



THE INSTITUTE OF ELECTRICAL AND ECTRONICS ENGINEERS

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# REPORT FROM THE REGIONAL DIRECTOR



**Regional Committee Meeting in Venice** The Regional Committee meeting took place in Venice April 18, 19, 1975 at the site of the 1977 Eurocon, the "Fondazione Cini" on the Isle of San Giorgio. President Stern was present and commented on several items. IEEE Headquarters was represented by Mr. Charles Stewart, Director membership services.

UKRI, France, Northern Italy, Southern Italy, Switzerland, Benelux, Greece, Yugoslavia, Israel, Poland, F. R. Germany and Sweden Sections partici-

pated in the meeting, as well as the Secretary-Treasurer, the junior past-president, the student activities chairman, the educational activities chairman, the Awards Board and Fellowships representative and the Membership Development delegate. Due to a strike on Thursday several delegates arrived late.

The IEEE participants in the Eurocon '77 Steering Committee were elected: the Director Region 8, Mr. Russell, Prof. Reggioni, chairman of the North Italy Section, Professor Carassa, chairman program committee. Their Eurel (European Convention of National Societies of Electrical Engineers in Western Europe) colleagues are Professor Gigli (AEI), General Bertrand (SEE), Dr. Ing. Fleischer (VDE) and Mr. van den Broecke (KIVI).

The development of our membership usually looks good in the first months of a new year, but the number of members, who fail to pay their dues, leads to a disappointment later in the year. Possibly Sections should ask their members to pay their dues, if they have not cancelled their membership before October 1. This is normal practice in many societies. The extension of the deadline for payments leads now to many former members receiving their journals (Spectrum, Transactions, etc.) free for four months. In this way they take an unfair advantage on their fellow members.

The Director drew attention to the possibility of organizing IEEE Short Courses in Europe. He asked Section chairmen to investigate the interest for this possibility in their sections, to see whether it would be possible to arrange a series of Short Courses in September, October 1975. (Will Section chairmen please let the Director know soon, even if their conclusion is negative).

Mr. Russell was appointed Regional vice-chairman.

The Regional Newsletter was discussed again. Though everyone agrees that Professor Williams and Mr. Devenish do very worthwhile work for IEEE, the very limited funds that Headquarters allow the Sections, make it difficult to decide on further support. (This is a difficulty also in other Regions!) The decision was to continue for another year.

P	UBLISHED QUARTERLY	JAN.	APRIL	JULY	OCTOBER
S	News to Editor	Dec. 7	Mar. 7	June 7	Sept. 7
DEADLINE	Advertisements to County Secretarial Services	Dec. 15	Mar. 15	June 15	Sept. 15
	Delivery inserts to County Secretarial Services	Jan. 1	Apr. 1	July 1	Oct. 1

The Student Activities chairman announced that apart from a councillor's meeting in Venice, there would be other regional meetings in Stockholm and Louvain.

# Student Paper Contest

The final contest was held on the 19 April between the three papers judged best among the nine presented. It was stressed that several papers were rejected by a very small margin, and that the five judges even in the finals had great difficulties, as was shown by the fact that each paper was placed first on the list of at least one judge. Mrs. Alexandra lzhkar, Israel Institute of Technology, won third prize for her paper "On Horowitz's optimization Problem in Active RC Network Synthesis and the Solution of an Associated Nonlinear Programming Problem". Willi Vollenweider and Piers Kasser, ETH, Zurich won second prize for their presentation describing possibilities for exploiting the redundancy of speech. Norbert Bayoux and Jean Francois Scheffers got first prize for "Realization and Measurement of MOS Transistors with an Inhomogeneous Substrate", as their paper showed good theoretical insight, as well as experimental ability, bringing their subject near to industrial realization.

#### Eurocon '77

The first meeting of the Steering Committee of Eurocon '77 agreed to the choice of Venice and on a program based on communicationsoriented subjects, rather than a program with more mixed subjects like Eurocon's 1 and 2.

The preliminary program will be devoted to communications and signal processing.

- Communications and power. The use of power lines for communication and control EMC requirements. The use of communications between power centres.
- Communication electronics, e.g. the use of CCD's, gyrators, LSI's, magnetic bubbles.
- 3. Computers and communications, minicomputers, microprocessors, etc. The use of the computer in communications, communication between computers, data network, etc.
- 4. New developments in communications.
- 5. Communications and education (Education by satellites).
- 6. Communications and medical research. Signal processing.

It is thought that the Eurocon '77 Symposium may start on Monday afternoon with a session in the Palazzo Ducale. Then depending on the number of manuscripts offered three days of technical sessions (it is not necessary for all subjects to continue for all days, in fact we hope that only four sessions would be available at any time, as this is easiest from the point of view of the facilities in the Palazzo Cini).

It has been suggested to give the final day to a discussion of what the engineer can do for the underdeveloped countries. We remind the readers that this was also planned for the Amsterdam Eurocon, but the plan had to be given up for lack of papers in this direction. Another discussion of engineering ethics is also possible. Your comments are welcome.

World Telecommunications Symposium, Geneva October 6-8 1975 This important Symposium in the communications field is organized

This important Symposium in the communications field is organized by I.T.U., the International Telecommunications Union, with the help of many professional organisations; IEEE, VDE-NTG, A.E.I., S.E.E., C.S.E.E., Japanese I.T.U. Society, Finnish Society, S.E.V. and others. At the request of secretary-general Mili, Mr. Kirby agreed to chair the Symposium, Prof. Stumpers acts as program chairman, Mr. Joel coordinates U.S.A., and Canadian contributions, and Mr. Wolter coordinates between I.T.U., the Exhibition, the financial and the technical Symposium.

The morning meetings will be Plenary Assemblies, with invited speakers. We mention Prof. Leprince Ringuet, Prof. C. Cherry, Dr. Elias, Mr. Ellis and Dr. von Sanden on social aspects of communications. Dr. Irmer, Mr. Simpson, Mr. Haughton, Mr. Picard, Mr. Culbertson and Mr. Larsson on Data communications. Mr. Gressman, Prof. Bruch on broadcast systems, Dr. Wheelon and Mr. Gibson on satellites, Prof. van der Laan on radioastronomy, Prof. Voge on the role of URSI and Mr. Jacobs on amateur radio.

There will be technical sessions on National and regional network developments, on Optical Communication Systems, on Mobile radio and on Electronic Switching on Monday, October 6. On integrated switching and digital transmission, Computer and data communications, Satellite developments, Wideband radio and cable, Digital Transmission and processing on Tuesday. On Microwave relay systems, including digital transmission, new video and information services, Terrestrial and space sound and television broadcasting on Wednesday afternoon.

The status of I.T.U. and the help of so many organisations led to a very large number of abstracts, out of which the program committee has tried to make the best possible choice. It is hoped that complete texts will be available in book form before the Symposium starts.

#### Florence Conference on Digital Signal Processing

This conference will be organized by Dr. Coppellini of Florence University and Dr. Constantinides of Imperial College, London on September 11-12, 1975. Subjects are the approximation methods and techniques, multidimensional filtering, hardware implementation (CCD's), and applications to signal and image processing with particular reference to speech and biomedical areas. For detailed information the address is Dr. V. Cappellini, Institute di Elettronica, 50139 Firenze, Via di S. Marta 3, Italy.

#### International EMC Symposium Montreux 1975

The first international symposium on electromagnetic compatibility in Western Europe was held in Montreux, Switzerland May 20-22, 1975. Over 100 papers filled a very well edited Symposium book of 550 pages. The number of 450 participants from all over the world was considered very satisfactory, especially in a time of economic stress. The program committee could award two monetary prizes and three honorable certificates. The latter went to the papers by Cortina, Demichelis and Serravalli: A new type of 500 KHz measuring instrument for longtime recording of radio interference from electric power lines, by Struzak: Electromagnetic compatibility: Urban electromagnetic environment, facts, models, trends, and by Bull and Jackson: Interference survey in military transport aircraft.

The judges could not decide on first and second prize, but preferred to give these Awards ex aequs to the papers by R. W. P. King and G. S.



The complete code was published in the February issue of Spectrum and the President had indicated that "complete" should not be taken to mean "completed" as the code must be a living document which develops as a result of comments from members. Any member wishing to make any points on its contents should contact Jack Kinn at Headquarters in New York.

#### **Student News**

Industrial contacts should be stressed by every IEEE Student Branch for the benefits to be derived. The Institute Student Activities Committee (SAC) has proposed that, in addition to an IEEE faculty Counsellor, each Branch also have an Industrial Contact person to help in programme planning, setting up "Day with an Engineer" programmes, on the needs and requirements of the "working world". How about finding someone in industry, through your local Section, to serve as your Branch's Industrial Contact? Comments on this idea would be appreciated. (Contact your Regional SAC Chairman, and see February Student Newsletter for names.)

IEEE Prize Paper Awards, W. R. G. Baker Prize and the Browder J. Thompson Memorial Prize are due September 15. To tell us the deserving and worthy candidates is up to you. (Contact Una Lennon, HQ.)

Classical blunders in presenting technically oriented talks is covered in a film (16 mm) based on a one-act play written by Mr. James M. Lufkin,



Professor Reggiani and members of the Region 8 Committee after viewing the facilities of the Palazza Cini for Eurocon 77. In the centre of the group are Mr. A. P. Stern, the President of the Institute, and Professor F. L. Stumpers, the Director of Region 8. St. Mark's Square may be seen in the background across the lagoon.

Smith: Electrical field probes and their application in EMC and by V. Pevnitsky and L. Tigin: A stochastic model of a cumulative process of man-made radio interference and objective evaluation of signal distortions produced by these interferences.

Professor Borgnis, who took the initiative for this Symposium and was its chairman, Mr. Dvorak who had the heaviest task as Editor and Secretary-General, and Prof. Stumpers were given special Awards by the IEEE EMC Group represented by Mr. Hill.

#### **Dues Increase**

One of the major items at the next Board of Directors meeting will be an increase in dues. The reasons, that no agreement was reached at the April meeting, although many Directors felt that inflation might well make this necessary, were by themselves a compliment to the IEEE staff. By economizing and good housekeeping they made it possible to envisage a positive balance for 1975, even though the same services are given. An increase in dues that would go 50% to the reserves of IEEE did not attract the necessary support. In the list of items that IEEE might be able to do with the increased dues, there were in the opinion of most Directors, not enough items of major importance to their Region.

In my opinion an increase of dues would be easier to justify if it included an increase in Section rebate as some Sections in Region 8, although smaller than U.S. Sections, are more active.

F. LOUIS STUMPERS Director Region 8

# **INSTITUTE NEWS**

President of the IEEE Professional Communication Group, and published in the IEEE Transactions. This film, produced by the Power Engineering Society (PES), is available from the Chapters Department of the PES on a free Ioan basis. (More information, contact John C. Lang, Chairman, Chapter Relations and Continuing Education Working Group, Room 1220, Baltimore Gas and Electric Company, Lexington and Liberty Streets, Baltimore, MD 21203.

Vincent Bendix Awards named six Student Branch groups as 1974 winners. Of eighteen Branches submitting proposals from the United States, Canada, South America and Asia, the following were chosen to receive funding: University of Alberta; Brigham Young University; Cooper Union; Georgia Institute of Technology; Lehigh University; New Mexico State University. Start now on your 1975 Vincent Bendix Award entry. Awards are based on six-page proposals submitted before November 15—but it's time to begin today. Contest rules and entry information are available from your IEEE Counsellor or from Bob Asdal at IEEE HQ.

Counsellor selection spurred on by a proposed revision to Bylaws 407.2 and 407.3 gives Students a direct role in the selection of their faculty Counsellors. The Bylaw, in part, states: "At each Student Branch there shall be a Counsellor who shall be an IEEE member and a faculty member . . . appointed by the Regional Director upon the recommendation of the Student members of the Branch, the Regional SAC Chairman and with the approval of the Department Head at the educational institution involved. The appointment shall be for two

years commencing July 1." The new Bylaw will allow Branch members to renominate their current Counsellor or nominate a new person for each two-year appointment period.

#### **IEEE Press**

Three books now published deal with computer communications, with non-linear networks and with power system stability.

The first book treats systems through which the resources of the modern computer are made available to many remote users. It covers the design of the total interconnection sub-system, in contrast to previous books in the computer field or in the communications field, which concentrate either on the function of the central machine, or on transmission details, respectively.

Three levels of detail are given. First, the Editors have provided a brief tutorial introduction, including guidance to other literature, for each of the 18 sections. Second, there are tutorial survey papers for most of the sections. The remainder of the 60 reprinted papers constitute the third and most detailed level. A comprehensive subject index and an author index are included to facilitate access to the papers.

This 624-page book, sponsored by the IEEE Computer Society and the IEEE Communications Society, is \$9.00 for the paperbound member edition and \$13.45 for the clothbound edition.

The second book is a comprehensive review of research on the theory of non-linear networks. Directly concerned with circuit-theoretic issues, the book allows the reader to gain a sound understanding of a non-linear network's behaviour resulting from the properties of the circuit's elements and its topological structure. In a tutorial introduction and a survey paper, the editor gives examples of, and integrates, the theory developed in the 23 reprinted research papers. Topics considered in depth include the formulation of equations for non-linear transistor circuits, the properties of these equations, and aspects of the theory underlying some of the most useful numerical solution techniques.

This 408-page book, sponsored by the IEEE Circuits and Systems Society, is \$8.50 for the paperbound member edition and \$16.95 for the clothbound edition.

A large body of material on stability of large electric power systems has been published, and this volume contains 59 papers carefully selected to cover the many aspects of the stability of modern power systems. The reprinted papers are arranged into six major parts as follows: Introduction; Mathematical Models and Apparatus Description for System Analyses; Dynamic Stability; Transient Stability; DC lines; Load Shedding; Effects of Trends of Future Generator Designs; Bibliographies; Author and Subject Indexes. Each part is preceded by introductory comments by the editors.

This 584-page book, sponsored by the IEEE Power Engineering Society, is \$8.00 for the paperbound member edition and \$11.95 for the clothbound edition.

### **IEEE Field Award**

The Frederik Philips Award, established in 1971 through agreement between NV Philips Gloeilampenfabrieken and the IEEE, will be given to Dr. Chauncey G. Suits. Retired Vice-President and Director of Research of the General Electric Company, Dr. Suits was cited "For his leadership in guiding the research efforts of a major technologically diversified industrial company".

Having joined General Electric in 1930, within fifteen years Dr. Suits became GE's youngest officer and Director of one of the world's foremost research laboratories. During WW II he devoted most of his time to the National Defence Research Committee. Following the war, Dr. Suits returned to GE and became Vice-President and Director of Research. He was responsible for GE's work for the Atomic Energy Commission including the development of atomic power plants for the production of useful power.

Dr. Suits received a BA at the University of Wisconsin and a ScD at the Swiss Federal Institute of Technology (Zurich).

#### **Continuing Education Courses**

During 1974 two teams of instructors taught 1,120 students in Latin America – 30% of the total regional membership. This highly successful educational venture was given in the native languages of the countries visited. A similar arrangement is being actively considered for implementation in Region 8 but no details have yet been decided. Suggestions are that instruction should come perhaps only 50% from USA with the remainder from Europe or the Section sponsoring the course. Whatever financing arrangements are adopted, it is felt certain that the courses will present outstanding value for the cost to the participant.

The Benelux Section was the first one to make use of the opportunity to organize a short course. The subject was minicomputers and the lectures were given by Professor John J. Allan of the University of Texas at Austin. There were some 40 participants for this course, which was given at the Technical University of Eindhoven. The director of Region 8 and the representative of the University, Professor Hooge, spoke words of welcome. Professor Allan went about his task with great enthusiasm and took his audience with him. To talk from 10 to 6 on the first day, and have 2½ hours for practice on a minicomputer in the evening and then to talk from 9 to 4 on the second day with again two hours practice after that, and to be able to stimulate your audience all the time takes quite an effort. Many students hoped that a more advanced course might follow this introduction.

If other Section wish to organize such a short course in the autumn they should inform the Director of Region 8 soon. Members interested may approach their Section chairman.

# **MEETINGS IN REGION 8**

### Conference "Civil Land Mobile Radio"

This conference will cover the following areas: **Systems**: digital, personal, vehicle, paging, privacy, multi-access trunking, system control, vehicle location, radiating cables, inductive loop, telemetry; **Networks**: area coverage techniques, interfaces with fixed land systems, links with public systems, selective calling; **Spectrum**: utilization, pollution, dynamic channelling, demand forecasting; **Equipment**: aerials and siting, receivers, transmitters, modulation methods, design problems, test methods and equipment.

The conference will take place at the National Physical Laboratory, Teddington, Middlesex, England, on November 18-20 1975. Two types of paper are required: (a) Full papers up to approximately 4,000 words long in the written version and able to be presented in 20 minutes; (b) Short contributions, approximately 1,000 words long in written version and able to be presented in 5 minutes.

Authors should submit the full manuscript to the Institution of Electronic and Radio Engineers, 8-9 Bedford Square, London, WC1B 3RG, England. The closing date for receipt of manuscripts is July 18 1975.

#### Data Networks

Committee 12 "Datennetze und Datenenderäte (Data networks and data sets)" of the Nachrichtentechnische Gesellschaft in VDE (NTG) in co-operation with the German section of the IEEE plans to hold from February 18 to 20 1976, in Baden-Baden (Germany) a data communications conference on the present status of and the future trends in data networks.

The conference is intended to cover-methods and systems for switching of data; structures and features of data networks; equipment and systems for the transmission of data in data networks. German is used as the common conference language. However, papers may be given in English.

For further information please write to the technical programme chairman: Prof. Dr.-Ing. W. Kaiser, Institut für Nachrichtenübertragung der Universität Stuttgart, 7 Stuttgart 1, Breitscheidstrasse 2. Prospective authors are invited to submit a title and an abstract of approx. 20-30 lines to the same address.

The deadline for the submission of papers is September 1 1975.

#### Brussels Conference on the Environment of Human Settlements

Sponsored by WERC this conference will be held in Brussels, Belgium, March 1-4 1976, with the patronage of the Belgian Government, as a contribution to Habitat, the United Nations Conference on Human Settlements in Vancouver, Canada.

The theme of the conference is urban development and preservation of open space. Papers are requested which discuss all of the environmental consequences of the various Human Settlement alternative strategies that are under consideration. The Brussels Conference on the Environment of Human Settlements has been requested to provide information to the Council of Europe meeting in April 1976 and to the European non-governmental organizations for use at the Vancouver Habitat Conference in June 1976.

Participation by the professional community is especially encouraged. Sessions are scheduled and papers are invited on the following subjects: new forms of development as alternatives to urban sprawl; planning techniques for human well-being in existing settlements; integration of private initiative with the planning processes. Each subject should include the physical, social, health and economic consequences. Case histories describing environmental consequence of human settlements are invited. Abstracts of 500 words were required by July 1 1975 by Dr. P. Laconte, University of Louvain, Avenue de l'Espinette 14, B-1.348 Louvain-La-Neuve, Belgium.

Complete papers will be due by November 15 1975. Please advise us now of your intention to submit an abstract so we can inform you of details of the technical programme as they are developed.

The purpose of WERC is to provide an open, interdisciplinary, nonpolitic international forum for interaction, exchange of information and review of environmental quality and progress on the management of resources among professional, scientific, social and other national groups concerned with, or influenced by environmental or resources problems.

# Conference ''On-Line Operation and Optimization of Transmission and Distribution Systems''

The conference "On-line operation and optimization of transmission and distribution systems" will provide a forum to examine recent advances in on-line control including comparison of practical experience, reliability, cost and operational benefits from computer application. It will take place at the Institution of Electrical Engineers (IEE), Savoy Place, London, WC2, between 21-25 June 1976.

Papers are invited on the following topics: analytical methods: system modelling, data processing, estimation and validation techniques, optimization methods; computer hardware: interfacing, data acquisition; computer software: algorithms, program organization; implementation experience: economic despatch, load-frequency control, security, network switching, computer system management. The conference is being organized by the Power and Control and Automation Divisions of the Institution of Electrical Engineers in association with Associazione Elettrotecnica ed Elettronica Italiana, British Computer Society, Institute of Electrical and Electronics Engineers (United Kingdom and Republic of Ireland Section), Institute of Electrical Engineers and Norsk Elektroteknisk Forening.

The organizing committee invite offers to contributions of approximately 3,500 words (or less if illustrations are included), for consideration for inclusion in the conference programme. Those intending to make an offer should have submitted a 250-word synopsis by 2 June 1975 to the IEE Conference Department, Savoy Place, London, WC2R 0BL, England.

International Conference on Millimetric Waveguide Systems-1976 An international conference entitled "Millimetric Waveguide Systems" is being organized to take place at the Institution of Electrical Engineers (IEE), Savoy Place, London, between 9-12 November 1976. Included in the conference programme will be a day visit to the Post Office Research Centre at Martlesham Heath, Suffolk, on Friday, 12 November 1976.

The conference is being organized by the Electronics Division of the Institution of Electrical Engineers, in association with the Institute of Electrical and Electronics Engineers (United Kingdom and Republic of Ireland Section), the Institute of Physics and the Institution of Electronic and Radio Engineers.

# International Symposium on Subscriber Loops and Services

An international symposium on "Subscriber Loops and Services" is being organized to take place in London between May 3-7, 1976. This symposium is the second in the series following the one held in Ottawa in May 1974. It aims specifically to provide a forum for the presentation and discussion of topics covering the subject of local telecommunications. It is hoped to bring together people with backgrounds in Research, Development, Planning and Service/Operations.

The scope of the symposium will be concerned with the following topics: customers' equipment; local network planning and economics; line plant construction (including mechanical aids); local network performance, maintenance and reliability; local area management; safety and safe working (design, construction and practice); cable design; electronics in the local system; new services and assessment of future needs; wideband facilities (including video services); network evolution; integrated local networks and mobile (radio) services and facilities.

The symposium is being organized by the Electronics Division of the Institution of Electrical Engineers (IEE) in association with the IEEE Communications Society, the IEEE Region 8 and the IEEE (United Kingdom and Republic of Ireland Section) with the support of the Institute of Mathematics and its Applications, the Institution of Electronic and Radio Engineers and the Institution of Mechanical Engineers.

The organizing committee invite offers of contributions of approximately 3,500 words (or less if illustrations are included) which will be considered for inclusion in the symposium programme. Those intending to make an offer should submit a 300-400 word synopsis to the IEE Conference Department by July 25, 1975.

Registration forms and further programme details will be made available a few months before the symposium from the IEE Conference Department, Savoy Place, London WC2R 0BL.

# **NEWS OF THE SECTIONS**

The following information has been extracted from the reports for the period October 1974 to April 1975 presented at the meeting of the Region 8 Committee held in Venice in April.

### **Greece Section**

During the period the following lectures were presented at three meetings:

- Reduction of sensitivity in automatic control systems, by Mr. S. Tzafestas, University of Patras, December 20 1974. (Attendance 25)
- Computer Application in Telecommunications, by Mr. G. V. Theodorou, OTE Hellenic Telecommunication Organization, January 24 1975. (Attendance 40)
- Short Circuit Problems and modern relevant solutions in the HV Transmission Networks, by Mr. B. C. Papadias, Public Power Corporation, April 4 1975. (Attendance 60)

The member and Chairman of the Greece Section, Mr. J. A. Tegopoulos, was elected to the grade of Fellow effective January 1 1975. The Fellow certificate was presented at an appropriate ceremony of the Section.

## Middle and South Italy Section

Section technical meetings:

November	14	1974 -	The	anech	noic	char	mber	of	the	Istituto	
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- November 28 1974 Present and future of large communication networks by radio links, by G. Monti Guarnieri, GTE Milano.
- December 5 1974 Review of the analysis of nonlinear networks, by V. Cimagalli, University of Roma.
- March 18-20 1975 Two-day seminar on "Information and

Genetics" co-sponsored by the Istituto di Genetica medica e gemellologia, with five speakers.

# **Poland Section**

Three technical meetings have been held at which the following lectures were presented:

January 15 1975 — in Warsaw	Infra-red recombination radiation studies of plasma spreading in thyristors, by Dr. D. R. Muss, Div. Solid State Research Labs, Westinghouse Electric Corp., Pittsburgh, Pa., USA.
February 18 1975 — in Warsaw	Optical Fibre Transmission, by Prof. A. K. Smolinski, Warsaw Technical University, Poland.
February 25 1975 — in Warsaw	Antenna arrays applied to satellite com- munications, by Dr. A. Roederer, European Space and Technology Centre, Noordwijk, Netherlands.

On March 24 1975, Professor Janusz Groszkowski, Life Fellow of IEEE and Vice-President of the Poland State Council, in the presence of the members of Executive Committees of the IEEE Poland Section and the Association of Polish Electrical Engineers, handed to Professor Adam K. Smolinski, Poland Section Chairman, the certificate "Fellow of IEEE" for "achievements in research, development and teaching of electronic engineering."

## Switzerland Section

The Section sponsored a certain number of technical lectures and joint meetings, mainly held in the Federal Institutes of Technology of Zürich and Lausanne, as well as at the University of Bern. The highlights were the 4th European Microwave Conference in Montreux (September) and the "Journées d'Electronique" in Lausanne (October).

The suggestion of forming a new local joint Chapter on Circuits and Systems and Electron Devices received a good answer from the members of the Section. This chapter will probably be formed in a few months.

A committee meeting and a general assembly were held on January 14 1975 in Lausanne. The activities of the section during the year 1974

were presented.

The following officers have been elected for a period of two years: Chairman: Prof. F. Gardiol

Vice-Chairman: Prof. M. Jufer

Secretary-Treasurer: Mr. M. C. Decréton

Members at large: Dr. A. Bachmann, Dr. G. Guekos, Dr. A. Roth

# **MEETINGS OUTSIDE REGION 8**

#### International Symposium on Electrical Insulation

The IEEE Group on Electrical Insulation is sponsoring an International Symposium on Electrical Insulation, which will be held at the Queen Elizabeth Hotel, Montreal, Quebec, Canada, on June 14, 15 and 16 1976.

The Symposium will deal with electrical insulation problems in the power and communication fields. Original papers, not presented elsewhere, are invited. Papers, concerning the following subjects, will receive particular consideration:

- 1. Corona discharge in electrical apparatus (origin, detection, measurement and practical significance).
- Ageing of insulating materials (thermal, electrical, environmental, statistical studies).
- 3. Insulation materials for cryogenic systems (dielectric properties of cryogenic liquids and solids at cryogenic temperatures).
- Synthetic insulation for power applications (synthetic liquids, solids and composites).

Any other papers of general interest, dealing with important aspects of insulating materials and systems will also be considered.

The Symposium will offer a unique forum for presentation of the latest advances in dielectric theory and practice to specialists in the electrical insulation field. A selection of symposium papers is to be published in a special issue of the IEEE Transactions on Electrical Insulation, thus being documented in permanent literature.

Two copies of a title and abstract not exceeding 500 words should be submitted to the Technical Programme Chairman, Dr. E. O. Forster, Exxon Research and Engineering Co., Linden, N.J. 07036, USA, no later than October 1 1975. Notice of acceptance for publication and detailed instructions for the preparation of the paper manuscripts will be sent to the contributors before November 15 1975. General questions concerning the Symposium should be directed to the Symposium Chairman, Dr. R. Bartnikas, Hydro-Quebec Institute of Research, Varennes, Quebec, Canada, JOL 2PO.

### International Electron Devices Meeting

The Annual Technical Meeting of the Electron Devices Group will be held in Washington D.C., December 1-3 1975. This meeting will emphasize new and significant aspects of research, development, design and manufacture of electron devices.

Specific areas to be covered include: device technology, integrated electronics, solid state devices, image transducers and optoelectronic devices, lasers and quantum electronic devices, electron tubes, and energy conversion devices.

The deadline for abstracts is August 4 1975. Prospective authors must submit a comprehensive abstract emphasizing results, which is approximately 200 words long, appropriate to a 20-minute paper. The abstract must include the title, author(s), telephone number, mailing address, company affiliation, city and state of company location—all one one side of a double-spaced typewritten page. The abstract should clearly state: (a) the purpose of the work, (b) how much it advances the art, and (c) what specific results have been obtained. Additional supporting material (for review purposes only) may be submitted at the discretion of the author. An original and 15 copies of all material should be sent to Dr. C. Neil Berglund, 1975 IEDM Technical Program Chairman, Bell-Northern Research Ltd., POB 3511, Station C, Ottawa, Canada, K1Y 4H7.

Late news papers will be considered if comprehensive 200-word abstracts (one typed page) for ten-minute papers are received for review by the Program Chairman before October 20 1975. The format for these abstracts is the same as for regular abstracts.

# **EMI/EMC TRAINING**

### ELECTROMAGNETIC COMPATIBILITY AND INTERFERENCE COMPREHENSIVE ACCELERATED TRAINING COURSES TAUGHT BY DON WHITE, INTERNATIONALLY-KNOWN CONSULTANT

# ELECTROMAGNETIC COMPATIBILITY – DESIGN AND MEASUREMENT FOR CONTROL OF RFI/EMI – OCT. 13-17, LONDON, ENGLAND.

This 5-day course covers the RFI/EMI/EMC field including system, subsystem and equipment prediction and analysis, EMC specifications, control and test plans, instruments, test methods and procedures, and EMI design, control, fix, and retrofit techniques. The latter includes wiring, grounding, bonding, shielding, filtering, and active circuits. Also included are prediction and analysis of EMI amongst communications, broadcast, land mobile, radar, and navigation systems. Price 595 U.S.A. dollars including all training materials.

To register or obtain additional information on the above, contact Mr. Rod Smith, REL Equipment & Components Ltd., Croft House, Bancroft, Hitchin, Herts., England. Phone Hitchin 50551 or Telex 82431.

Other EMI/EMC and related training seminars taught in U.S.A. during fall 1975 include above course, EMI control in design and installation of computers, hospitals and medical electronics, shielding and grounding, fibre optics and optical isolators, microwave solid-state circuits, MIL-STD-462/462B testing and clinic, mobile communications, and vibration and shock. Special tailored courses also taught in your facility in your country.

Also available are EMI/EMC and related handbooks and HP-65 Programmable Calculator/Magnetic Cards with accompanying software background.

For more information contact:-

U.S.A. Phone: 301-948-0028 Mrs. Muriel M. Moeller Don White Consultants Inc., 14800, Springfield Road, Germantown, Maryland 20767, U.S.A.

Telex: 89-2766 DWCI-GTWN

#### International Conference on Cybernetics and Society

The IEEE SMC Society 1975 International Conference on Cybernetics and Society will be held in San Francisco, September 23-25. As in previous years, this conference will cover the full range of the field of systems sciences and engineering. A special theme of the 1975 conference, however, will be "Technological Forecasting and Assessment: 1975-2000".

Papers are solicited in a variety of areas including the following: Technology Forecasting, Technology Assessment, Societal Goals, Public Policy Analysis, Telecommunications, Transportation Systems, Health Care, Alternative Energy Sources, Agriculture and Food Technology, Climate and Weather Control, Environmental Quality, Nuclear Disarmament, Birth Control Technology, Genetic Engineering, Technology for the Less Developed Countries, Modelling and Simulation, Pattern Recognition, Image Analysis, Artificial Intelligence, Robotics, Computer-Based Conferencing, Computer Security, Computers and the Arts, Man-Machine Systems, Biocybernetics, Prosthetics, Urban Systems, System Theory, Control Theory, Econometrics, Operations Research, Decision Analysis, Estimation, and Learning and Adaptive Systems. Both Tutorial papers and reports on recent advances are welcome.

Further information from Prof. Lawrence Stark, Program Chairman, 1975 SMC Conference, Dept. of Physiological Optics and Engineering Science, 226 Minor Hall, University of California, Berkeley, California 94720.

A series of "free sessions" (in parallel with the regular sessions) are also planned at which unreferred, preliminary, or last-minute results may be presented.

#### International Conference on Crime Countermeasures

Papers are invited for the 1975 International Conference on Crime Countermeasures, November 13-18 1975, in Montego Bay, Jamaica, W.I. Principal emphasis will be placed on engineering developments as applied to law enforcement, security and crime prevention.

Papers are solicited in the areas of EDP security, police systems, automatic vehicle monitoring, contraband detection, alarm systems, personnel identification, security equipment standards, and progress reports of current research and development work.

Further information from, John S. Jackson, Proceedings Editor, Department of Electrical Engineering, University of Kentucky, Lexington, Kentucky 40506, USA.

# International Electrical, Electronics Conference and Exposition

The Conference and Exposition is in Toronto, September 29, 30 and October 1. It is the largest and most comprehensive of its kind in Canada and attracts interested, decision making technical personnel from all parts of Canada, the United States and other parts of the world.

Papers are grouped by disciplines of the various market areas such as: home entertainment; broadcast; navigation aids; emergency services; avionics; utility; medicine; industrial; telecommunications; satellite communications; military; business; transportation.

#### International Symposium on Electromagnetic Compatibility

The Symposium will be held in San Antonio, Texas, on October 7-9, 1975. The Symposium is hosted by the Central Texas IEEE Section through its Electromagnetic Compatibility Group Chapter with the sponsorship of the IEEE Group on Electromagnetic Compatibility. The Theme "EMC—The Old and the New" depicts the broad range, tutorial, applications, and theory, of the expected technical programme. Papers dealing with Interference Generation, Suppression Control and Compatibility in the following areas are requested: power; telephone; microwave; satellite; vehicular; mass transit; aerospace; biomedical; radio and TV; computer; environmental; law enforcement; analysis and modelling; measurement techniques; spectrum management; EMC management; EMP; TEMPEST; lightning and statics; grounding and bonding; shielding; hazards and pollution; circuits and systems; standards.

Three copies of paper summaries (300 words, not an abstract) should have been submitted by March 1, 1975. Authors were to be notified of

acceptance by March 31, 1975. Complete papers (typed and ready for reproduction in the symposium record) will be due July 15, 1975. The contact is Gus Van Steenberg, Southwest Research Institute, P.O. Drawer 28510, San Antonio, Texas 78284, USA.

# Annual Meeting of URSI

The 1975 Annual Meeting will be held October 20-23, 1975 at the University of Colorado, Boulder, Colorado, in co-operation with various Societies of the IEEE and sponsored by the US National Committee of URSI.

Local hosts are the University of Colorado, the National Bureau of Standards, the Office of Telecommunications, and the National Oceanic and Atmospheric Administration.

The following Commissions will hold technical sessions:

Commission 1-Radio measurement methods and standards

Commission 2-Radio and non-ionized media

Commission 3-On the ionosphere

- Commission 4-On the magnetosphere
- Commission 5-Radio and radar astronomy

Commission 6-Radio waves and transmission of information Commission 7-Radio electronics

Commission 8-On radio noise of terrestrial origin

Advance programme and pre-registration form available from Mr. Richard Y. Dow, USNC/URSI Staff Officer, National Academy of Sciences, 2101 Constitution Avenue, Washington, DC 20418, USA.

#### IEEE Intersociety Energy Conversion Engineering Conterence

This annual, international conference is jointly sponsored by the Aerospace and Electronic Systems and Electron Devices Groups of The Institute of Electrical and Electronics Engineers and six other American Institutes and will be held August 17-22, 1975 at University of Delaware, Newark, Delaware.

## International Federation of Automatic Control

The sixth Triennial World Congress of the International Federation of Automatic Control is to be held in Boston/Cambridge, Massachusetts USA, August 24-30, 1975. Earlier IFAC World Congresses have taken place in Moscow, Basel, London, Warsaw and Paris.

The theme of the 1975 Congress is "Control Technology in the Service of Man". Automatic control and related computer technology will be one of the main contributors to the resolution of existent world problems, therefore congress participants have been requested to relate their discussions to the congress theme wherever practical. It is anticipated that the congress will provide an unprecedented opportunity for international discussion of the latest achievements, challenges, and opportunities in a number of important scientific and technical areas. Plenary sessions, to be held each morning and afternoon, will be addressed by renowned leaders in the control, computer and related social/economical fields. Sixty-three technical sessions arre to be held during the week-long event. A total of 330 papers will be given, detailing the most recent developments in control theory, computer guided control systems and applications, and the many related subdivisions of these areas.

The Host Organization is the American Automatic Control Council representing its eight constituent societies including IEEE.

For a copy of the IFAC/75 Advance Programme, write to: IFAC/75 Secretariat, 400 Stanwix Street, Pittsburgh, Pa. 15222, USA.

# International Conference on Environmental Sensing and Assessment

The conference is co-sponsored by 11 US organizations, WHO and the University of Nevada, and will bring papers on monitoring techniques and devices available now, matters of great interest to public officials, biologists and public administrators, and R & D papers on sensing techniques and devices and assessment of future options, of equally great interest to technologists, chemists, physicists and forecasters. The cross-fertilization that should occur is one of the significant advantages of the combined conference.

The conference will be held September 14-19, 1975 in Las Vegas, Nevada; full particulars from IEEE HQ, New York.

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