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#### THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

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FEBRUARY 1981

#### REPORT FROM THE OUTGOING REGIONAL DIRECTOR



D. C. J. Poortvliet Director Region 8 1979-80

Just before the second Region 8 Committee meeting in 1980 the results of the annual IEEE elections became known. The 1981 President of the IEEE is Richard W. Damon, the 1981 Executive Vice-President is Robert W. Lucky and the 1981-1982 Region 8 Director is Walter E. Proebster, the current chairman of the Germany section. My congratulations to those elected and I hope they will have a good term of office. This time less than 20% of all voting members of Region 8 actually voted, a disappointing result. Again I wonder what can be done to improve the situation, so if you have suggestions please inform the Region 8 Committee. The second 1980 Region 8

Committee meeting took place in Rome on November 21-23. Present were Poortvliet (Benelux), Winton (UKRI), Bolinder (Sweden), Vander Vorst (Benelux), Wellinger (Switzerland), Giddings (UKRI), Tegopoulos (Greece), Van der Wulp (Benelux), Williams (UKRI) and the following section representatives: Richter (Austria), Stumpers (Benelux), Becker (Denmark), Bilal (Egypt), Tallqvist (Finland), Voge (France), Proebster (Germany), Protonotarios (Greece), Baal-Schem (Israel), Cappellini (M&S Italy), Civalleri (North Italy), Forssell (Norway), Sowinski (Poland), Ruiz de Gopegui (Spain), Forrer (Switzerland), Osborne (UKRI), Furlan (Yugoslavia). Further attendees were Smolinski (Poland), Peiser, Sorrentino (Italy), and Mrs. Patricia Lech, Director Field Services IEEE Headquarters. It was encouraging that so many section chairmen could be present and I considered this an extremely good meeting. The problems in Region 8 were discussed in depth with a proper spirit.

The most important agenda items were: The Region 8 finances; Increasing membership services in Region 8; Student activities and membership development; EUROCON '82; MELECON '81; Newsletter; Continuing education; Region 8 bylaws.

Due to the introduction of the Regional Assessment the Regional Committee has now the possibility of improving the membership services, such as decreasing mailing delays, sponsoring conferences, student activities, and increasing continuing education activities. The committee discussed these points extensively and the section chairmen were asked to indicate specific needs in their section at the next meeting. Prof. Vander Vorst discussed the future of the Postgraduate Student Paper Contest and introduced the concept of the Young Engineers' Paper Contest to be held in conjuntion with EUROCON and MELECON. The Committee was in favour of these proposals and asked Prof. Vander Vorst to prepare a paper. The Region 8 Conferences EUROCON 82 and MELECON 81 are in good hands and in my opinion attendance would prove very worthwhile. The reports of Prof. Proebster and Prof. Baal-Schem were very encouraging. More news about MELECON 81 can be found elsewhere in this Newsletter. Talking about the Newsletter, Prof. Williams announced during the last Region 8 Committee meeting that he was prepared to go on for another two years. I consider this good news, thank you Prof. Williams. Prof. Parvopassu, Chairman of the Rome Section of the Italian Association of Electrical Engineers was so kind as to attend the dinner meeting of the Region 8 Committee. On the same occasion I had the pleasure of

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presenting an IEEE plaque to Robert Winton, the present Region 8 Secretary/Treasurer, to honour him for the devoted service he has given to Region 8 for so many years.

On October 19 I arrived in Israel where I attended a small meeting with President of the Association of Engineers and Architects (AEAI) U. Stock, the Israel Chairman dr. J. Baal-Schem and the Israel Section Secretary R. Hoyda. At this meeting the agreement between the AEAI and IEEE was signed. On October 22 I arrived in Cairo where I discussed the further development of the Egypt Section and a possible agreement between IEEE and the Egypt National Society EIEE. From this place I want to thank the representatives in Egypt for their excellent co-operation. Just before I left for the December Board meetings in Orlando, Florida, the General Secretary of the French National Society SEE informed me that the President of SEE, Mr. Malegarie, had signed the agreement between SEE and IEEE. I hope this agreement will improve the relationship between the French engineers and IEEE. In December I attended meetings in Orlando of the Transnational Relations Committee of TAB (TRC), the Regional Activities Board (RAB), the Annual Assembly and the Board of Directors (BOD).

The TRC discussed extensively how Technical Activities could be improved in developing countries and how to obtain funds to do so. In 1981 this will be worked out in more detail. The Technical Activities Board (TAB) is deeply interested in the transnational operations of IEEE and I hope my successor Walter Proebster will be able to report on further progress.

The RAB approved the establishment of an IEEE Student Branch at the University of Florence. On the relationship with the National Societies in the non-US Regions it was decided that the Regional Directors should be the main force and that they should be considered to be the initial negotiating body. The RAB Transnational Ad-Hoc Committee will get ther status of a RAB Standing Committee pending the submission of appropriate Bylaws-revisions.

In the BOD the results on the voting on the Constitutional amendment were discussed extensively. Finally the BOD decided on a roll call vote that the Constitutional amendment passed. This implied that the concept of the President Elect is adopted. The financial position of the IEEE was discussed and the motion of Treasurer Brereton to accept the 1981 IEEE General Fund Operating Budget having a \$250 K deficit, for recommendation to the 1981 BOD was passed.

The result of the Annual Assembly election for 1981 was the following: Vice-President (VP) Educational Activities: Edward W. Ernst;

VP Professional Activities: Richard J. Gowen;

VP Technical Activities: Robert E. Larson;

VP Regional Activities: Larry K. Wilson;

VP Publication Activities: Theodore H. Bonn;

Director Standards Activities: Irvin N. Hovell Jr.;

Executive Director: Eric Herz;

Treasurer: Charles A. Eldon;

Secretary: Dick C. J. Poortvliet.

This is the first time in IEEE history that a representative of Region 8 through 10 is a member of the Executive Committee and I can assure you I shall do everything in my power to improve the transnational operations of IEEE.

This is my last report as Director of Region 8 and I must say I regret it. Working for this Region, although not always easy, was a great experience. Now the Regional Boundaries are changed to include the whole of the continent of Africa I want to welcome all the members in this area and I hope to meet the representatives during the Region 8 Committee meetings. Finally, I want to thank all the members who supported me during my term of office as Regional Director and I know that my successor Walter Proebster can count on your support in the same way. I had to make certain unpopular decisions but I did it for the benefit of Region 8. Thank you for your support and my best wishes for the future.

The Hague, January 2, 1981

DICK C. J. POORTVLIET

#### A MESSAGE FROM THE INCOMING REGIONAL DIRECTOR



Prof. Dr. Walter E. Proebster Director Region 8 1981–82

May I start my first remarks in the Newsletter as Director of Region 8 by thanking the outgoing Director, Dick Poortvliet, for all his work in maintaining activity in the Sections, for creating a new Section in Austria, and for his efforts to overcome difficulties in the Egypt and France Sections. He has worked successfully to increase harmony and understanding between the IEEE and national societies, especially in working towards co-operation with the French national society SEE and in bringing about a meeting between the IEEE Executive Committee (ExCom) and representatives of EUREL at Friedrichsruhe in March 1980. Among other significant events

during Dick Poortvliet's Directorship I have space to mention only the increase in Region 8 membership far above the average increase in the IEEE as a whole, and establishing the Regional finances on a sound basis.

In particular, I am sure all members will wish to join me in congratulating Dick on his election as Secretary of IEEE. He is the first person from Region 8 to be appointed to this office, and I am certain that this indicates not only his personal merit but also an increased awareness of the value to our Institute of members, Sections, and Regions outside the US, and of the importance of the transnational policy.

I wish to thank members sincerely for their confidence in electing me Director of our Region. I shall do my utmost to fulfil your expectations, and I am happy to have Dick, now Junior Past President, to support me. As Secretary of IEEE he will be a powerful ally in the many substantial tasks ahead, among which are bringing MELECON '81 and EUROCON '82 to successful conclusions. In under-taking these tasks I am greatly encouraged by the knowledge that I also have the support of members in Region 8.

Finally, I hope it is not too late to wish you all success and happiness in 1981.

WALTER E. PROEBSTER Boeblingen, Federal Republic of Germany.

#### **INSTITUTE NEWS**

#### 1981 To See Significant Expansion in Pages

There will be a 36 per cent increase in the number of periodical pages printed in 1981 over those printed last year. Much of this unprecedented increase will come from three new S/G Magazines, two of which are noted below, and to the Power Engineering Society's expanded publication plans.

In addition to its new 1981 Magazine IEEE Computer Graphics and Applications, the Computer Society will also publish in 1981 a quarterly magazine to be called IEEE Micro. Like Computer Graphics, Micro will carry advertising and will be published by the staff at the California office of the Computer Society where the present IEEE Computer Magazine is now published.

The Control System Society has received approval to convert its present newsletter to Magazine status, and, starting in 1981, will publish quarterly the IEEE Control System Magazine.

#### Miscellany

IEEE now publishes the Membership Directory annually instead of bi-annually.

At the request of RAB, TAB and PUB have developed a special price for IEEE Section libraries wishing the full compliment of IEEE Society periodical publications. Each request for this special arrangement,

which involves setting up formal section library facilities, requires the approval of the appropriate Regional Director.

#### **Low Cost Pachaged Courses**

A new continuing education package programme that is low cost and uses local instruction is available in USA. Participants will qualify for the IEEE Continuing Education Achievement Unit. A typical course "package" will handle fifteen participants and will include an instructor's manual, visuals, student work-books, examinations evaluation forms, input forms for the record-system and other course-related materials. Each course consists of approximately 12 contact hours of instruction with four to six weeks at two to three hours/week for a normal recommended schedule. The initial programme includes the following titles.

"Microprocessor Seminar" by Dr. Hans van den Biggelaar.

"Computer Automated Measurement and Control (CAMAC)" by Dale Zobrist

"Protection and Grounding of Distribution Systems" by J. Lewis Blackburn.

"Basic Project Management-Planning, Scheduling, and Control" by Merrill W. Buckley, Jr.

"Practical Fibre Optics" by Forrest Mims.

nent, "BASIC for Beginners" by Rex Beers.

#### MELECON'81

MELECON '81 is making good progress towards success. Four weeks before the 15 January deadline for abstracts 103 abstracts had been received from 20 countries, and in addition over 50 international companies had rented some 700 square metres of space in the Exhibition. At least 800 participants are expected from all over the world

MELECON '81 will be held in Tel Aviv, Israel, on 24-28 May, 1981. It is the first electrotechnical conference to pay particular attention to developments and needs in countries around the Mediterranean and in the Middle East. The initiative came from the Israel Section, and was warmly supported by the Region 8 Committee. Representatives of the Egypt, Greece, Israel, Italy, Spain and Yugoslavia Sections are members of the Conference Steering Committee, which is Chaired by Dr. Jacob Baal-Schem, Chairman of the Israel Section. The Conference is sponsored by the Israel Section, Region 8, and the Association of Engineers and Architects in Israel.

MELECON '81 has six main themes: Telecommunication systems and services including computer and data networks; Solar energy and wind power; microprocessors and computer applications; Electronics and the environment including pollution control, ocean engineering, and frequency management; Medical applications of electronics and computers: Technology transfer and socio-economic impact.

The Exhibition associated with the Conference is an expanded version of ISRATECH, the Biennial Electronics and Electrical Exhibition which attracted over 300 exhibitors and more than 60,000 visitors when it was last held in 1979.

The registration fees for members of sponsoring organizations are \$145 if airmail postmarked before 15 April and \$160 if later. For non-members the corresponding fees are \$180 and \$200.

Special attention has been given to attracting students to MELECON '81. They can register and obtain accommodation combined at the reduced rate of \$150, and a students programme is being arranged, which will include a social evening when students attending the Conference canmeet.



Jerusalem: Western Wall and Al Aqsa Mosque

Special events associated with MELECON '81 are technical visits, a social programme, a sightseeing programme for those accompanying participants, and a three-day post-conference tour in Israel.

Further information on the Conference and Exhibition, including an advance programme, is available from the MELECON '81 Secretariat, c/o ORTRA, 431 Namir Square (Atarim), P.O. B.3473, Tel Aviv, Israel (Tel: 03-289128/9, Telex: 33629). ORTRA can provide information on local travel agents, which have been appointed in many countries, to advise on the most economical arrangements for attending MELECON '81.



# For the Computer Professional:

### From Electronics to Microelectronics

Fourth European Conference on Electrotechnics - EUROCON '80, Stuttgart, Germany, 24-28 March, 1980

edited by W. A. KAISER, University of Stuttgart, and W. A. PROEBSTER, IBM Deutschland GmbH, Stuttgart, Germany

1980. 754 pp. US \$70.75/Dfl. 145.00 ISBN 0-444-85481-9

EUROCON '80, sponsored by the world's largest groups of electronical engineers: EUREL and IEEE, has as its motto: From Electronics to Microelectronics - Trends and Applications. Published in this work are overview papers as well as technical contributions on developments in areas ranging from technology itself to products and applications. The 165 papers in the book are divided into five different topic groups: (1) Technology of Microelectronics, (2) Telecommunications and Data Processing, (3) Electrical Power Systems and Controls, (4) Medical and Other Applications of Microelectronics, and (5) Tutorial Program. The work presents a comprehensive review of the technological trends and applications of microelectronics in the world of today

# Methodology of Interaction - Seillac 2

IFIP Workshop on Methodology of Interaction, Seillac, France, May 1979

edited by R. A. GUEDJ, Thomson-CSF, France, P. J. W. TEN HAGEN, Mathematical Centre, Amsterdam, F. R. A. HOPGOOD, Rutherford Laboratory, U.K., H. A. TUCKER, Technical Univer-sity of Denmark, and D. A. DUCE, Rutherford Laboratory, U.K.

1980. 350 pp. Price: US \$44.00/Dfl. 90.00 ISBN 0-444-85479-7

One of the major unsolved problems in computer science concerns the design of interactive systems, with predictable, good human factors. Work done at the first Seillac Workshop largely improved the understanding of basic graphics programming. The activities following Seillac 1 in the field of graphics standardization have been very successful. They also gave the main impetus for the Seillac 2 Workshop by stressing the need to understand the problems associated with graphics input and its relationship to output.

This work contains 26 papers on manmachine interaction, interactive systems and their design. The study group reports convey the results of intensive analysis and discussion of various aspects of interaction, such as: Models of Interaction, Design of Interaction Programs, Specification of Dialogues, Program Environment, Portability and Device Independence, and Future Trends.

**Invited Presentations.** Goals of the Workshop (R. A. Guedj). SMALLTALK (A. Kay). Interactive Control (R. F. Sproull). Interaction and Syntax (P. J. W. ten Hagen). Cognitive Psychology - Introduction (T. Moran). Cognitive Psychology and Interaction (J. Hayes). Systems Design (T. Moran). Visual Communication and Interaction (N. Negroponte).

### Methodology in Computer Graphics -Seillac 1

IFIP Workshop on Methodology in Computer Graphics, Seillac, France, May

edited by R. A. GUEDJ, Thomson-CSF, France, and H. TUCKER, Technical University of Denmark

1979. 218 pp. Price: US \$29.25/Dfl. 60.00 ISBN 0-444-85301-4

Contributors: K. Bo, J. P. Crestin, R. M. Dunn, J. Encarnacao, J. D. Foley, R. A. Guedj, E. Hermans, F. R. A. Hopgood, M. Lucas, G. Nees, M. E. Newell, M. Sabin, T. L. Sancha, E. A. Warman.

# The Information Systems Environment

Proceedings of the IFIP TC 8.2 Working Conference, Bonn, West Germany, 11-13 June, 1979

edited by H. C. LUCAS, Jr., New York University, U.S.A., F. F. LAND, London School of Economics, U.K., T. J. LINCOLN, IBM, U.K. and K. SUPPER, MBP Germany GmdH, F.R.G.

1980. 368 pp. US \$39.00/Dfl. 80.00 ISBN 0-444-86036-3

The papers in the first section of this work, Organisation and Behaviour, set out to analyse the organisational and behavioural context in which information systems are developed and are expected to support the goal seeking activities of those who work in the organisations. In the second section, Participative Design Techniques, speakers attack the topic from a number of different directions. In Methodologies and Tools, experts present a variety of different methodologies

and tools which fall into a number of broad schools. The final section of the work, Personal Views and Speculation, presents two papers which, though based on a great deal of practical experience in industry and administration, and sensible analysis of current trends, are rather more speculative than other papers in the volume.

### **APL 80**

Proceedings of the International APL Congress, Leyden, The Netherlands, 24-26 June, 1980

edited by G. VAN DER LINDEN, O.R. and Special Applications Group, Elsevier-NDU, Amsterdam, The Netherlands.

1980. 380 pp. US \$48.75/Dfl. 100.00 ISBN 0-444-86015-0

APL 80 follows the general concept of the previous eleven APL conferences. It deals with all aspects of the programming language APL: the language itself, future developments and applications. This 1980 conference represents a careful selection of papers which cover a broad field of topics, encompassing the use of language, methodology, simulation, programming techniques, design of the language, as well as a of applications, including databases and education.

# Firmware, Microprogramming and Restructable Hardware

Proceedings of the IFIP Working Conference, Linz, Austria, 28 April - 1 May,

edited by G. CHROUST, IBM Laboratory Vienna, and J. R. MÜHLBACHER, Johannes Kepler University, Linz, Austria

1980. 310 pp. US \$39.00/Dfl. 80.00 ISBN 0-444-86056-8

This conference identified and decided on those problems where a consensus of solutions exists; identified those areas in which solutions are offered, but strong discrepancies of opinion still exist; earmarked and characterized as yet unsolved areas; and indentified directions in which useful and promising research should or could be especially fruitful. Four topics received major attention: (1) firmware engineering, (2) migration, (3) restructurability, and (4) new machine architecture. The high caliber of the contributors ensures the excellence of the papers, which present and identify many problems and current trends.

**North-Holland Publishing Company:** 

P.O. Box 211, 1000 AE Amsterdam, The Netherlands 52 Vanderbilt Ave, New York, N.Y. 10017, U.S.A.

#### **REGION 8 NEWS**

#### Continuing Education in Region 8



Michael A. Giddings Chairman, Continuing Education Committee, Region 8

Continuing Education plays a vital role in the development of our engineering knowledge to utilise the onslaught of technology in our everyday and work lives. Over the last twenty years we have seen the slide rule replaced by the calculator and the wireless reduced to the pocket transistor.

Never have the impacts of these changes been more noticeable than today. The normal career updating must be supported by a wider appreciation of technology to keep up to date with ones own specialisation and those, which although once quite unconnected, now are relevant.

The kernel of continuing education is the exchange of information. This may be

achieved with the help of many media such as books, films, television, and lectures. The IEEE has a firm policy of encouraging electrical and electronic engineering information exchange and continuing education. Continuing Education Courses are easy to organise consisting of anything from an evening lecture to a residential course lasting several days. Region 8 or IEEE Headquarters may be able to assist sections and chapter in their arrangements.

An alternative to group activities are the home study courses. One example of this is the home microcomputer course (Heathkit Model ET-3400) which can be obtained with a discount for members. This course gives a good grounding in microprocessors and microcomputers on a self build experimental kit.

Another example of the way that assistance may be given is the 'Do it Yourself Kit' which provides all the necessary ingredients for a continuing Education Course but without an instructor.

In Region 8 we also co-ordinate what is known as the Travelling Instructor Scheme. Engineers who have specific information or experience of interest and who are travelling outside their home Sections are requested to notify myself of their travel programme. This information is then circulated to the relevant Section chairman or continuing education representative to see if a lecture or a course may be organised. Please let me know if you are planning a visit outside your section. I can be reached at the address below.

If you are interested in hearing more of the IEEE Continuing Education Programmes contact your Section chairman, Continuing Education Co-ordinator, Student Counsellor or myself. My address is 6, Goswell End Road, Harlington, Beds, LU5 6NZ, England.

MICHAEL A. GIDDINGS

#### IEEE Fellows in Region 8

The following statement was made by Prof. J. A. Tegopoulos at the Region 8 meeting in Rome:

For 1980 there were 290 nominations for the Fellow grade and 129 of them were finally elected. From Region 8 there were fourteen nominations, seven of which were elected. These figures correspond to a percentage 4.8% and 5.4% respectively. For 1979 both these figures were 7%. Region 8 membership as a per cent of IEEE membership is 4.5%.

Although Region 8 Fellows for 1980 are about in the percentage of membership, Region 8 can do better considering its potential. All Region 8 Sections are therefore urged to see that more nominations are encouraged and submitted.

#### **MEETINGS IN REGION 8**

# 4th Electromagnetic Compatibility Symposium and Technical Exhibition.

After three successful international conferences in Montreux 1975 and 1977, as well as in Rotterdam 1979, each attended by approximately 500 participants from 27 countries and up to 23 exhibitors, the 4th EMC Symposium and Technical Exhibition will be held from March 10 to 12, 1981, at the Federal Institute of Technology, Zurich (ETHZ).

The conference is organized by the Institute for Communications Technology of the ETHZ under the auspices of Mr. F. Locher, Director-General of the Swiss PTT, and is sponsored by the Association of Swiss Electrotechnicians (SEV/ASE). A number of national and international professional organizations supporting the conference includes IEEE.

The symposium features 112 papers, which will be delivered in three parallel daily sessions: "Spread Spectrum Compatibility", "Characterization of Interference and Noise and Evaluation of System Performance", "Intra-system EMC", "Mathematical and Computer Methods in Spectrum Utilization", "Nuclear EMP I & II", "EMI in Microelectronics", "Biological Effects", "Coupling", "Immunity", "EMC in Communications", "Particular EMI Sources", "EMC Measurements Options for the Future", "Reliability, Limits, Measurements", "Available Computer Programs for the EMC Engineer", "Shielding and Grounding", "Lightning and Power Lines", "EMC Analysis and Modelling". The conference language is English.

Three two-hours workshops on "EMC Diagnostics", "EMP Hardening of Electronic Systems" and "Applications of Programmable Calculators and Computers for EMI Prediction and EMC Design" are included in the programme.

The symposium will review the current status and future trends of the EMC science. The workshops, organized on a question-answer basis in direct contact with the speakers, provide an introduction to newcomers, and respond to the needs of practising engineers. The exhibition will introduce modern measuring techniques, new technologies in materials and components, as well as EMC training programmes. The full text of all conference papers will be made available in the conference proceedings: "EMC 1981".

Further information from: Dr. T. Dvorak, ETH Zentrum-KT, 8092 Zurich, Switzerland. Phone (+411) 256-2790, tlx: 53 178 ethbi ch.

#### Conference on Very Large Scale Integrated Circuits.

The final programme for this Conference, to be held in Baden-Baden from 16-18 March, 1981, has now been published. It is organized by NTG in co-operation with the Germany Section.

Further information from: German Section of IEEE, Stresemannallee 21, VDE-Haus, D-6000 Frankfurt/M.70. Tel: (611)6308 221.

#### International Conference on Control and its Applications

The control field has matured considerably over the past decade and research and development efforts are shifting to meet new demands. The conference 'Control and its Applications' to be held at the University of Warwick on 23-25 March 1981 has been organized, in association with a number of other bodies including IEEE Control Systems Sopciety, to reflect this fact by acting as a general forum and bring together teachers, researchers and industrial and other users of control concepts to meet, present their work, exchange ideas and discuss the success of past research efforts and possible future trends. The final programme consists of approximately eighty papers in many of the established and rising control fields. The programme is divided into eighteen sessions devoted to specific areas such as multi-variable systems control, computer-aided design, self-tuning and adaptive control, system modelling and identification, optimization, stability and non-linear and large-scale systems together with sessions devoted to applications in the biomedical, mechanical and automotive, power and environmental fields and computer control. A number of review lectures have been arranged. Invited speakers include Prof. A. G. J. MacFarlane (Cambridge), Dr. M. T. G. Hughes (Warwick), Prof. H. H. Rosenbrock (UMIST), Prof. R. Saeks (Texas Tech. University) and Prof. D. P. Atherton (Sussex). The conference is supported by a number of social events and there will be an opportunity to look round the computing and laboratory facilities on site.

Further details from: Conference Department, The Institute of Electrical Engineers, Savoy Place, London WC2R OBL. Tel: 01-240 1871, Ext. 261. Telex: 261176.

# Sixth Workshop on Computer Architecture for Non-Numeric Processing.

This Workshop is sponsored by IEEE, ACM and others in Hyeres, France, 9-11 June 1981, and is the first to be held outside the USA. The Workshop encompasses all aspects of research and development of specialized non-numeric systems: data base machines; artificial intelligence machines; multimicroarchitectures; text-processing and office automation machines; etc.

Authors were to submit, by 15 February 1981, papers reflecting their most recent work. Full papers (English, not to exceed 20 double-spaced pages) should be submitted in five copies to the Chairman of the Programme Committee with an abstract (maximum 200 words). Surveys, short papers (including project presentations), will also be considered.

Further information from: Workshop Secretary, Therese Bricheteau, Head of the Public Relations Department, INRIA, B.P. 105, Domaine de Voluceau – Rocquencourt, 78153 – Le Chesnay Cedex, France. Tel: 954 90 20, Ext. 600; Telex: 697 033 F.

#### 2nd International Conference on the Numerical Analysis of Semiconductor Devices and Integrated Circuits (NASECODE II)

This conference will be held from 17 to 19 June 1981 at Trinity College, University of Dublin, Dublin, Ireland. It is sponsored by IEEE

Electron Devices Society and others.

Contributed papers, not more than five pages in length, are solicited on any topic relevant to the numerical simulation, optimization and computer aided design of semi-conductor devices and integrated circuits. The preliminary version of such a paper should be submitted not later than Friday, 20 March, 1981 and it must be accompanied by a separate one-page abstract. Final versions of accepted papers must be delivered to the registration desk during the conference and they must be prepared using the special author kit available from the Secretary. Conference Fee: £120 (Irish pounds).

Short Course:In association with NASECODE II a short introductory course on the Numerical Analysis of Semiconductor Devices and

Integrated Circuits will be held on 15 to 16 June 1981.

For further information about the conference and/or short course please contact: The Secretary, NASECODE II, 39 Trinity College, Dublin

# International Conference on Visual Psychophysics and Medical

Sponsored by the Engineering in Medicine and Biology Society. Region 8 and the Benelux Section of the Institute of Electrical and Electronics Engineers, and the VUB. The Conference is to be held on 2 and 3 July 1981 at Vrije Universiteit, Brussels, Belgium.

This is the second conference following a meeting in 1979 on the same subject held in Connecticut. Its aim is to attract experts from Europe, North America and around the world who are active in medical imaging, vision research, and image processing and display.

The conference is scheduled adjoining the XVth International Congress of Radiology which will be held 24 June - 1 July also in Brussels.

The following topics are of particular interest, i.e.

Physics aspects of medical images (spatial, contrast, colour, noise aspects).

Basic visual mechanisms and visual perception. Image processing and display in (bio) medicine.

Visual fatigue and human factors.

Evaluation systems.

Observer performance and the effects of age.

Development in machine vision and automated analysis.

Original papers suitable for twenty-minute presentation at the conference are solicited. To submit a paper, send three copies of a three-page abstract on or before 27 February 1981 to: Godefridus J. Arink, IEEE Benelux Section, Puttendijk 12, 6026 VZ Maarheeze, The Netherlands; or A. Oosterlinck, Kath. Universiteit Leuven, Centrum voor Menselijke Erfelijkheid, Sint Jacobsplein 21, B-3000 Leuven, Belgium.

#### Conference on Very Large Scale Integration (VLSI)

This conference will be held in Edinburgh, UK, 18-21 August 1981, and will present current research in all aspects of the design and application of VLSI, in particular on Theory, Design Methodology, Design Tools, Architectures, Applications, Circuit Design and Fabrication. Invited speakers: Barron (INMOS), Mead (Cal Tech), Mudge (DEC), Larkin (Plessey). Deadline for submission of abstracts 16 March 1981. Secretariat VLSI Conference, 26 Albany Street, Edinburgh EH1 3QH; telex VLSI 727442 (UNIVED G).

Sponsors: Department of Electrical Engineering (Prof. Mavor), Department of Computer Science (Prof. Michaelson), Wolfson Microelectronics Institute (Director Milne), all of Edinburgh University. IEEE Region 8 is a co-sponsor. Single study bedrooms at the University Halls of Residence will be available or, if required, hotel

accommodation.

#### European Conference on Circuit Theory and Design

The Conference will be held in The Hague, 25-28 August 1981, and will

concentrate on the following areas:

Computer-Aided Circuit Design and Testing. Simulation algorithms; modelling and macro-modelling; multi-level simulation; system design; numerical techniques for simulation; circuit layout and layout vertification; testing of electronic circuits; parallel simulation, optimization and centering, hierarchical and parallel computer, design languages, datastructures, VLSIC design.

Signal Processing. Filter theory and techniques; stochastic and adaptive filters; LSI design of filter and signal processing algorithms; SAW, CCD and switched capacitor-filters; digital filters; signal processing algorithms; fast algorithms; parallel and pipeline filter design;

digital hardware in filtering applications etc.

Classical Network and System Theory. Scattering theory, large scale systems theory; stability theory; estiomation theory; stochastic filter theory; non-linear network and system theory; graph theory; network synthesis, factorization theory, numerical properties etc.

Authors were invited to submit papers not exceeding twelve pages double-spaced A4 sheets. They will be selected by the programme committee and will be published in the proceedings of the conference. The time-table for submission is as follows: Submission of papers - 31 January 1981; Notice of acceptance - 15 March 1981; Final deadline for camera-ready copies - 1 May 1981.

Please submit papers in triplicate to: Prof. R. Boite, Institut d'Electricite, Faculte Polytechnique de Mons, Boulevard Dollez 33, Mons, Belgium. The ECCTD '81 is organized on behalf of the ECCTD Steering Committee jointly by: The Department of Electrical Engineering, Delft University of Technology, The Netherlands, and The Polytechnique de Mons, Mons, Belgium, and is sponsored by: The IEEE Society on Circuits and Systems; Bell Telephone Mfg. Co., Antwerp, Belgium; NERG (Nederlands Elektronica en Radio-genootschap); IEEE Region 8; The Convention of National Societies of Electrical Engineers of Western Europe (EUREL) through the Dutch Society of Engineers (KIVI); and The Belgian Association of Telecommunication and Electronic Engineers (SITEL).

Secretariat: Delft University of Technology, Department of Electrical Engineering, Attn. Erika van Verseveld, P.O. Box 5031, 2600 GA Delft,

The Netherlands.

#### International Conference on Digital Signal Processing.

To be held in Florence, Italy, 2-5 September 1981, sponsored by: Imperial College of Science and Technology, University of London, England; EURASIP – European Association for Signal Processing; Facolta di Ingegneria, Universita di Firenze, Florence, Italy; Istituto di Ricerca sulle Onde Elettromagnetiche del C.N.R., Firenze; Sezione di Firenze dell'AEI; Sezione di Firenze dell'ANIPLA; AICA; AITA; and IEEE Middle and South Italy Section. In co-operation with the IEEE Audio Speech and Signal Processing Society.

Papers are invited for this conference devoted to advances in the theory and techniques of digital signal processing and digital filtering. Contributions on the following topics are particularly encouraged: design methods and techniques; quantization effects, accuracy and stability; multi-dimensional filtering methods; digital image processing; hardware implementation (including CCD, switched capacitors and SAW); array processors; applications to signal and image processing with particular reference to speech, radar and sonar signals; biomedical signals and images, remote sensing.

The conference will include some special sessions on the following subjects: speech processing, radar signal processing, digital image processing, remote sensing, microprocessors, array processors,

biomedical signal and image processing.

A Round Table discussion on "Impact of Digital Signal Processing in Technical and Industrial Areas" will also be held. The Round Table will be recorded on cassettes which will be on sale a few hours after the close of the session.

Prospective speakers are invited to submit contributions not later than 28 February 1981 to either:

Prof. V. Cappellini, Istituto di Elettronica, Facolta di Ingegneria, via di S. Marta, 3, 50139 Firenze, Italy; or Dr. A. G. Constantinides, Department of Electrical Engineering, Imperial College of Science and Technology, Exhibition Road, London SW7 2BT, England.

#### 11th European Microwave Conference

This conference will be held at the Rai Congress Centre, Amsterdam, The Netherlands, 7-11 September 1981.

Conference topics will include: Communication Systems including Terrestrial and Satellite Communication and Broadcast; Microwave Techniques in Radar, Remote Sensing and Radio Astronomy; Biological, Medical and Industrial Applications of Microwaves; Antennas and Arrays; Passive Components and Circuits including non-reciprocal Circuits; Active Devices and Circuits including GaAs Monolithic Circuits; Mixers and Low-Noise Reception; New Materials for Active and Passive Components; Millimetre Wave Components and Circuits: Sub-nanosecond Digital Techniques.

Details of a Workshop on 11 September will announced later.

Further information can be obtained from: Dr. M. T. Vlaardingerbroak, Conference Chairman, Philips, Elcoma EH5, 5600 MD Eindhoven, The Netherlands. Telephone: (040) 756853; Telex: 51121 NPHEED.

#### 1982 International Zurich Seminar on Digital Communications

The traditional biannual Zurich Seminar is planned for 9-11 March 1982. We expect it to attract again some six hundred specialists from all over the world. The main theme "Man Machine Interactions" will concentrate on the peripheral - the user/subscriber - and the maintainer/operator-side of digital communication systems. The Call for Papers was scheduled for January 1981.

The IEEE Switzerland Chapter on Digital Communication Systems, in co-operation with the IEEE Switzerland Section and different IEEE Societies, has always been, and will also be in 1982, the organizer of

this seminar.

Further information from: Secretariat '82 IZS, Miss M. Frey, EAE, Siemens-Albis AG, POB, CH-8047, Zurich, Switzerland.

#### **NEWS OF THE SECTIONS**

#### **BENELUX SECTION**

Early in 1980 technical meetings were held on satellite communications, digital audio, radar systems for ATC, and communication technology for nautical traffic control.

In May a meeting was held covering the history and future trends in electrical and electronic engineering. Domestic communications satellites was the topic of a June meeting.

In August the Benelux Section and the Eindhoven University of Technology jointly organized a seminar on radar technology which was taught by Dr. Brookner. This course was attended by about seventy participants.

In September the Student Branch at the Twente University of Technology in Enschede organized a symposium on artificial intelligence. Prof. Findler and Messrs. Addis and Swets lectured on this challenging field of computer science. Also in September, Dr. Jacobaeus, winner of the 1979 Alexander Graham Bell Award, gave a lecture on the telephone industry – an industry in transition – at the Delft University of Technology. In October a meeting was held with lectures on digital video and image processing techniques. A record attendance of 280 persons was indicative of the interest in this subject. In November a technical meeting was held on alternative energy sources. As in previous years, this programme of technical meetings is conducted in close co-operation with two national engineering societies. Twice a year the programme co-ordinators of the three societies meet to discuss the proposed meeting programme.

During 1980, the Benelux Section voted by letter ballot a new committee. Prof. J van Overstraeten is Chairman, and Dr. Willy Sansen is Secretary/Treasurer. Both are from the University of Leuven, Belgium. Dr. Ed Maanders continues as Past-Chairman. Prof. Albert Guissard became the Chairman of the Joint Chapter of the Antennas and Propagation/Microwave Techniques and Technology Societies. The Benelux Section now has 1,193 members, which means an

increase of about ten per cent in a year.

#### **DENMARK SECTION**

During the first eleven months of 1980, the Section organized the following six lectures:

Prof. G Cook from the University of Virginia lectured on "Minimum-Noise Aircraft Landing Trajectories" in March.

In May Dr. C Lundsteen from the Copenhagen University Hospital talked about "Visual Supervision of Selection of Attributes for Automatic Pattern Recognition"

Automatic Pattern Recognition". In July Dr. J Baal-Schem from Tel-Aviv University gave the following two lectures: "Telecommunications and Society" and "Impact of

two lectures: "Telecommunications and Society" and "Impact of Modern Telecommunication Systems on the Location of Industrial Plants".

In November Dr. D Biran, Chief Scientist at the Ministry of Communications, Tel-Aviv, gave two lectures on "Direct Conversion of Solar Energy to Electricity".

Two lectures were scheduled for December.

The Denmark Section is giving much attention to the EUROCON '82 Conference; its topic is "Components and Systems".

The Conference will take place at the Technical University of Denmark, June 14-18, 1982, and potential contributors were requested to forward a preliminary title before January 15, 1981.

The address of the Conference Office, where further information can be obtained, is: DIEU, Danish Engineers' Post Graduate Institute, The Technical University of Denmark, Bldg 208, DK-2800 Lyngby, Denmark. Telex: 37529 DTHDIA DK.

#### **EGYPT SECTION**

The Egypt Section was established in 1956 and is working in co-operation with the National Society of Electrical and Electronics Engineering in Egypt. As of April 1980, the total membership is 164 among which 35 are student members. On Tuesday, April 8, 1980, the Egypt Section had the honour to receive IEEE President L Young, General Manager Eric Herz and Region 8 Director, Dr. Poortvliet. During the year 1980, the Section has participated in different technical activities including seminars, workshops, and invited lectures as follows:

Seminars: On "Acoustical Theory and Terminology" by Dr. F N Kessler Dames and Moore, USA.

Workshops: On "Microprocessors and Optoelectronics" in collaboration with Fairchild Company.

Expositions and Conferences: On "Electric Power Generation and

**Expositions and Conferences:** On "Electric Power Generation and Transmission" in co-operation with Horison House, USA, and Ministry of Electricity, Egypt.

Lectures: On "Modern Trend of Large Scale Systems" by Prof. A Titli, Director of Control Systems Group, LAAS, Toulouse, France.

The Section has planned for several future activities during 1981. This includes special lectures on different topics of interest to the Egyptian community such as: Thick film integrated technology; Large scale systems, Direct TV satellite reception; Pollution control and Recent

trends in computer networks. It is also planned to have an international conference on Measurement, Simulation and control, in collaboration with Prof. M H Hamza, representative of IIASTD, and Cairo University.

#### **FINLAND SECTION**

The traditional co-operation between the Section and the national electrical engineering societies has continued. Three co-organized events are found among the activities during the period March-November 1980.

The annual "Day of Electricity" arranged by ten electrical engineering societies gathered some 170 participants. Twelve speakers representing government, academic world and industry gave their views on the topic "Research–Development–Internationalization". Continuing education and transfer of know-how between research institutes and industry were two common demands.

Two technical meetings with invited lecturers were organized in co-operation with the Association of Electronics Engineers in Finland. Dr. Heikki Ihantola (Salcomp) gave a talk on the present state of semi-conductor component manufacturing in Finland. Dr. Tuomo Suntola (Lohja Corporation/Electronics Division) presented the technology and applications of an electro-luminescence display which has been developed by his group. These interesting topics gathered large audiences.

Beyond the activities in common with the national societies, the development of international relations within the electrical engineering community is an important task of a Section within Region 8. However, to arrange a more regular flow of visitors is not easy for various reasons. In order to stimulate such activity it was suggested in a membership letter that Section members who are planning a business trip abroad should contact the local Section to enquire about their possible interest in a lecture. Since this activity should be bi-directional, the idea is forwarded to other Sections.

#### **ISRAEL SECTION**

Membership: As of September 30, 1980, the Israel Section has 430 members, including 98 students.

Visit of IEEE President: IEEE President, Dr. L Young, visited the Israel Section on April 1-4, 1980. He was accompanied by E Herz, Executive Director and General Manager, and Region 8 Director, D C J Poorvliet. The visitors met on April 3, 1980, with members of the Section. At the meeting several subjects were raised by the members – mainly on

Continuing Education and receipt of journals – and the visitors

responded and explained IEEE policy on those subjects.

IEEE/AEAI Agreement: During the visit of President Young, an agreement between IEEE and the National Association of Engineers and Architects in Israel was signed in principle by the Presidents of IEEE and AEAI. The agreement was approved by RAB and IEEE Ex. Com. and was finally signed by IEEE President on September 28, 1980, and by AEAI President on October 20, 1980. The agreement enhances the co-operation between IEEE and AEAI in Israel, especially through organizing joint meetings and establishing continuing educational centres for electrical and electronic engineers in AEAI Institutes in Israel cities.



Signing the IEEE/AEAI Agreement. From left to right: R. Hoyda, Section Secretary; Dick Poortvliet, Region 8 Director; U. Stock, President AEAI; J Baal-Schem, Chairman IEEE Israel Section.

Meetings and Lectures:

- (a) A one-day seminar on "Software Engineering in Computer Embedded Systems"; co-sponsored by IEEE Israel Section and AEAI, was held on April 29, 1980. The seminar was attended by over 250 persons.
  - (b) A lecture on "Communications Technologies for the 80s" was delivered by Prof. R Feldman at a meeting organized by the Communication Chapter of the Section and co-sponsored by

AEAI and the Ministry of Communication. The lecture was

attended by fifty engineers.

(c) A two-day seminar on "The Office of the Future" was organized by the Communication Chapter in co-sponsorship with Defence R & D and the Interdisciplinary Centre for Technological Analysis and Forecasting of Tel-Aviv University on May 26-27, 1980. The lecturers were R P Uhlig of Bell Northern Research Ltd, Prof. D J Foerber of University of Delaware; J H Bair of SRI International. 160 persons attended this seminar, held in the Tel-Aviv University campus.

(d) The S-AP/ED/MTT Chapter met on June 12, 1980, for a lecture on VLSI delivered by Prof. Shapir of the Hebrew University and for a

visit to the Intel. Plant in Haifa. 35 members attended.

(e) The S-AP/ED/MTT Chapter held its Third Biennial Symposium on October 12, 1980, with an attendance of 120. A tutorial lecture and 15 papers were presented and a Symposium Proceedings book was issued.

(f) A one-day course on Millimetre Waves, attended by sixty persons was held on October 13, 1980. The lecturer was Dr. J C Wiltse, national lecturer for 1980 of the MTT Society of IEEE.

#### MIDDLE AND SOUTH ITALY SECTION

Executive Committee: Elections of the new Executive committee for the two-year term August 1980/July 1982 were made by ballot in July 1980. The elected officers are: V Cappellini, Chairman; P Peiser, Vice-Chairman; R Sorrentiono, Secretary-Treasurer. The new Executive Committee had the first meeting on November 12, during which the following Standing Committee Chairmen have been appointed: P Bernardi, Nominating Committee Chairman; V Cimagalli, Programme Committee Chairman; M D'Amore, Membership Development Committee Chairman; P Maltese, Student Activities Committee Chairman; F Cappuccini, Awards Committee Chairman. The Section Junior Past-Chairman, P Bernardi, is a member of the MELECON '81 Steering Committee.

Section Technical Meetings: March 14, 1980, University of Rome, Prof. I Modena, "Magnetometri superconduttori (SQUID) e loro applicazioni". May 7, 1980, University of Rome, Dr Eng C Maffezzoni, "Controllo della centrale eliotermoelettrica di Adrano (Progetto

'Eurelios')".

Technical Conferences Sponsored by the Section: 3rd Riunione Nazionale di Elettromagnetismo Applicato, Bari (Italy), June 25-27, 1980. International Conference on Digital Signal Processing, Florence (Italy), September 2-5, 1981, in co-operation with the IEEE ASSP Society. The conference is also sponsored by: Imperial College of Science and Technology, London, England; EURASIP; Facoltà di Ingegneria, Università di Firenze, Florence (Italy). President: Prof. B McA Sayers. Conference Co-Chairmen: V Cappellino, A G Constantinides. Symposium on special purposes machines, Bologna (Italy), September 1981. The conference is organized by Group of Electrical Machines, Consiglio Nazionale delle Ricerche, Italy, directed by Prof. O Honorati.

Membership Development: The membership of the Section rose from

July 1979 to July 1980 by 29% (77 new members).

Student Activities: April 11, 18, 24, 1980. A three-day seminar on Design and Realization of GaAs FET Amplifiers at Microwave frequencies. Dr. Eng. R Rosati. May 5, 12, 1980. Technical tours at Elettronica Spa, Via Tiburtina, Rome. A new student branch with about 40 members has been established at the University of Florence, Italy.

#### **NORWAY SECTION**

Section Officers: Chairman: Dr. Børje Forssell, Electronics Research Laboratory (ELAB), N-7034 Trondheim-NTH. Vice-Chairman: Ass. Prof. Nils Haaheim, Department of Telecommunications, Norwegian Institute of Technology, N-7034 Trondheim-NTH. Secretary/Treasurer: Prof. Gunnar Stette, Department of Telecommunications, Norwegian Institute of Technology, N-7034 Trondheim-NTH.

Section Technical Meetings: February 28, 1980, the Section was visited by Dr. Christian Jacobaeus, L M Ericsson, Stockholm, who gave two lectures: (1) Traffic theory – applications and use in telephone companies and administrations. (2) The telephone industry – an industry in transition. The lectures were given at the Norwegian Institute of Technology in Trondheim and attended by a great number of interested listeners, students as well as managers of companies and

telephone administrations.

Co-sponsored Conferences: The 33rd Norwegian Conference on Electronics and Acoustics, co-sponsored by the Section and different national societies, was arranged June 13-15, 1980, in Kristiansand. The conference was organized in morning sessions with overview papers and five parallel afternoon sessions with more specialized papers. The following papers were presented by IEEE members: (1) Dag T Gjessing, Surveillance of resources and pollution. (2) Per G Gløerson, Development of environmental parameter sensors. (3) Raymond S Pengelly, GaAs microwave integrated circuits — technology and applications. (4) Audun Hordvik, Pilot production of optical fibres. (5) H Marcus Bayegan, The computer in design and production planning. (6) Einar Arne Herland, Synthetic aperture radar for imaging purposes. (7) Yngvar Lundh, Intricate signal processing by new multi-processor technology.

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**Membership Development Activities:** The number of active members increased from September 30, 1979, to September 30, 1980, by 11 members, ie by 7.7%.

#### **POLAND SECTION**

Educational: The Section co-sponsored three international conferences in co-operation with other Polish and international scientific or technical organizations. These conferences were as follows: 4th European Conference on Circuit Theory and Design, September 2-5, 1980, Warsaw, which attracted unusually high numbers for this conference, 323 participants from 28 countries. 10th European Microwave Conference, September 8-12, 1980, Warsaw, with over 500 participants from 36 countries. 5th International Wroclaw Symposium on Electromagnetic Compatibility, September 17-19, 1980, Wroclaw, in which participated over 200 specialists from 22 countries all over the world.

On April 9, 1980, Dr. Christian Jacobaeus of L M Ericson, Sweden, being invited to Poland by the Association of Polish Electrical Engineers and IEEE Poland Section, gave a very interesting lecture on "Teletraffic

Theory and its Practical Application"

In September, 1980, Poland was visited by Prof. F L Stumpers (Past Director of Region 8 IEEE) from Utrecht University, Netherlands. On the invitation addressed to him jointly by the Polish Academy of Sciences and the Association of Polish Electrical Engineers, Prof. F L Stumpers took part in the International Wroclaw Symposium on Electromagnetic Compatibility and independently gave lectures on "Radioastronomy in Netherlands" at the Wroclaw Technical University and afterwards at the Torun University. They were followed by the lecture on "Microelectronics in Telecommunications" presented at Warsaw Technical University.

Information on Poland Section activity has been distributed among its members in an already well established form of bulletins. One was issued in October, 1980, and contained eleven pages. In addition, thanks to the efforts of the Section members, the most interesting topics of the annual review "Technology '80" (Spectrum, January 1980) have been presented in a publication to be distributed among the Section members and authorities interested in the progress of world technology. The publication is in Polish and contains 100 pages.

Membership: Poland Section has at present 53 members and no significant changes of this figure are presently being foreseen.

#### SWEDEN SECTION

The Swedish Section was visited in April by Leo Young, 1980 IEEE President, and meetings were arranged with officers of both the IEEE Sweden Section and the Swedish Electrical Engineers Association (SER). Interesting discussions were had about possible co-operation between the two organizations.

Student Branches exist on Göteborg, Lund, Linköping, Stockholm and Uppsala. If a sixth student activity, at the new technical university in Luleå, in the north, where industrial electronics is one of the specializations, develops into a branch, this will probably be one of the northern-most in the world, close to the arctic circle.

The Swedish Electrical Industry has succeeded in overcoming some of the critical steps in the "computerization" and "digitalization" of information processing. As one example of seminar activities dealing with these problems, Dr. Christian Jacobaeus of the L M Ericsson Telephone Company gave a talk at the end of November on "The Telephone Industry – an industry in transformation". Other planned seminars involve presentations by specialists from the ASEA Company, specialized in power electrical engineering. Multi-national companies like IBM also contribute to building up the engineering potential of Sweden, and as an example L Arosenius of Swedish IBM talked on computer activities in Sweden, at the beginning of December.

#### **SWITZERLAND SECTION**

The main event has been the formation of a new Chapter on Solid-State Devices and Circuits. It is a joint Chapter reporting to the Circuit and Systems and the Electron Devices Societies of IEEE. The Chapter officers are: M Ilegems, Chairman; H Wyss, Vice-Chairman; and M Dutoit, Secretary-Treasurer. The new Chapter made a good start in organizing a one-day meeting on "Microelectronics in Switzerland" in Berne on October 23, 1980, attended by over 100 members and guests. Nine conferences covered the subjects of Integrated-Circuits Manufacturing, Thin and thick film hybrids, and various technological subjects, showing the fast growing industrial activity in this field in Switzerland.

Other Section activities consisted in continuing the series of scientific-industrial meetings at Hasler AG on May 9 and at Autophon AG on June 27. The fall meeting was held on September 7 at CERN in Geneva and another on November 7 at ETA AG in Grenchen.

#### UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION

Forthcoming Meeting: The Annual General Meeting of the Section will be held in London at 14.30 on Tuesday, March 3, 1981. Further details will be circulated.

Chapter Meetings: Keep in touch with your Chapter Secretary. Details of Chapters were given in UKRI News in the November '80 Newsletter. New Student Counsellor: Dr. P G Farrell, of the University of Kent, an elected member of the Section Executive Committee, took over from Prof. C W Turner as Student Counsellor for UKRI Section, as from January 1, 1981. Thanks to Prof. Turner for his services.

Presentation of Award. The Alfrid N Goldsmith Memorial Award for 1979 was presented to Prof. E Openshaw Taylor at Imperial College, London, at a Section meeting on November 13, 1980. The Award was made by the Professional Communication Society for his outstanding achievement in furthering the aims of the Society.

Joint Meeting with IEE and IERE: The Section meeting on November 13, when Mr. C S den Brinker (Redifon Telecommunications) spoke on the future of radio communications, was arranged by IEEE and held as a joint meeting with Professional Group E8 of the IEE and with the IERE. MELECON '81: The Mediterranean Electrotechnical Conference (1981) will be at Tel Aviv, Israel, on May 24-28, 1981. VIP International Conference Services Ltd, the official United Kingdom travel agents, have put together a special low-cost travel package which includes return flights, accommodation and transfers. The starting price will be from £271 per person and further details can be obtained from Miss Louise Neville, VIP International Conference Services Ltd, 42 North Audley Street, London W1A 4PY. Tel: 01-499 4221.

Circuits and Systems Chapter Officers: Chairman: Dr. J | Sewell (University of Hull); Vice-Chairman: Dr. L F Lind (University of Essex); Secretary: Dr. D G Haigh (Imperial College, London).

### STUDENT ACTIVITIES

During the academic year 1979-1980, there has again been a substantial increase in the volume of student membership and student activities. From October 31, 1979, to October 31, 1980, student membership has gained 21.2% in Region 8, increasing from 1,406 to 1,704 members. This is essentially due to the effort of many counsellors, but the interest shown by many sections and section chairmen for student activities has, of course, also been quite important. In several places, counsellors have been appointed for the first time: Prof. De Wilde (Delft) and Ir. Vinck (Eindhoven) in the Benelux: Prof. Kriezis (Thessaloniki) in Greece; Prof. Cappellini (Florence) in Middle and South Italy; Prof. El-Gabaly on Kuwait; and Prof. Delgado-Penin (Barcelona) in Spain. New branches have been approved: Eindhoven (Benelux), Thessaloniki (Greece), Kuwait, and Barcelona (Spain). Since then, a new branch is in formation in Florence (Middle and South Italy). and there are good hopes in the Benelux, in Egypt, Israel, Norway, Sweden, Germany and Denmark.

Activities have grown too: more trips from one branch to another one, trips from several branches to EUROCON '80 in Stuttgart, and

participation in the undergraduate and postgraduate contests in 1980. In 1981, the final presentations for the undergraduate contest will be held in Israel, within MELECON '81, while in 1982 there will be an undergraduate and also a postgraduate contest, within EUROCON '82, in Copenhagen, Denmark.

All this clearly indicates that there is a strong interest in Region 8 for IEEE student activities: the high quality of the publications and the participation of a large international organization have always been in Region 8 the two key points which have linked students to the IEEE. The minutes of the 7th Meeting of the Region 8 Committee, held in

Rome on April 13, 1966, indicate that the first branch was formed in Rome in 1961 (Prof. Barzelai), the second one in Madrid in 1963 (Prof. Millan), and the third one in Louvain in 1965 (Prof. Jespers). In September 1980, there were 36 branches in Region 8. This is due to many efforts of many people and I sincerely wish to thank them all. With my best wishes for the New Year.

Professor A. VANDER VORST

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