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Editor: Gusztáv Hencsey
Layout: Margaret A. Gottfried
published bimonthly

Industrial Problem Sessions at the 10th IFAC World Congress in Munich, 1987

One often hears the complaint that IFAC is too "academic", and has little scope for the problems of industry. Therefore, during the 9th World Congress (Budapest, 1984) a "stream" of industrial problem sessions was organized, with opportunities for informal exchange of experiences and opinions.

Based on the experience obtained, five discussion sessions are being planned for the next Congress (Munich, FRG, July 27—31, 1987). Tentatively, the following topics are envisaged.

- Vendor/customer/user relationships
- Economics of industrial automation
- Applicability of advanced control in industry
- Interactions between automation,

- organization, and human resources
- Integration of business and production plant automation.

Potential participants will be asked to submit brief written contributions (max. 1000 words).

We would very much like to receive comments, suggestions, and proposals, in order to tune the sessions to the needs and requirements of industry. Please write to:

Uolevi Luoto, Consultant, Runeberg 15A,
SF-00100 Helsinki 10, Finland;

and/or to:
John Rijnsdorp, Twente University of
Technology, P.O. Box 217,
7500 AE Enschede, The Netherlands.

FIACC Meeting in Oslo, Norway

In conjunction with the 11th IMACS World Congress — Oslo, August 5—9, 1985 which attracted about 500 delegates from all over the world — the 16th Meeting of the Five International Associations Coordinating Committee (FIACC) took place on August 10, 1985.

IMACS, the International Association for Mathematics and Computers in Simulation was represented by its President, who also chaired the Meeting.

IFAC was represented by its Secretary.

IFIP (International Federation for Information Processing) was represented by its Treasurer.

IMEKO (International Measurement Confederation) was represented by its President.

IFORS (International Federation of Operational Research Societies) was represented by its Secretary.

The participants of the meeting stated the pleasing fact that the development of closer contacts among the Sister Federations is reflected in a growing number of co-sponsorships. Furthermore an exchange of ideas

as to the organisation of World Congresses took place.

G. Hencsey, IFAC Secretary, reported on the activities of our Federation in the past year, mainly on the outcome of the last Council Meeting in Boston, Mass.

For the next two years, FIACC will be chaired by IFORS with IMEKO to take over after that time. Gy. Striker was elected Honorary Secretary for another year.

PLEASE NOTE:

IFAC Workshop in Kuwait on "Automatic Control in Petroleum, Petrochemical and Desalination Industries" now postponed to

January 6—8, 1986.

Seventh IFAC/IFORS Symposium on Identification and System Parameter Estimation

3rd — 7th July 1985, York, U.K.

The seventh Symposium on Identification and System Parameter Estimation, held in the United Kingdom at the University of York from 3rd to 7th July 1985, was attended by 364 participants from 37 countries. In common with its predecessors in this long-running series, the Symposium was sponsored by IFAC, but this was the first occasion on which it was co-sponsored by IFORS. The Symposium was organised by the Institution of Electrical Engineers on behalf of the United Kingdom Automatic Control Council, the IFAC National Member Organisation for the United Kingdom. In the tradition of the previous Symposia, the aim was to present the state-of-the-art in the field and to provide an opportunity for theorists and practitioners from a broad spectrum of applications to exchange both ideas and experience.

The International Programme Committee, chaired by Professor P. Young of the University of Lancaster, United Kingdom, was composed of 50 members, drawn from 18 countries and representing the sponsoring IFAC Technical Committees on Applications, Theory, Education, Mathematics of Control and Economic and Management Systems, together with the co-sponsoring IFORS. The call for papers attracted 438 abstracts, from which 322 papers were provisionally accepted and 237 papers appeared in the programme. The International Programme Committee solicited a further 112 invited papers for plenary, tutorial and other special sessions.

The programme consisted of 6 plenary sessions, 3 tutorial workshops, 30 technical sessions, 17 special sessions and 5 poster sessions. The plenary addresses were:

- "The self-tuning regulators revisited" by K. J. Åström and B. Wittenmark.
- "The proper study of mankind" by P. Rivett.
- "Some representation, measurement, estimation and validation problems in reflection seismology" by J. M. Mendel.
- "Some observations on robust estimation and control" by G. C. Goodwin.
- "New directions of research in noisy identification" by R. E. Kalman.
- "Optimal identification algorithms and their application to process control and inventory systems" by Ya. Z. Tsympkin and V. A. Lototsky.

The tutorial workshops, all held on the first day of the Symposium, were:

- Instrumental variable methods
- Biomedical applications of identification
- Identifiability of model parameters.

The 30 technical and 17 special sessions, which throughout most of the programme were organised as 6 sessions in parallel, provided excellent coverage of both the theory and applications of identification and system parameter estimation. The spectrum

of applications broadens with each successive Symposium, with whole sessions devoted to topics previously covered by individual papers only. Typical among the new sessions were those on failure and fault detection. 5 sessions were directly relevant to the IFORS interest in the Symposium, of which 2 were special sessions organised by Dr. W. G. Gilchrist, one of the IFORS representatives on the International Programme Committee.

The 5 poster sessions, an innovative feature for Symposia in this series, were:

- Self-tuning and adaptive systems
- Distributed parameter and nonlinear systems
- Applications
- Recursive and adaptive methods
- Model order reduction and uncertainty — spectral and special methods.

The papers for these sessions were selected by the International Programme Committee as particularly suitable for presentation in the highly individual and personal way available to the authors of poster session papers, and most authors responded well to this.

Feedback from participants indicated that the Symposium had achieved its aims and that this reflected a continuing interest in the theory of the subject and a growing interest in its applications. The eighth Symposium of the series will be held in Beijing, China, in 1988.

The proceedings of the Symposium will be published by Pergamon Press.

H. A. Barker (U.K.)

New Publications:



Proceedings of the
7th IFAC/IFORS Symposium
York, UK, 3—7 July 1985

Identification & System Parameter Estimation

Editors:

S. A. Billings, University of Sheffield, UK and
P. Young, University of Lancaster, UK

Covers all major aspects of modelling, identification and parameter or state estimation ranging from theoretical and methodological developments to applications in education and in self adaptive or self tuning systems. The applications papers are concerned not only with engineering and control systems, but also with signal processing, biological and biomedical systems, ecology, hydrology, environmental systems, business systems and socio-economic modelling. The use of microcomputers in estimation is also discussed.

1st IFAC Symposium on

Automation for Mineral Resource Development

July 9—11, 1985, Brisbane, Australia

This Symposium was held in conjunction with the 1985 Annual Conference of the Australasian Institute of Mining and Metallurgy.

Three hundred and thirty three delegates attended, including 31 from 19 overseas countries. Fifty-two papers were distributed in the preprints, and these, with opening addresses and an additional paper, are being published in the Proceedings.

Opening addresses at the IFAC Symposium were given by Professor M. Thoma, President, IFAC, and R. S. Davie, President, The Institution of Engineers, Australia, which is the National Member Organisation of IFAC in Australia.

The opening was followed by a Plenary Session at which papers were presented by Dr. E. Hoek, Golder Associates, Canada, on Prediction of Hazards in Underground Excavations, and by Dr. M. D. G. Salomon, Chamber of Mines Research Organisation, South Africa, on The Role of Automation in the Mining of Tabular Deposits at Depth.

The next two days were devoted to the presentation of technical papers in four parallel streams.

Some of the topics discussed were as follows:

- Automation and the Future of Mining
- Monitoring and Control of Metallurgical Processes
- Automating Mining Processes
- Modelling and Control of Coal Preparation
- Mining Transportation Systems
- Monitoring Mining Processes
- Automation and the Future of Metallurgical Processing
- Modelling and Control of Mineral Processing
- Control Theory and Its Applications.

The Symposium was wound up by a Round Table on The Effect of Automation on People in the Mineral Industry. Panel members represented employers and employees. Discussion was vigorous, frank, and indicated a good understanding by all of the inevitability of change and the need to help workers adapt to the changes.

Closure of the Symposium was by Professor M. Thoma and by D. C. Tennent, President of the Australasian Institute of Mining and Metallurgy.

An impression of the Symposium is that, in spite of and perhaps because of the harsh environment in which the mining industry has to work, interest and activity in the application of automation in the industry is great. A major problem is the development of reliable sensing devices. Automation is likely to develop rapidly, but the widespread use of robots may be a long way off.

C. N. Bailey



FORTHCOMING EVENTS

| Title | 1985 | Place | Deadlines | Further Information |
|---|----------------|--------------------------|-----------|--|
| IFAC Symposium Robot Control | Nov. 6—8 | Barcelona, E | — | Secretariat of SYROCO '85 Institute de Cibernètica Diagonal, 647 E-080828 Barcelona, Spain |
| IFAC Symposium Modelling and Control of Biotechnological Processes | Dec. 11—13 | Noordwijker- hout, NL | — | Prof. Dr. A. Johnson Lab. voor Fysische Technologie Prins Bernhardlaan G 2628 BW Delft The Netherlands |
| Title | 1986 | Place | Deadlines | Further Information |
| IFAC Workshop Automatic Control in Petroleum, Petrochemical and Desalination Industries | Jan. 6—8 | Kuwait | — | Dr. Jaafar Assiri c/o Dr. Samir Kotob TED/ASD Kuwait Institute for Scientific Research P.O. Box 24885, Safat, Kuwait |
| ICID/IFAC Workshop System Analysis in Irrigation, Drainage and Flood Control | Feb. 10—28 | Rabat Morocco | — | Prof. M. Najim AMADEIA, Faculté des Sciences B.P. 1014, Rabat, Morocco |
| 5th IFAC/IFIP/IMACS/IFORS Symposium Information Control Problems in Manufacturing Technology | April 22—25 | Yerevan, SU | — | Organizing Committee of the 5th Symposium ICPMT 65, Profsojuznaja Str. Moscow, 117342, USSR |
| 2nd IFAC Symposium Stochastic Control | May | Vilnius, SU | — | USSR National Committee on Automatic Control 65, Profsojuznaja Str. Moscow, 117342, USSR |
| IFAC Workshop Reliability of Instrumentation Systems for Safeguarding and Control | May 12—14 | The Hague, NL | — | Mr. J. P. Jansen Shell Intl. Petroleum Mij. Carel von Bylandtlaan 30 2596 HR Den Haag, NL |
| IFAC Workshop Experience with the Management of Software Projects | May 14—16 | Heidelberg, FRG | — | H. Wiefels VDI/VDR GMR POB 1139 D-4000 Düsseldorf 1, FRG |
| IFIP/IFAC/IFORS Conference Computer Applications in Production and Engineering — CAPE '86 | May 20—23 | Copenhagen, DK | — | CAPE '86 c/o DIS Congress Service 48, Line Allé DK-2720 Vanlose/Copenhagen, Denmark |
| 4th IFAC/IFIP Symposium Software for Computer Control (SOCOCO) | May 20—23 | Graz, A | — | SOCOCO '86 att. Ms. R. Hammer, IIG Schießstattgasse 4a A-8010 Graz, Austria |
| 14th IFAC/IFIP Workshop Real Time Programming | May 26—28 | Balaton, H | — | Prof. J. Szlanko Central Institute for Physics POB 49 H-1525 Budapest, Hungary |
| IFAC Workshop Use of Technology incl. Systems Cooperation for International Conflict Resolution | June 3—5 | Cleveland OH, USA | — | Dr. Harold Chestnut SWIIS Foundation Inc. 1226 Waverly Place Schenectady, N.Y. 12308, USA |
| IFAC Workshop Digital Image Processing in Industrial Applications | June 10—12 | Helsinki, SF | — | Mr. Martin Ollus Technical Research Centre of Finland Otakaari 5 I SF-02150 Espoo, Finland |
| IMEKO/IFAC Symposium Intelligent Measurement | June 10—14 | Jena, GDR | — | Prof. D. Hofmann Friedrich-Schiller University Section Technology GDR-6900 Jena |

FORTHCOMING EVENTS (ctd.)

| Title | 1986 | Place | Deadlines | Further Information |
|---|----------------------------|-----------------------------|-------------------------------|---|
| 5th IFAC/IFORS Conference Modelling and Control of National Economies | June 17—20 | Budapest, H | — | Dr. Margit Ziermann Institute of Economic Planning Roosevelt tér 7—8 H-1051 Budapest V, Hungary |
| 4th IFAC Symposium Control of Distributed Parameter Systems | June 30 July 3 | Pasadena, USA | — | Mr. G. Rodriguez Jet Propulsion Laboratory 3800 Oak Grove Drive Pasadena, CA 91109, USA |
| IFAC Workshop Adaptive Systems in Control and Signal Processing | July 1—3 | Lund, S | Oct. 15, 1985 | Prof. K. J. Åström Dept. of Automatic Control Lund Institute of Technology Sweden |
| 5th IFAC/IFIP/IFORS International Conference Control in Transportation Systems | July 8—11 | Vienna, A | — | ÖPWZ, Mr. W. Stejskal POB 131 A-1014 Vienna, Austria |
| IFAC Symposium Microcomputer Application in Control | July 22—25 | Istanbul, TR | Oct. 25, 1985 | Prof. E. Adali P. K. 175 Levent-Istanbul, Turkey |
| IFAC Workshop Modelling, Decisions and Games with Applications to Social Phenomena | August 11—15 | Beijing, PRC | * | Prof. Zhang Si-Ying Dept. of Automatic Control Northeast Inst. of Technology Shenyang, Liaoning Province, PRC |
| IFAC Symposium Power Systems and Power Plant Control | August 12—15 | Beijing, PRC | Full Papers: Jan. 15, 1986 | Mr. Ma Guobin Chinese Society of Electrical Engg. No. 1, Lane 2, Baiguan Road POB 2905, Beijing, China |
| IFAC Symposium Automation in Aquaculture | August 18—20 | Trondheim, N | Nov. 1, 1985 | Prof. J. G. Balchen Norwegian Inst. of Technology N-7034 Trondheim NTH, Norway |
| 5th IFAC Symposium Automation in Mining, Mineral and Metal Processing | August 24—28 | Tokyo, J | * | Prof. Y. Yoshitani Technological University of Nagaoka Dept. of Control Engineering Kamitomioka Nagaoka 949-54, Japan |
| 4th IFAC/IFORS Symposium Large Scale Systems: Theory and Applications | August 26—29 | Zurich, CH | — | Prof. M. Mansour IFAC/IFORS Symposium ETH Zentrum CH-8092 Zurich, Switzerland |
| IFAC/IFIP/IFORS Symposium Economics and Artificial Intelligence | September 2—4 | Aix-en-Provence | — | Ms. E. Fayola & Ms. C. Frachon AFCEI 156 Bd. Péreire F-75017 Paris, France |
| 2nd IFAC Workshop Modelling and Control of Electric Power Plants | September 16—18 | Philadelphia PA, USA | * | Dr. H. G. Kwatny, Prof. of Systems Engineering Drexel University Dept. of Mech. Engg. & Mechanics Philadelphia, PA 19104, USA |
| IFAC/IMACS Symposium Simulation of Control Systems | September 22—26 | Vienna, A | Dec. 1, 1985 | Dr. P. Kopacek Technical University Karlsplatz 13 A-1040 Vienna, Austria |
| IFAC Workshop Fault Detection and Safety in Chemical Plants | September 28— October 1 | Kyoto, J | Oct. 31, 1985 | Prof. T. Takamatsu Dept. of Chemical Engineering Kyoto University Kyoto 606, Japan |
| IFAC Workshop Distributed Computer Control Systems — DCCS 86 — | October 13—15 | Mayschoss-Bad Neuenahr, FRG | * | Mr. H. Wiefels VDI/VDE GMR Postfach 1139 D-4000 Düsseldorf, FRG |
| IFAC/EWICS Workshop Safety of Computer Control Systems — SAFECOMP '86 | October 15—17 | Sarlat, F | * | Mr. J. M. A. Rata Chargé de Mission EDF Service IMA 1, Ave. du Général de Gaulle F-92141 Clamart, France |

+ not yet officially approved

* deadline not yet known

FORTHCOMING EVENTS (ctd.)

| Title | 1986 | Place | Deadlines | Further Information |
|---|-------------------|------------------------|---------------------|--|
| IFAC/IFIP/IMEKO Conference Instrumentation and Automation in the Paper, Rubber, Plastics and Polymerization Industries | October 27—29 | Akron OH, USA | Dec. 15, 1985 | Prof. A. Kaya The University of Akron Dept. of Mech. Engg. Akron, OH 44325, USA |
| IFAC Symposium Robot Manipulators: Modelling, Control and Education | November 12—14 | Albuquerque NM, USA | January 15, 1986 | Prof. M. Jamshidi CAD Laboratory for Systems/Robotics Dept. of Electrical and Computer Eng University of New Mexico Albuquerque, NM 87131, USA |
| IFAC Symposium Automatic Measurement and Control in Woodworking Industry — Lignoautomatica '86 | November 17—21 | Bratislava, CS | * | Dr. Branislav Hruz The State Forest Products Res. Institute Lamacská 1 CS-844 11 Bratislava, CSSR |
| IFAC Symposium Components, Instruments and Techniques for Low Cost Automation and Applications | November 27—29 | Valencia, E | * | Prof. Pedro Albertos Polytechnical University of Valencia P.O. Box 22012 Valencia, Spain |
| IFAC/IFIP/IMACS Symposium Theory of Robots | December 3—5 | Vienna A | February 1, 1986 | Dr. P. Kopacek Technical University of Vienna Karlsplatz 13 A-1040 Vienna, Austria |
| IFAC Symposium Control of Distillation Columns and Chemical Reactors | December 8—10 | Bournemouth UK | * | Ms. Rosamund da Gama UK Automatic Control Council c/o The Institute of Measurement and Control 87 Gower Street, London WC1E 6AA, UK |
| IFAC Symposium Automation and Instrumentation for Power Plants | December 15—17 | Bangalore IND | * | Dr. M. Ramamoorthy Central Power Research Institute P.O.B. 1242 Bangalore 560 012, India |

* not yet officially approved

* deadline not yet known

News from NMOs: SPAIN

As a result of growing Spanish interest in the field of automatic control, the "Comité Español de Automática (CEA)" was founded in 1965 under the chairmanship of Prof. Aragonés, within the National Association of Engineers, to promote the development in Spain of all kinds of activities in this field.

Shortly afterwards, talks took place between Prof. J. F. Coales, then President of IFAC and the CEA to establish the Committee as the National Member Organisation of the Federation for Spain. In 1966, during the 3rd IFAC World Congress in London, the application of CEA was approved by the General Assembly. The name of the Spanish NMO then became "Comité Español de Automática de la IFAC (CEA-IFAC)".

The supreme body of CEA-IFAC is the General Assembly formed by all the individual and institutional members. The management of the Committee is vested in the Executive Board, which consists of the President, Vice-President, Secretary, Treasurer and four Ordinary Members, all elected by the General Assembly. Since 1980, a representative of each of the delegations of CEA-IFAC also belongs to the Executive Board.

In 1980 the By-Laws were amended by the General Assembly held in Sevilla and the possibility of establishing delegations of CEA-IFAC in the most active areas of the country was introduced. At present, apart from the headquarters in Barcelona, there are delegations in Madrid, Sevilla and Valencia. A delegation in Valladolid is presently being constituted. The aim of the delegations is to promote local activities in the field of automatic control.

Working Groups with specific topics have been established to address the need for specialized activities. At present, working groups on Power Systems Control, Pattern Recognition (which represents IAPR in Spain), Robotics, Simulation, and Education, are active. Since its foundation CEA has organised 3 IFAC Symposia (1977, 1982, 1985) and several national meetings as well. The Working Group on Education organizes a two day meeting of Automatic Control Professors every year at different universities of Spain.

The Journal "Regulación y Mando Automático" is the official periodical of CEA-IFAC, where technical papers, news and all kinds of information related to the field are being published. The journal has a remarkable industrial audience.

Among the events planned for the near future are an IFAC Symposium on Low-Cost Automation in Valencia, and an International Symposium on Simulation (in cooperation with IMACS) in Barcelona.

At present, the members of the Executive Board are the following:

President: G. Ferraté, Barcelona
Vice-President: E. A. Puente, Madrid
Secretary: L. Basañez, Barcelona
Treasurer: J. A. de la Puente, Valencia

Ordinary Members:
J. Aracil, Sevilla
M. Silva, Zaragoza
J. Ayza, Barcelona
E. F. Llorente, Madrid

Representatives of Delegations:
R. Aracil, Madrid
F. Camacho, Sevilla
P. Albertos, Valencia

CEA-IFAC's address is:
Comité Español de la IFAC
Via Layetana 39
Barcelona 3
Spain.

Seminar on the Development and Use of Powder Metallurgy in Engineering Industries

(Minsk [Byelorussian SSR] 25—29 March 1985)

The Seminar on the Development and Use of Powder Metallurgy in Engineering Industries was held in Minsk from March 25—29, 1985 on the invitation of the Government of the Byelorussian SSR and under the auspices of the Working Party on Engineering Industries and Automation of the Economic Commission for Europe (ECE). The more than 50 papers presented at the Seminar repeatedly emphasised the growing role of powder metallurgy in the development of materials with special properties and in solving the problems of engineering industries. The developments in powder metallurgy demonstrate the advantage of a technique which makes it possible to obtain materials with better or completely new characteristics, to manufacture components using more economical processes and to save raw materials and energy. A wide industrial

assimilation of powder metallurgy methods leads to the production of a constantly increasing number of component parts of metals, alloys and composite materials by this technique. Participants expressed the opinion that the large scale introduction of automated flexible manufacturing systems for the fabrication of powders, for pressing, sintering and gauging, as well as actively controlling all the stages of the production processes will further improve the quality, lower the costs and expand the range of powder products in engineering industries.

Attention should be paid to the accelerated development of new materials like high-tech ceramics, rapidly solidified amorphous and microcrystalline alloys, super-alloys and enhanced performance tool materials. The importance of new technological processes like coating, hot forging of sintered preforms to precision parts, hot isostatic pressing of complex preforms, high capacity cold isostatic pressing and cold plastic forming was stressed by the speakers.

Dr. Wolfgang Glätzle
Metallwerke Plansee GmbH, Austria

IFAC Symposium on Automatic Control in Space

June 25—28, 1985, Toulouse, France

This Symposium, the 10th in this series, was held for the second time in Toulouse, France, at the Ecole Nationale Supérieure de l'Aéronautique et de l'Espace.

Sponsored by IFAC's Technical Committee on Space, co-sponsored by AFCET, the French National Member Organization of IFAC, it was organized by CERT (with M. Pelegrin Chairman of the Space Committee and of the IPC, A. J. Fossard Chairman of the NOC, and J. P. Chretien Symposium Editor).

127 participants from 12 countries involved in space research and technology up to various degrees exchanged and demonstrated their experiences along 7 technical sessions during which 39 accepted technical papers out of 77 submitted ones were presented and discussed. The topics covered included: Geostationary Satellites (S1), Scientific Satellites (S2), Low Earth Orbit Satellites (S3), Flexible Systems (S4), Orbit and Trajectory Control (S5), Component Technology (S6), Platforms, RVD and Manipulators (S7). In addition, J. W. Moore commented on the space shuttle (Invited Paper) and D. Debra lead a Round Table on Passive vs. Active Damping which raised a lively discussion. The closing session was conducted by J. L. Lions, President of the French Administration for Spatial Research (CNES).

The Symposium proved to be very successful with respect to participation, the quality of papers and discussions, and the very good atmosphere prevailing among participants. Proceedings of the Symposium will be published by Pergamon Press.

At the occasion of the Symposium two meetings of the Technical Committee on Space were held: one on June 24 with 14 members present, mainly dedicated to the Symposium; and another one on June 27 with 21 members present, to draw the conclusions of the Symposium and prepare future activities of the Committee.

M. Pelegrin

WHO IS WHO IN IFAC



Prof. André J. Fossard
IFAC Council Member

Prof. A. J. Fossard was born in Paris in 1935. He received his engineering diploma in Aeronautics in 1958 from ENSAE and the MSc in Electrical Engineering from the California Institute of Technology in 1959.

After serving two years in the French Air Force as a pilot he joined the Control Department of Nord Aviation (now Aerospatiale) before, in 1962, being called on by J. C. Gille and M. Pelegrin to initiate CERA, a research group in automatic control forming the origin of CERT, now a division of the French National Office for Aerospace Research. In 1968, he joined the Faculty of ENSAE as full professor where he is now Head of the Control Department while continuing his research activities at CERT.

Prof. Fossard has worked in several fields including nonlinear systems, multivariable control systems, hierarchical systems, modelling and control of converters and is now involved in the applications of singularly perturbed methodology to nonlinear trajectory optimization. He is the author of three books and over 120 papers and technical reports covering these various fields.

From the beginning he participated in the activities of the French Control Society (AFRA, then AFCET, the French NMO of IFAC) in various positions, e.g. as initiator of working groups, member of the editorial board of RAIRO, and Chairman of the Theory of Control Division. He also served in various committees of the French National Council for Scientific Research.

Within IFAC Prof. Fossard has been actively engaged for many years, serving as Vice Chairman and Chairman of the Theory Committee, as member of IPCs in numerous IFAC events and as a liaison officer between AFCET and IFAC. At the last meeting of the General Assembly in Budapest in July 1984 he was elected ordinary member of the IFAC Council.

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Papers from the Next Issue - Nov. 1985

Parameter-Adaptive Control with Configuration Aids and Supervision Functions (R. Isermann, K.-H. Lachmann)

An Approach to Adaptive Control of Robotic Manipulators (M. Vukobratovic, N. Kircanski)

Continuous-Time and Discrete-Time Design of Water Flow and Water Level Regulators (M. Papageorgiou, A. Messmer)

Efficient Algorithm for Matrix Spectral Factorization (J. Jezek, V. Kucera)

Optimization with Respect to a Covariance Sequence Parameters (P. Stoica, T. Söderström)

On the Estimation of Transfer Functions (L. Ljung)

Unprejudiced Optimal Open Loop Input Design for Identification of Transfer Functions (Z.-D. Yuan, L. Ljung)

Identification of Scalar Errors-in-Variables Models with Dynamics (B. D. O. Anderson)

Asymptotic Stability of Nonlinear Singularly Perturbed Systems Using Higher Order Corrections (K. Khorasani, M. A. Pai)

Short Term Load Forecasting Using Daily Updated Load Models (M. Nakamura)

On the Adaptive Control of a Class of Systems with Random Parameters and Disturbances (H. F. Chen, P. E. Caines)