IFAC International Federation of Automatic Control
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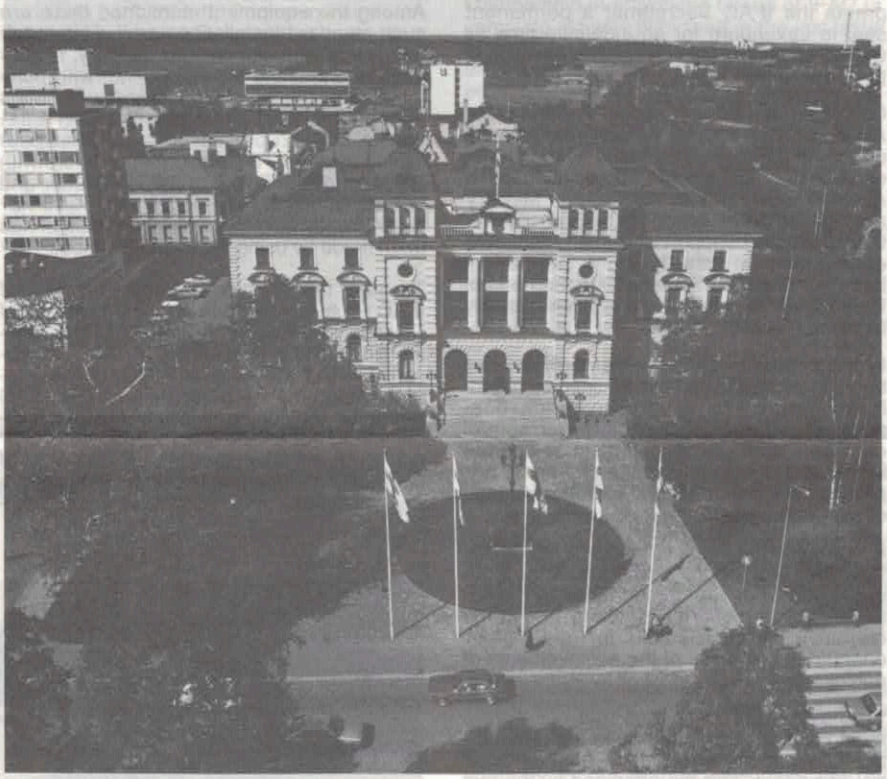
Council- and Related Meetings 1988
Oulu, SF/Tallinn, USSR
June 13 - 17, 1988



View of Oulu City Hall

The Finnish Society of Automatic Control, the Finnish NMO of IFAC, invited IFAC to hold its annual Council- and Related Meetings in Oulu in conjunction with the 3rd IFAC/IFIP/IEA/IFORS Conference on Man-Machine-Systems (June 14-16, at the University of Oulu).

By invitation of the USSR National Committee of Automatic Control, the Soviet NMO of IFAC, the Council Meeting will be continued in Tallinn, the capital of the Estonian SSR on June 17. The participants in this meeting will have the opportunity to visit the venue of the 1990 IFAC World Congress as well.

An important factor in these first meetings after the Munich Congress will be the meetings of the individual Technical Committees, which will consolidate their programs and further outline their activities. Also the executive committees will hold meetings to keep the Federation on its stable, future-oriented path. One of the highlights of the consultations will be the first meeting of the International Program Committee for the next World Congress in Tallinn, August 1990.

So far already more than 40 officers have stated their intention of participating in the meetings, which will once more provide a platform for an exchange of opinion and the opportunity to shape the future development of our Federation.

10th Anniversary - IFAC Secretariat in Austria

This year marks the tenth anniversary of the IFAC Secretariat's permanent seat in Laxenburg, Austria. To celebrate this occasion and to stress the traditionally excellent relations between the Austrian Government and IFAC, the President of IFAC, Prof. Boris Tamm, wrote the following letter to the Austrian Minister of Science and Research.

Your Excellency,

Ten years ago the Agreement between the Republic of Austria and the International Federation of Automatic Control - IFAC - was signed by the then Federal Minister of Science and Research, Dr. Herta Firnberg, and the President and Vice-President in office, Profs. U. Luoto and T. Vamos.

In the framework of this Agreement, Austria grants the IFAC Secretariat a permanent seat in Laxenburg for an indefinite time as well as an annual subsidy for the operation of the Secretariat.

On behalf of the International Federation of Automatic Control and the control engineers of its 44 member countries, I would like to express our most sincere appreciation to the Austrian Government, the Federal Ministry and the Austrian Academy of Sciences for their continued support and their invaluable contribution in establishing a permanent home for the IFAC Secretariat in the heart of Europe, in this hospitable and internationally highly respected country.

In the course of all these years, IFAC has become a strong and highly influential organization, providing a very important non-political and non-profit platform for control engineers from five continents to co-operate in the field of scientific research and its application in the interest and to the advantage of human progress.

Following in the steps of former IFAC Secretary, Prof.Dipl.Ing. Fred Margulies, the Federation attaches great importance to the social effects of modern technology and to the responsibility of scientists in truly human oriented applications of the achievements of engineering.

We have great confidence that our Agreement plays a significant role in the remarkable increase of the activity of Austrian control engineers. This is underlined by the fact that many IFAC-sponsored scientific events have been organized in Austria by the National Member Organization in the course of the last years.

Laxenburg is also the permanent venue for annual meetings of the IFAC Presidents, where they discuss informally the current- as well as long-term strategies of the Federation. This occasion is also used to strengthen the ties between IFAC and the Federal Ministry of Science and Research, the Austrian Academy of Sciences and other Austrian institutions, by meeting representatives of these bodies; in addition, close contact is also held with our colleagues at IIASA -, our neighbours in Laxenburg, with whom a fruitful cooperation has been established over these last ten years.

Let me once again express my firm belief in the significance and usefulness of our mutual cooperation. I do hope that we shall have the opportunity to celebrate the next anniversary of our Agreement in the same spirit in 1998.

News of the Secretariat

In the course of its 10 years in Laxenburg, Austria, the IFAC Secretariat has become a clearing house for information for all our officers and the place to turn to if questions arise from within the control engineering community.

To make the Secretariat's task as easy as possible, it is equipped with the latest communication media, since keeping contact with all persons concerned and doing so as quickly as possible is one of the most essential features of the Secretariat.

Among the equipment mentioned there are such standard installations as the latest telex system with display and memory, a telecopier connecting the Secretariat with places all over the world in just a few seconds and, as the latest development and in addition to the text-processor, a desktop publishing system. This equipment will forthwith be used for the layout of the Newsletter and of various brochures. As you may have noticed already also this Newsletter edition has been made by using the new equipment.

To mark this anniversary, the President of IFAC wrote a letter to the Austrian Ministry of Science and Research (see left). The Minister invited the Presidents of IFAC, representatives of the Austrian NMO, of the Austrian Academy of Sciences, of the IFAC Beirat for the cooperation with Austrian institutions and of IIASA to a reception and dinner which will take place in the framework of the traditional Informal Presidents Meeting in April this year.

The staff of the IFAC Secretariat, from left to right:
B. Aumann, E. Rudas, E. Löschinger

Information Brochure

The 1988 edition of the IFAC Information Brochure is now available at the Secretariat. If you wish to receive a free copy, please write to

IFAC Secretariat
Schlossplatz 12
2361 Laxenburg
Austria

Cooperation with Austrian Institutions

To make better use of the presence of the IFAC Secretariat for Austria, the Austrian Ministry of Science and Research founded the so-called IFAC Beirat in 1983. This is a body of experts from science, research, industry and public authorities one of whose main tasks is to make available the findings in the field of automation, collected and disseminated by IFAC, to Austrian industry and here in particular to medium-sized and small enterprises. These findings are mainly presented at IFAC Congresses, Symposia and Workshops and are to be made available to interested parties in Austria through the assistance of the Beirat. The Secretary of the Beirat is Prof. P. Kopacek who is at the same time active in IFAC as Working Group Chairman. Also the Austrian Ministry of Science and Research and the Austrian Academy of Sciences are represented in the Beirat.

The Beirat is a good example of how the task accomplished by IFAC can be put to good use in practice through cooperation with official bodies and industry.

News from NMOs

KUWAIT

The Kuwait Society of Engineers (KSE), i.e. the IFAC National Member Organization of Kuwait consists of ten elected members which include the President, Vice-President, Secretary, Treasurer and six other members of the executive council.

K.S.E. 1987/1988 Council

President:
Bader Sayed Abdulwahab Al-Refai
Vice-President:
Abdullah Mohammad Al-Minayes
Executive Secretary:
Wayel Sulaiman Al-Sane
Treasurer:
Abdulhadi Ahmad Al-Dosari
Members:
Moayed Abdulaziz Al-Rshied
Ahmad Abdulla Al-Ghanim
Mousa Husain Al-Saraf
Hasan Abdulaziz Al-Sanad
Saud Mohammad Al-Rukhayes
Shallal Khaleefah Al-Shallal

The following committees organize the various activities of the Society:

Public Relations
Engineering Houses
Engineering Education
Energy
Social Security
Technical
Cultural
Engineering Degrees Evaluation
Internal Activities

Active members totalled 1242 in 1987 and associate members totalled 10504. Society income totalled KD 180.729,--, i.e. approx. US$ 662.000,-- almost half of which comes from membership dues.

The Kuwait Society of Engineers is very active internationally and regionally. Kuwait will house the 18th Arab Engineering Conference in February 1989, a triennial event. Automatic control is a rapidly growing activity in Kuwait. Among the benchmark events is the IFAC workshop on Automatic Control in Petroleum, Petrochemical and Desalination Industries, held in January 1986. In July 1988, the Kuwait University will hold its first Intensive Course on Advanced Process Control, organized by Dr. Imad Al-Atiqi, KSE representative to IFAC.

The Kuwait Society of Engineers hopes to establish close ties and faster exchange with other IFAC NMOs and related Societies around the world.

How to Become Active in IFAC as an Individual

Recently the question has repeatedly been asked how an individual can become active in IFAC. For the information of our readers, we would like to clarify this question, especially as IFAC is interested in having as many people as possible actively participating in committee- and working group work.

For membership in one of the fourteen IFAC Technical Committees, the National Member Organization must make the nominations to the respective TC. A person, be it from industry or the university sector, interested in cooperating in any one of the TCs should therefore contact his or her NMO for the nomination to be effected. The addresses of the NMOs are listed in the newly published IFAC Information Brochure which is available from the IFAC Secretariat.

Membership in a Working Group of IFAC (a complete list was published in the last issue of the IFAC Newsletter) does not require the endorsement of the NMO. Persons interested in the work of a Working Group should contact the Working Group Chairman directly or write to the IFAC Secretariat which will be happy to forward any such correspondence.

We greatly encourage active participation in TCs and WGs as all these contributions will make IFAC an even better platform for the exchange of ideas and information in the many different fields in which automatic control plays an ever bigger role.

Newly Approved Events* for 1988/89

IFAC/IFIP Workshop Experience with the Management of Software Projects	Sept. 27-29 1988	Sarajevo Yugoslavia
RSO/IFAC/IFIP/ILO Conf. Jubilee of Innovation Choice	Oct. 12-14 1988	Venice Italy
IFAC/IFIP Workshop Real-Time Programming	May 16-19 1989	Berlin GDR
IFAC/IEEE Symposium Nonlinear Control System Design	June 14-16 1989	Capri Italy
IFAC/IFIP/IFORS/IIASA/ UNIDO/SEDC/World Bank Conference Dynamic Modelling and Control of National Economies	June 27-29 1989	Edinburgh UK
IFAC Symposium Automatic Control in Space	July 17-21 1989	Tsukuba Japan
IFAC/IFIP/IFORS Symposium Control, Computers, Communication in Transportation	Sept. 20-23 1989	Paris France
IFAC Workshop Production Control in Process Industry	Oct.30 - Nov. 2 1989	Kyoto Japan

*These events have been approved since the last Newsletter listing in the February issue. As a special service, the newly approved events will be published in the issues between the ones giving a complete survey. A complete list of forthcoming events will again be given in Newsletter issue 3/June 1988.

Sensors and Actuators in Distributed Parameter Systems

IFAC Workshop

Perpignan, F, Dec. 16-18, 1987

The objective of the Workshop, organized within the activities of the Theory Committee Working Group on Sensors and Actuators, is to expand the understanding of the field and to encourage contacts with scientists working in the area.

It is difficult to describe all the various aspects associated with sensors and actuators in a few words. In the case of Distributed Parameter Systems, the design and the analysis of the system must take into account the parameters which constitute the natural interface between the system and its environment, that is to say sensors and actuators.

For these systems the space variables play essential roles. The sensors and actuators are characterized by the supplementary variables such as placement or spatial distribution. The interactions between these outputs and inputs are then expressed by the state equations. Thus the study of some systems, theoretic concepts like observability, controllability, observer and compensator design, etc., can be recast in terms of parameters of the sensors and controls. By suitable choice of these parameters, the performances of the system can be improved considerably and this leads to a new class of problems.

In almost all the presented papers (18), the authors were interested in these aspects. Most of the participants stated that this workshop brought them new insights and it is expected that further developments in the area will soon be reported.

A El Jai
NOC Chairman

automatica

The Journal of IFAC the International Federation of Automatic Control

Papers from the Next Issue - May 1988

Editor: Gusztav Hencsey

Layout: Margaret A. Gottfried

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IFAC-SECOM WG Supplemental Ways for Improving International Stability

SWIIS

The Working Group was installed 1981 in the Technical Committee on System Engineering (SECOM) of the International Federation of Automatic Control (IFAC). The main goal of the Working Group is applying well-known methods from the field of System Engineering for tasks of conflict resolutions. In this sense, conflicts might be considered as a "stability problem" in a dynamic system.

Trying to realize this idea in the last six years has interested scientists from engineering (especially control engineering) as well as other disciplines; e.g. sociology, economy, political sciences, medicine, etc. were contacted. The first exchange of ideas occurred at the first workshop on "International Stability" which took place in Laxenburg, Austria, 1983. During these three days papers, dealing with various topics and relating to SWIIS were presented and discussed. The programme was completed by survey papers. Some of these were presented - in revised and updated form - at the 9th IFAC World Congress in Budapest (1984). Also a panel discussion took place during that event. Considering the 3-year cycle for IFAC events, the next IFAC Workshop on this topic was held in Cleveland in 1986. Pergamon Press has published proceedings.

During 1987 several members of the IFAC WG on SWIIS have contributed to meetings related to improving international stability in conjunction with other conferences of other organizations. In Budapest in May, the International Society for General Systems Research held two days of meetings on International Stability. In July, at the 10th IFAC World Congress, the SWIIS WG sponsored two sessions of International Conflict Resolution and also held a meeting of the Working Group. In August, three days of meetings were held in Grand Rapids, Michigan with the AMIS organization - which is devoted to Alternative Methods for International Stability. And in October 1987, 4 sessions on "Technology for Improving International Conflict Resolution" were held with the IEEE SMC Society in Arlington, Virginia. 1987 was a very busy year for the IFAC Working Group, and thanks are given to the many people who contributed to the success of these activities.

During the 9th European Meeting on "Cybernetics and Systems Research", Vienna, April 5 - 8, 1988 a special Subsymposium on SWIIS will be organized by H. Chestnut and P. Kopacek. Some of the WG members have prepared contributions.

At this event a meeting of the NAMIS (Network for Analytic Modelling of International Stability) Project Participants will be held. This project group was founded during the AMIS workshop in Grand Rapids and has now members from seven universities.

As suggested at the last WG meeting in Munich, the WG chairmen are finishing a "State of the Art" paper on topics, goals and activities which might be published as an IFAC brochure.

P. Kopacek
H. Chestnut

WHO IS WHO IN IFAC

Prof. A.H. Levis
Technical Board Vice-Chairman

Alexander H. Levis was born in Yannina, Greece in 1940. He received the B.A. degree in mathematics and physics from Ripon College, Ripon, WI in 1963; the B.S. and M.S. degrees in mechanical engineering in 1965, the M.E. degree in 1967 and the Sc.D. degree in 1968 from the Massachusetts Institute of Technology (MIT).

From 1968 to 1973 he was on the faculty of the Department of Electrical Engineering of the Polytechnic Institute of New York, Brooklyn. From 1973 to 1979 he was with Systems Control, Inc., where his last position was Manager of the Systems Research Development. Since 1979, Dr. Levis has been a Senior Research Scientist at the MIT Laboratory for Information and Decision Systems. His current research interests include mathematical organization theory, Petri Nets, and the modelling of human decision making in information processing organizations. In addition, he is continuing to work on modelling for policy analysis with application to food processing systems and to vocational rehabilitation systems for disabled workers.

Dr. Levis was Associate Editor of IEEE Transactions on Automatic Control from 1975 to 1977. He was Program Chairman of the IEEE Conference on Decision and Control in 1976, and General Chairman of the same Conference in 1982. He was Vice-President of the IEEE Control Systems Society in 1984 and 1985; President-Elect in 1986; he is currently serving as President.

In IFAC, Dr. Levis served from 1980 to1985 in AUTOMATICA as Editor for Technical Communiques and Correspondence; from 1983 to 1987 he chaired the Technical Committee on Systems Engineering (SECOM). Currently he is serving as Vice-Chairman of the Technical Board.