

**IFAC**

INFORMATION BULLETIN

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NEW FORMAT OF THE IFAC INFORMATION BULLETIN

The format of this publication differs very much as compared with the small brochures which have been issued for 8 years. In the future our Bulletin is intended to be shorter and to appear at more frequent intervals than the previous Bulletin which appeared only about three times a year. It is hoped to improve the efficiency of this means of communication among scientists and engineers of automatic control.

The Bulletin is distributed free of charge to all those who show an interest by informing the IFAC Secretary by letter or by returning the attached postcard. In some larger countries the national member organization will receive all Bulletins in bulk for distribution to the individuals. In other countries, the Bulletins are directly mailed to the individuals by the IFAC Secretary. In any case, it is necessary to notify the IFAC Secretary of the wish to get the Bulletin regularly. The Secretary's address is:

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CONTENTS

1. Third IFAC Congress London
2. Control Abstracts
3. Seminar on Graph Theory
4. Seminar on Optimal Control and Hybrid Computation
5. IMEKO Symposium on Microwave Measurement
6. International Conference on Automatic Operation and Control of Broadcasting Equipment
7. Fifth International Meeting of the International Association of Analog Computation (AICA)
8. 2nd Conference on Automatic Control in Chemical and Petrol Industries

1 - THIRD IFAC CONGRESS LONDON

The Third Congress of the International Federation of Automatic Control will, as already announced, take place in London from the 20th to the 25th of June, 1966. The United Kingdom Automation Council (UKAC) is the host organisation, and the conference will be presided over by John F. Coales, Professor of Control Engineering at Cambridge University, who is Chairman of UKAC and President of IFAC. H.R.H. Prince Philipp, Duke of Edinburgh has graciously consented to be Patron of the Congress.

The organisation of the Congress has been undertaken by the Institution of Electrical Engineers and the Institution of Mechanical Engineers; and the Society of Instrument Technology is organising the visit programme which follows the Congress.

The pattern of the Congress will be as follows:-

- (a) Survey papers to be presented at plenary sessions on the following subjects:-
 - The Economics of Control
 - Systems Engineering in Industry
 - Problems in Theory
 - Microelectronics
 - Real-Time On-Line Digital Computers
 - Automatic Control and Medicine
 - Systems Modelling and Identification
 - Adaptation Learning and Pattern Recognition
 - Computer Aided Design
 - New Methods of Controlling High Powers
- (b) Tutorial sessions to be held in advance of the appropriate technical sessions on the following subjects:-
 - Optimal Control
 - Computer Control
 - Statistical Identification Procedures
 - Computer Languages
- (c) Informal colloquia to be held in parallel with the technical sessions on the following subjects:-
 - Terminology
 - Education
 - Standards and Evaluation
 - Artificial Languages
 - Fluidics
 - Theory
 - Reliability
- (d) Technical sessions divided into the following subject groups: Continuous Linear Systems - The Use of Control Theory and Computers in Management - Random Theory and Statistical Analysis - Speed and Torque Control of Motors - Gas Industry and Railway Transport - Optimization Theory - Position and Speed Control - Steam Boilers and Heat Exchangers - Iron and Steel - Continuous Non-Linear Systems - Deterministic Optimal Control - Learning Systems - Sensors and Measuring Systems - Servomotors -

Power Systems (Thermal) - Paper and Glass - Actuators and Valves - Power Systems (Nuclear) - Machine Tools and Materials Sorting - Discrete Systems Analysis - Stochastic Optimal Control - Bio-Cybernetics - Fluid Logic and Control Devices - Chemical and Petroleum - Aerospace - Finite Automata Theory - Systems Dynamics - Control of Complex Systems - Adaptive and Self-Adjusting Systems - Aircraft Testing - Electric Logic and Control Elements - Propulsion Control - Reliability and Maintenance.

- (e) Film Programme: The Films Selection Sub-Committee will be pleased to receive information regarding films suitable for showing during the Congress.
- (f) Social Events: A programme of social events and a programme for ladies accompanying delegates has been arranged for the period of the Congress.
- (g) Arrangments are being made for delegates and their wives to visit places of historic and technical interest during the week following the Congress.

The official languages of the Congress will be English, French, German and Russian, and simultaneous translation facilities into these languages will be available at the Plenary Sessions.

Enquiries regarding the Conference should be addressed to:-
The Institution of Electrical Engineers, Savoy Place,
London, W.C.2.

2 - CONTROL ABSTRACTS

The Council of the Institution of Electrical Engineers, London, have decided, on the advice of the Board of the Control and Automation Division, and with the support and collaboration of the International Federation of Automatic Control, to issue a new publication entitled "Control Abstracts". The Consulting Editor will be Prof.Dr.Ing. Victor Broida and the actual Editor Mr. J.R. Boxcer.

This will form a third part of "Science Abstracts", which at present comprises "Physics Abstracts", published in association with the Institute of Physics and the Physical Society and the American Institute of Physics, and "Electrical & Electronics Abstracts", the new name of "Electrical Engineering Asstracts" as from January 1966.

"Control Abstracts" will cover all aspects of control and automation and will thus extend beyond the scope of electrical and electronic engineering. It is planned that the first publication of this new periodical should coincide with the Third International Congress of IFAC which meets in London from the 20th to 25th June 1966.

Orders should be sent to the Institution of Electrical Engineers, Savoy Place, London, W.C.2.

3 - SEMINAR ON GRAPH THEORY

A Seminar on Graph Theory will be held in Rome from 8 to 12 July 1966 under the auspices of the International Computation Centre. The Seminar will consist of invited lectures as well as contributed papers. The Seminar follows immediately after an International Symposium on Mathematical and Computational Methods in Social Sciences (Rome, 4 to 8 July, 1966). One session will be devoted to graph applications in Psychosociology and in Operational Research; another to the relations between graph problems and computers, another to combinatorial properties of graphs, etc.

The fee for participants who are not giving lectures is \$20 (including cocktail, mimeographed lectures, etc.). The official languages will be French and English, with simultaneous interpretation for the most important sessions.

4 - SEMINAR ON OPTIMAL CONTROL AND HYBRID COMPUTATION

Time and Place: The Seminar will be held from 8 to 20 August 1966 in Dubrovnik, Yugoslavia.

Aim: The Seminar is one in a series of advanced summer courses in engineering sciences organized by the Center of Advanced Studies (CAS) under the sponsorship of various industrial and educational institutions. The purpose of these courses is to provide postgraduate and postdoctoral students with the opportunity of discussing current research topics with leading experts in the specific field and to be introduced into new areas requiring exploration. The seminars also provide opportunities for lecturers from different countries and of varying backgrounds and viewpoints to exchange ideas and experiences.

Lectures: Lectures at the Seminar will be delivered by professors of international reputation drawn from different countries. The staff of lecturers includes Dr. R. Bellman and Dr. W. Karplus of USA, Dr. Moiseev and Dr. Rosonoer of USSR, Dr. Westcott of UK and Dr. Kulikowski of Poland. The lecturers will cover recent advances in the field of optimal control and hybrid computation and indicate new areas of research. Opportunities will also be provided for individual consultations between students and professors. Additional lectures are expected from Acad. Pontryagin of USSR and Dr. Zadeh and Dr. Kalman of USA. Seminar lectures will be edited and published in suitable form.

Participation: Participation in the Seminar is open to all postgraduate and postdoctoral students. The number of participants, however, is limited and priority will be given to members of CAS. A participation fee of 100 US dollars will be required from every non-member of CAS. Registration is most urgent.

Detailed Programme: A detailed programme of the Seminar will be issued in April 1966 and will be available on request.

Languages: Seminar lectures will be held in English and Russian. It is therefore required that all applicants should have a good working knowledge of one or both of the two languages.

Information and Correspondence: All inquiries and other correspondence concerning the Seminar should be addressed to: CAS Yugoslav Committee for Electronics and Automation, P.O.B. 356, Belgrade, Yugoslavia.

5 - IMEKO SYMPOSIUM ON MICROWAVE MEASUREMENT

Time and Place: 12th to 14th October, 1966. Hungarian Scientific Society for Measurement and Automation, Budapest V, Szabadságter 17, in the House of Engineering Societies.

Scientific Programme: The Symposium will be arranged as a series of round-table discussions, in the course of which 20 papers are planned to initiate most effective discussions. The Symposium is intended to deal with latest achievements in the theory and practice of microwave measurement. In view of this, papers discussing measuring methods and measuring equipment and the theory and design thereof, are invited. Participants will receive the full text of papers prior to the opening of the Symposium. Oral presentations - not exceeding 20 minutes - will serve to introduce the discussion.

The following items may be dealt with at the Symposium, a final grouping of which depends on the number and distribution of papers received and accepted.

- (1) Recent results achieved in the field of standards for microwave measurement (e.g. power, noise, attenuation, impedance, etc.) and calibration technique.
- (2) Automation of microwave measurement technique, e.g. new rapid measuring methods for large scale repetitive microwave measurements, self-balancing bridge methods, digital technique including recording and data printing applied to the field of microwave measurement.
- (3) Semi-conductors in microwave measurement, e.g. recent results in the field of PIN diodes, varactors, Hall-generators, magnetic semi-conductor elements, etc.

Languages: The official languages of the Symposium are German, English and Russian with provision for occasional consecutive interpretation between English and Russian, as the need arises.

Submission of Papers: Symposium participants proposing to present a paper are requested to forward a short summary in three copies, not later than 30th April, 1966, to the Organizing Committee (address below). Authors will receive notification on the acceptance of their papers, together with detailed instructions concerning the preparation of the final full text, which will have to be submitted before 31st July, 1966.

Mailing Address: Inquiries concerning the Symposium should be addressed to the Organizing Committee of the IMEKO Symposium on Microwave Measurement, P.O.B. 457, Budapest 5, Hungary.

6 - INTERNATIONAL CONFERENCE ON AUTOMATIC OPERATION AND CONTROL OF BROADCASTING EQUIPMENT

The Conference will be held at the Institution of Electrical Engineers, London, from 9th to 11th November, 1966.

Contributions are invited for inclusion in the programme. The Conference will cover all aspects of the automatic operation and control of broadcasting equipment including:

- Programme distribution systems
- Picture and sound generation equipment
(including automatic lighting control)
- Switching and distribution equipment
- Communication equipment
- Primary and relay transmitting equipment
- Monitoring equipment

(Reference to domestic receivers will not be included)

The meeting is sponsored jointly by the Television Groups of the IEE Electronics Division and the Institution of Electronic and Radio Engineers, the Television Society and the Institute of Electrical and Electronics Engineers Region 8.

Provisional titles and 250-word synopses of contributions should be sent before 31st March 1966 to the Conference Secretariat, Institution of Electrical Engineers, Savoy Place, London W.C.2, from whom further details of the Conference will be available.

7 - FIFTH INTERNATIONAL MEETING OF THE INTERNATIONAL ASSOCIATION OF ANALOG COMPUTATION AICA

We have announced in the IFAC Information Bulletin No. 22 (December 1965, page 19) this meeting as having to be held in Basle, Switzerland, from 29th August to 1st September, 1967. We are now informed that this meeting will be actually held in Lausanne, Switzerland, from 28th August to 2nd September, 1967.

8 - 2nd CONFERENCE ON AUTOMATIC CONTROL IN CHEMICAL AND PETROL INDUSTRIES

The Conference, organized jointly by the Association Française de Régulation et d'Automatisme (AFRA) and the Centre de Perfectionnement Technique, will be held in Rouen (Mont St-Aignan), France from 1 to 3 June 1966. Registration fee: 250 francs. Programme and registration forms can be obtained from the Centre de Perfectionnement Technique, 28 rue Saint-Dominique, Paris 7e, France.