains 278 papers on modern systems modeling applications in science, industry, environment and socio-economic systems. Numerous papers focus on the justification of the 'science' of Modeling and Simulation. The Conference, held 26-27 April 1976, was sponsored by the University of Pittsburgh, Department of Chemical Engineering in cooperation with a number of technical societies.

Part 1 (697 pp.)

The papers examine theories, important parameters, and applications of modern systems science and industry.

Part 2 (640 pp.)

The reports fuse the basics covered in Part 1 into direct social applications, emphasizing economics, social systems, energy, and the importance of modeling and simulation.

Standards and Practices for Instrumentation, Fifth Edition.

Instrument Society of America, 1977
ISBN 87664-350-0, 930 pp., hardbound.
ISA members: \$80 List price: \$100 Code:SP5

The new revised edition of *Standards and Practices for Instrumentation* is thorough guide to what is widely accepted in instrumentation design and usage. Encompassing new areas of growing importance in the sciences and industries, the *Fifth edition* contains information on instrumentation terminology, design, specification, selection, application, measurement and testing.

The book is a dual purpose reference source, containing the texts of all current ISA Standards and Recommended Practices and serving as a directory to over 1000 additional instrumentation related standards developed worldwide.

Send orders for the *Fifth edition* and requests for additional information to: Publications, Instrument Society of America, 400 Stanwix Street, Pittsburgh, PA 15222.

In Europe, order from your bookdealer or John Wiley, Baffins Lane, Chichester, Sussex PO19 1UD, England.

In Asia (including Far and Near East, Southeast Asia, Australia, India and Pakistan) order from your bookdealer or Intercontinental Marketing Corp., IPO Box 5056, Tokyo 100-31, Japan.

NON IFAC EVENTS

International Conference on Energy Use Management (Tucson, Arizona, 85701, U. S. A. October 24-28, 1977).

Objectives and format

Resource limitations and environmental degradations have focused attention on societal needs and energy use. It has become increasingly obvious that there is an urgent need to examine energy use patterns in order to plan and provide for an optimal use of physical and capital resources in the quest for an equitable quality of life throughout the world.

It is the purpose of this conference to promote efficient energy use by providing a forum for the exchange of technical information, strategies, and experiences. The conference is uniquely designed to:

- focus on the end use of energy
- be international in scope of interest
- consider a complete range of social and economic activities
- present diverse philosophical views objectively.

The program will have a technical emphasis and center on recognized energy experts to present overviews on state-of-the-art concepts and solutions. The diverse impact of energy on humanity is reflected by the broad scope of topics to be treated.

Further information from:

Dr. Craig B. Smith
Energy Conference
P.O. Box 64369
Los Angeles,
California 90064
U. S. A.

2nd IMECO Symposium on Hardness Testing in Theory and Application (Stuttgart 17 - 18 May, 1978).

The Symposium will deal with the following topics:

- Hardness testing of metallic materials
 - Hardness testing of plastics and rubber
- Survey papers presented by international experts will cover these topics.

Further information available from

VDEI/VDE—Gesellschaft Mess- und Regelungstechnik
(GMR)
POB 1139, D-4000 Düsseldorf 1

Phone: (0211) 6214/228,
Telex: 08 586 525 vdi d

or

IMEKO—Secretariat
POB 457, H-1371 Budapest 5/Hungary

Phone: 124-116,
Telex: 22-57-92 mtesz