

# IEEE Region 8 newsletter



NEXT ISSUE - AUGUST

COPY DEADLINE - JULY 7

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS  
INCORPORATED

Editor: Mr. W. H. Devenish, ERA Technology Ltd., Cleeve Road, Leatherhead, Surrey, England KT22 7SA.  
Tel. Leatherhead 74151

Telex 264045 ERALHD G

Regional Director: Prof. Dr. Walter E. Proebster  
IBM Deutschland GmbH, Postfach 80 08 80  
7000 Stuttgart 80, Federal Republic of Germany

No. 54 MAY 1981

## REPORT FROM THE REGIONAL DIRECTOR



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

Since I became Director of Region 8 at the beginning of this year I have found out in detail what a very active Region we are. We held EUROCON in 1980, and it will be held again in 1982 and in 1984. In May this year we shall hold our first MELECON, and MELECON will be repeated in 1983 and probably in 1985. This means that the present programme of major conferences in which our Region takes a leading part is continuing year by year over six years, by far the largest programme in our history. I confidently expect that our programme will continue in this way in the future.

The introduction of the Region 8 assessment has given us a secure financial base, which has enabled us to increase our

services to members by arranging this programme of conferences. The assessment has also made sure that there will be four issues of the Newsletter every year in spite of steeply rising printing and mailing costs, and the assessment has enabled the Region 8 Committee to strengthen our Student Activities and Membership Development activities.

Before I describe our activities in more detail I wish to say, on behalf of all Regional Members, how greatly we appreciate that the IEEE President, Dick Damon, will be visiting the Region in May this year, together with General Manager Eric Herz and the Vice-President for Regional Activities, Larry Wilson, who will be accompanied by their wives during part of their visit. Their visit will include Helsinki, Stockholm, Oslo, Trondheim, and the INTERMAG Conference in Grenoble. Of particular significance is a meeting in Paris with EUREL President Jean Syrota, who is also President of the French national society SEE. Next the party will meet representatives of the recently formed Austria Section, will visit Budapest, the North and the Middle and South Italy Sections in Rome, and the Greece Section in Athens. Finally, the party will arrive in Israel in time for the opening of MELECON '81 in Tel Aviv.

During their visit the party plan to meet Section Chairmen and their Executive Committees, and I am confident that wherever they go they will receive a very warm welcome.

I am very encouraged by the progress being made by our first MELECON Conference, MELECON '81, which takes place in Tel Aviv on 24 to 28 May. I wish to record my special appreciation of the work of the Chairman of the Steering Committee, Jacob Baal Schem, and of the many people who are helping him. I am glad to note that there will be two IEEE stands in the Exhibition associated with MELECON '81, a Membership stand and a stand which will display and demonstrate much of the continuing education material which the IEEE provides.

In this Newsletter you will find further information about MELECON '81 and about EUROCON '82, which will be held in Copenhagen on 14 to 18 June, 1982, and which will be honoured by the presence of His Royal Highness Prince Henrik of Denmark to open the Conference. As at the end of March about 200 titles had been offered, covering the broad range of components, products, systems and reliability design, testing and application. I am happy to tell you that the Vice-President for Technical Activities, Bob Larsen, is arranging for the Technical Activities Board, consisting of some 50 members, and on which all Societies and Groups are represented, to meet in Copenhagen during EUROCON '82.

Now let me refer to our future conference programme beyond 1982, it has been decided to hold MELECON '83 in Athens, and I am particularly pleased that Professor Emmanuel Protonotarios, Chairman of the Greece Section, has accepted the invitation to act as Chairman of the Conference Steering Committee.

I greatly appreciated that I was invited to the annual dinner of the IEE, the British national society, which was the first time such an invitation has been given to the Director of Region 8. This occasion provided the opportunity for me to discuss EUROCON '84 with IEE President, Air Marshal Sir Herbert Durkin, and EUREL representative Professor W. Dietrich. As a result we have agreed that EUROCON '84 will be held in September 1984 in Brighton, England, with the theme of computers, communication and control. This is a particularly important EUROCON for us because 1984 is the IEEE Centenary Year, and I am happy that the Conference arrangements for this special occasion are in such excellent hands.

I look forward to communicating with you all again in our next Newsletter, and to giving you further news of the activities of our Region.

WALTER E. PROEBSTER  
Boeblingen, Federal Republic of Germany

## INSTITUTE NEWS

### IEEE may change name to reflect Computer influence

The above headline is taken from the February issue of The Institute and the attention of all members in Region 8 is drawn to the item which follows it. Although it is said there that "the committee will definitely make an effort to contact membership directly on this issue, probably through a questionnaire", post delays may prevent Region 8 members' views being adequately represented unless those with strong feelings write immediately to Robert W. Lucky, Executive Vice-President, who is Chairman of the Committee.

The new name, proposed by the IEEE Computer Society, is the Institute of Electrical and Computer Engineers. The item in The Institute includes the following six specific reasons for the change:

1. Computer disciplines and technology are of interest to all Groups and Societies of the IEEE.

2. The Computer Society is the fastest growing part of the IEEE.
3. Computer science is the largest single discipline in the world.
4. The IEEE leads in accrediting computer engineering academic programmes.
5. A number of EE departments have changed their names to Electrical and Computer Engineering.
6. The Computer Society publishes more publications and pages than any other technical discipline in the IEEE.

### Unemployed, Retired and Life Members

IEEE Life Members are those members who are over 65 years old and whose years of IEEE membership, when added to their age, equals or exceeds 100. Life Members are not liable to pay any dues nor Regional assessment.

Few in Region 8 will qualify for Life Membership but they may qualify for a reduction in dues as Retired Members. The qualifications are to be over 62 years old and not gainfully employed, and those who qualify may apply to Headquarters for dues at \$12 per annum.

Members who advise Headquarters that they are unemployed but seeking re-employment are entitled to retain all the privileges of membership on payment of one-half of the annual dues, of the Regional assessment, and of Group and Society fees.

DEADLINES	PUBLISHED QUARTERLY	FEB	MAY	AUG	NOV
	News to Editor	Jan 7	April 7	July 7	Oct 7
Advertisements to County Secretarial Services	Jan 15	April 15	July 15	Oct 15	
Delivery inserts to County Secretarial Services	Jan 22	April 22	July 22	Oct 22	

## MELECON '81

TEL AVIV, ISRAEL, 24-28 MAY 1981



Mr Yitzak Navon,  
President of Israel,  
who will open Melecon '81

His Excellency Mr Yitzak Navon, President of Israel, will open MELECON '81. This will be a landmark in the history of Region 8, because it will be the first time a conference initiated by the Region has been honoured by a Head of State. His presence confirms the importance and standard of this first Mediterranean Electrotechnical Conference, which will be held at the Tel Aviv Hilton on 24-28 May 1981.

Dr Richard W. Damon, President of IEEE, will be present at the opening ceremony, and keynote speeches will be given by Dr H. Schorr, Director of the IBM T. J. Watson Computer Science Department, Yorktown Heights, USA, and by Professor

J Ziv, Vice-President, Technion-ITT, Haifa, Israel.

The support for MELECON '81 has been so encouraging that it has been decided to hold MELECON again in 1983. MELECON '83 will take place in Athens, Greece. Professor E. N. Protonotarios, Chairman of the Greece Section, has been appointed Chairman of the Conference Steering Committee, and Professor P. P. Civalleri, Chairman of the North Italy Section, has been appointed Chairman of the Technical Programme Committee. Dr J. Baal Schem has agreed to serve as Vice-Chairman of the Steering Committee, where his experience as Chairman of the Steering Committee for MELECON '81 will be extremely valuable. Further news of MELECON '83 will be regularly reported in the Newsletter.

Contributions from 15 countries, amounting to 175 papers, will be presented at the Conference in parallel sessions covering the five main themes: Communications; Solar energy and wind power; Microprocessors and computers, electronics and the environment; Medical applications; Technology transfer and socio-economic impact. Between 800 and 1,000 participants are expected.

MELECON '81 is sponsored by Region 8 and the Israel Section of the Institute of Electrical and Electronics Engineers, and by the Association of Engineers and Architects in Israel in co-operation with the European Association for Information Processing (EURASIP) and National Societies of Electrical Engineers in Mediterranean Countries. The registration fees for members of the sponsoring organizations are US \$145 if airmail postmarked before 15 April, and US \$160 if later. For non-members the corresponding fees are US \$180 and US \$200. For students, registration and accommodation combined are available at the reduced rate of US \$150. Registrations will be accepted at any time up to and during the Conference, and participants will receive a copy of the Conference Proceedings. For registration, further information and the names of local travel agents who can advise on the most economical arrangements for attending MELECON '81, write to MELECON '81 Secretariat, c/o ORTRA-TRAVEX, 431 Namir Square (Atarim), POB 3473, Tel Aviv 61 033, Israel (Telex 33629 TRVEX IL).

Associated with MELECON '81 are a student programme, an Exhibition at which the Israeli Electronics Industry will be well represented, visits to local industry, a social programme, a sightseeing programme for persons accompanying participants, and a three-day post-conference tour in Israel.

The Conference will include 36 technical sessions covering the main themes. Papers to be presented by authors from Israel include: "A first intelligent microprocessed dictionary that corrects spelling errors" at the session on Microcomputer Systems; "Remote telemetric stimulation and monitoring of freely-moving patients" at the Medical Engineering session; "Digital design automation tools as teaching aids" at the session on Education; and "Application of computerized irrigation control systems" at one of the two sessions dedicated to Control.

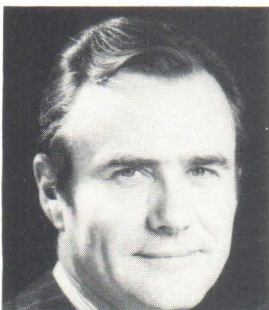


Tel Aviv Hilton, where Melecon '81 will be held

Authors from Italy will present papers such as "Electronic mail systems and services" at one of the two sessions on Communication Systems and "On the dynamic model describing transmission properties of optical fibers" at the session on Optical Wave Propagation. An invited paper on "Monolithic microwave circuits - technology and design, application and future prospects" will be presented by an author from the US at one of the two sessions on Microwave Components. Among the papers to be presented by authors from Spain is "Technology transference in nuclear programs" at the session on Technology Transfer and an author from the UK will present a paper on "A hybrid computer model of a flat-plate solar water heating system" at one of the two sessions on Solar Energy. A panel of academics and industrialists will discuss the subject of "Continuing education and its impact on research and industry".

## EUROCON '82

COPENHAGEN, DENMARK, 14-18 JUNE 1982



HRH Prince Henrik of Denmark  
who will open Eurocon '82

The Fifth European Conference on Electrotechnics will be in Copenhagen, 14-18 June 1982 with the theme "Reliability in Electrical and Electronic Components and Systems".

The conference is arranged jointly by the IEEE (The Institute of Electrical and Electronics Engineers) and EUREL (The Convention of National Societies of Electrical Engineers of Western Europe), and has already attracted a great deal of interest world-wide, with reliability experts from, e.g., USA and Japan notifying their intention of submitting papers to the conference.

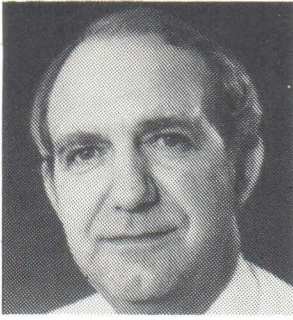
The conference committee, under the management of the conference chairman Erik Lauger and the technical programme chairman Peter W. Becker, are confident that the conference in every way will be even more successful than past EUROCON conferences, technically as well as socially. The committee expects to welcome some 800 participants from all over the world to the conference, which is scheduled for 14-18 June 1982, with the opening ceremony to be performed by His Royal Highness, Prince Henrik of Denmark. A scientific and technical exhibition is being arranged to take place while the conference lasts, with exhibits highlighting the reliability theme of the conference. Also, of course, the participants will be given ample opportunity to enjoy "wonderful

Copenhagen", which incidentally is at its best in the month of June!

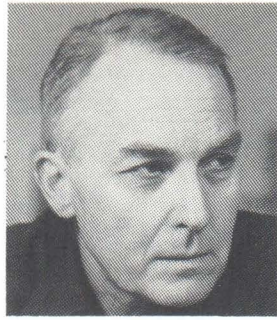
The technical programme has been structured in such a way that it will be of interest to electrical and electronics engineers, marketing experts and, indeed, anyone concerned with research, development, manufacturing and the application of electrical and electronics systems. The committee has sent out a "Call for Papers" from which the insert below is extracted. They would like potential contributors to the technical programme to give a preliminary title of their paper as early as possible, whilst a deadline for the abstracts has been set at 1 September 1981 and for the full paper at 1 January 1982. These deadlines are in reality not so far off as may seem at first, so please get in touch with the conference office as soon as possible if you plan to contribute to the conference in 1982. They will send you the "Call for Papers" information sheet and further details of the conference. You may get in touch with them by writing to Conference Office, DIEU, Danish Engineers' Post Graduate Institute, The Technical University of Denmark, Bldg 208, DK-2800 Lyngby, Denmark, or by telephoning the office, telephone (45) 02-882300, and asking to speak to Mrs Aase Sonne.

### A. General Aspects.

1. RELIABILITY THEORY: Failure rate models and prediction methods; Failure mode effects and criticality analysis; Fault tree analysis; Testing procedures and reliability indicators; Models for reliability growth; Operation research techniques; Software reliability.  
2. MANAGEMENT AND ECONOMIC ISSUES: Decision making; Reliability planning and management; Life cycle costs, trade-offs



Erik Lauger, Chairman  
Steering Committee,  
Eurocon '82



Dr Peter Becker, Chairman  
Technical Program Committee,  
Eurocon '82

## MEETINGS IN REGION 8

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

Extra information to that in the last issue about this conference in Dublin, 17-19 June 1981, is that five invited papers will be presented by authors from Germany, Japan and the USA. In addition to the sessions at which contributed papers will be presented, three formal discussion sessions will be held during the conference. These will be devoted to the following topics:

"Are we doing justice to the physics in numerical device modelling?". Chairman: M. S. Adler, GEC, Schenectady, NY 12301, USA.

"Device simulation - laboratory curiosity or predictive tool with business impact?". Chairman: P. E. Cottrell, IBM, Essex Junction, VT 05452, USA.

"Do we need numerical analysts to solve engineering problems?". Chairman: S. J. Polak, NV Philips Gloeilampenfabrieken, Eindhoven, The Netherlands.

Invited and contributed papers will be published in book form. The three formal discussions will be recorded on tape and reproduced in cassette form. The book and cassettes will be available approximately six weeks after the conference.

Further information from: The Secretary, NASECODE II, 39 Trinity College, Dublin 2, Ireland.

### P896 Design Course

This design course will take place from 29 June to 2 July 1981 at Les Diablerets, Switzerland (60 km from Lausanne).

It will present the requirements for future multiprocessor busses, and analyse in detail the IEEE P896 backplane bus for 8, 16 and 32-bit microprocessors in its presently proposed level 1 implementation.

It will be given by six US and seven European designers who have actively contributed to P896. Attendance will be limited and restricted to experienced engineers.

For more information and request for invitation, write to: J. D. Nicoud, Lami-EPFL, Bellerive 16, CH 1007-Lausanne. Telex 26420 EPFVD CH.

### European Conference on Electronic Design Automation

This conference is to be held at the University of Sussex, Brighton, UK, 1-4 September 1981, organized by the Institution of Electrical Engineers in association with the British Computer Society (BCS), Convention of National Societies of Electrical Engineers of Western Europe (EUREL), Institute of Electrical and Electronics Engineers Inc (IEEE) (Circuits and Systems Society) (Region 8), Institution of Electrical Engineers (IEE) (Southern Centre), Institution of Electronic and Radio Engineers (IERE).

Sixteen sessions, with four to six papers, cover design systems; modelling; gate arrays; printed circuit layout; LSI layout; analogue circuit design, specification and verification; simulation; testing; and design systems.

Further information from: The Manager, Conference Department, IEE, Savoy Place, London, WC2R 0BL, UK. Telephone: 01-240 1871 (ext. 222). Telex: 261176.

### 5th International Conference on Computer Hardware Description Languages and their Applications

The conference will be held 8-9 September 1981 in Kaiserslautern, FR Germany. It is the fifth one in a series held in New Brunswick, NJ (USA), Darmstadt (FRG), New York, NY (USA), Palo Alto, CA (USA). September 7 is pre-conference tutorial day. Topic areas will cover any aspects of Computer Hardware Description Languages (CHDLs): Language issues (specifications, transformations, equivalences, modelling, symbolic and graphic languages); CHDLs in education and acceptance problems; CHDL-based tools (analysis, synthesis, integration of tools); Design methodologies (VLSE Chip design, board design, system design, microprogramming, documentation and specification).

Organized by IFIP Technical Committee TC 10 and its Working Group

between reliability, maintainability and availability; Quality circles; Reliability as a marketing factor.

3. HUMAN AND LEGAL ASPECTS: Human factors; Standards; Legal issues; Product liability.

### B. Applied reliability

1. ENERGY PROCESSING: Power components; Power generation; Power distribution; Energy flow control; Transportation systems (road, rail, sea, air); Traffic control and regulation; Household appliances.

2. COMMUNICATION DATA AND SIGNAL PROCESSING: Passive components; Microelectronic components; Tubes (camera, display, microwave etc.); Microprocessors and related components; Radio and TV sets; Communication equipment and systems; Submerged transmission systems; Satellites; Navigation equipment; Data processing systems; Software reliability; Instrumentation and measuring equipment; Medical electronics.

Contributions outside the listed topics are welcomed as well.

WG 10.2 and the University of Kaiserslautern in co-operation with the Commission of the European Community, ACM (Association for Computing Machinery), SIGDA and SIGARCH, IEEE (Institute of Electrical and Electronics Engineers) Computer Society, GI (Gesellschaft fuer Informatik) and NTG (Nachrichtentechnische Gesellschaft).

For more information contact: CHDL '81 Conference Office, Fachbereich Informatik, Universität Kaiserslautern, Postfach 3049, D-6750 Kaiserslautern, FR Germany.

### Symposium on Electrical Machines for Special Purposes

The symposium, organized by the Electrical Machines Division of the Italian Research Council (CNR) is sponsored by AEI (Italian Electrical and Electronic Association), ENEL (Italian Electricity Board), IEEE (Institute of Electrical and Electronics Engineers - Middle and South Italy, North Italy), will be held in Bologna, Italy, 9-11 September 1981.

The main topics of the symposium are: non-traditional designs; machines for road electric traction; fractional horsepower machines; machines without conventional magnetic circuit; small machines for domestic appliances.

Participants intending to contribute papers should submit a synopsis of 300 words on or before 15 March 1981 to: Prof Benito Brunelli, Istituto di Elettrotecnica, Università di Bologna, Viale Risorgimento 2, 40136 Bologna, Italy, and successively will be requested to provide a typescript of no more than 5,000 words of text, or correspondingly less if illustrations are included, before 30 June 1981.

### 1982 International Zurich Seminar on Digital Communications

The seventh International Zurich Seminar (82 IZS) will concentrate like its predecessors on selected topics within the field of Digital Communications. It will be held at the Swiss Federal Institute of Technology, Zurich, 9-11 March 1982, with the main theme:

**Man-Machine Interaction (MMI).** The aim of the seminar is to present recent advances in theory and application at the user and subscriber as well as at the maintenance and operation side of digital communication systems. Services, facilities, ergonomics, and their impact on peripheral equipment, systems architecture and design, as well as input/output concepts and principles are encompassed. As a complement to the main conference topics, a panel discussion is planned.

Contributions to the mentioned topics are invited. They should comprise novel results, not previously published in any form. The conference language is English. A 500-word English summary should be submitted by 21 July 1981. Author(s) must be identified by name, title, affiliation, complete address and telephone and telex number. Deadline for the receipt of camera-ready manuscripts of accepted papers is 15 December 1981.

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

### IEEE Conference on Applications of Adaptive and Multivariable Control

The UKRI IEEE Control Systems Chapter, in co-operation with the University of Hull, is organizing this conference at the University of Hull on 19-21 July 1982.

The objective of the conference is to present the state of the art in adaptive and multivariable control system design methods. Particular emphasis will be placed on practical applications of new techniques.

Topics will include: self-tuning control; model-reference adaptive control; design techniques for multivariable systems; industrial applications of new design methodologies; design for systems with plant uncertainties; non-linear systems; computer aided design.

Three copies of a 400-600 word abstract should be submitted by 15 September 1981 to: Prof D. P. Atherton, School of Engineering and Applied Sciences, University of Sussex, Falmer, Brighton BN1 9QT, UK. Further information from: Dr P. Taylor, University of Hull, Department of Electronic Engineering, Hull HU6 7RX, UK.

### International Broadcasting Convention – Change of Date

The 9th International Broadcasting Convention – IBC 82 – will be held at the Metropole Conference and Exhibition Centre, Brighton, United Kingdom, 18-21 September 1982, one week later than was announced at the close of IBC 80. The change in date has provided advantages in the arrangements for the IBC 82 exhibition.

The IBC 82 Management Committee, nominated by the sponsoring organizations, is as follows:

Institution of Electronic and Radio Engineers:

John Tucker, Chairman; Peter Mothersole; Bob Roberts.

Electronic Engineering Association:

Gordon Williams, Deputy Chairman; Tom McGann, MBE; Primrose Thornbury.

Institution of Electrical Engineers:

John Etheridge; Alan James, MBE; Bryce McCrerrick; Suzanne Hall, Secretary.

Institute of Electrical and Electronics Engineers:

Basil Osborne.

Royal Television Society:

Tony Pilgrim; John Ware; Corney Webster.

Society of Motion Picture and Television Engineers:

Bob van de Leeden.

Further information can be obtained from the IBC Secretariat, Institution of Electrical Engineers, Savoy Place, London, United Kingdom WC2R 0BL.

## MEETINGS OUTSIDE REGION 8

### International Conference on Communications

The 1981 International Conference on Communications will be held in Denver, Colorado, on 14-17 June 1981. Discussions will include, but not be limited to, Communications: The Expanding Resource in the following disciplines: Cellular radio systems; Communication and information theory; Communications requirements for weather prediction; Communications security; Communications software; Computer communications; Data communications; Distributed communications systems; Economic aspects of spectrum utilization; Integrated switching; International standards for data communications; Lightwave communications; Microprocessors in communications; Millimetre wave communications; Radio communications; Social implications of expanding communications; Space and satellite communications; Spread spectrum communications; Standards, co-ordination and Liaison; Transmission systems.

Further information from: Dr M. Urien, CNET, Route de Tregastel BP40, 22301 Lannion Cedex, France; assisted by Mr R. C. Kirby, Director, CCIR, ITU, Geneva, Switzerland, and M Jean Voge, Direction des Affaires Industrielles et Internationales, CNET Issy les Moulineaux, France.

### International Microwave Symposium

The 1981 IEEE MTT-S International Microwave Symposium is to be

held on 15, 16 and 17 June 1981 in Los Angeles, California, with the theme "Around the world with Microwaves". The Microwave Symposium will be held jointly with the IEEE Antennas and Propagation Symposium which will meet on 17, 18 and 19 June. Papers are solicited describing original work that has not been published or presented previously. Papers concerned with microwave techniques, devices, systems and applications in the following subject areas will be considered: Computer-aided design and measurement techniques; Microwave and millimetre-wave solid-state devices; Microwave and millimetre-wave integrated circuits; Low noise techniques; Microwave passive components and networks; Microwave ferrite devices; High power amplifiers, circuits and systems; GaAs monolithic circuits; Phased array and active array techniques; Radiometry and remote sensing systems and applications; Satellite communication/microwave systems; Wide band millimetre-wave and microwave systems; Submillimetre-wave techniques and devices; Integrated optics, fibre optics and optical techniques; Microwave acoustics; Microwave field and network theory; Microwave bioeffects.

Further information from: Dr Don Parker, TPC 1981 MTT-S Symposium, Hughes Aircraft Company, Bldg 268/Mail Station A54, Canoga Park, California 91304, USA.

The MTT Society will also conduct workshops on selected topics on 18 and 19 June.

## IPC ELECTRICAL-ELECTRONIC PRESS LTD

### Electronics Weekly

is Britain's leading weekly newspaper in Electronics and Communication. Every issue is packed with up-to-the-minute information on trends and developments in all sectors of the electronics industry both in the U.K. and overseas.

U.K. Subscription rate £10  
Overseas \$26 (incl. p + p)

### ELECTRICAL REVIEW

is published every week, with a special international edition every four weeks, to keep its readers well informed of developments in the highly competitive electrical generating and supply industry.

U.K. Subscription rate £25  
Overseas \$65 (incl. p + p)

### wireless world

reaches out to the professional electronics man on a personal level, uniquely catering for both his occupational and spare-time interests. Every month it carries articles for the individual engineer on new techniques in electronics, audio, TV, radio and constructional projects.

U.K. Subscription rate £10  
Overseas \$33.80 (incl. p + p)

To keep ahead in the Electrical and Electronic industries, take out a subscription to the journal(s) of your choice by completing the form below.

To Marketing Services Department, IPC Electrical-Electronic Press Ltd.,  
Quadrant House, The Quadrant, Sutton, Surrey, SM2 5AS.

Please send me Electronics Weekly/Electrical Review/Wireless World\* for one year.  
I enclose a cheque for £ ..... made payable to IPC Business Press Ltd.

Name .....

Address .....

\*Delete as applicable

IE



# New Books in Computing:

## Signal Processing: Theories and Applications

Proceedings of EUSIPCO-80, First European Signal Processing Conference, Lausanne, Switzerland, 16-18 Sept., 1980

edited by **M. KUNT** and **F. DE COULON**

1980. 732 pages.  
ISBN 0-444-86050-9.  
Price: US \$73.25/Dfl. 150.00

This conference, promoted and organized by EURASIP, is a natural consequence of the long and by now well established activities developed to crystallize and enlarge communication among European scientists and engineers. The 122 papers published here are the authors' versions of rigorously refereed tutorial, regular and invited papers, and technological novelties in topics such as: Signal and Noise Theory, Filtering, Spectral Analysis, Image and 2-D Signal Processing, Optical Signal Processing, New Signal Processing Technology, Special Purpose Hardware and Software Developments, Radar-Sonar Signals and Systems, Speech Processing, and Applications in Communication and Biomedicine.

## Microprocessor Systems Software, Firmware and Hardware

edited by **M. SAMI**, **L. THOMPSON**, **K. HANNA** and **L. MEZZALIRA**

1980. 378 pages.  
ISBN 0-444-86098-3.  
Price: US \$53.75/Dfl. 110.00

The EUROMICRO Symposia, from the first one in Nice in 1975 to the present London one, have reflected the evolution of a fast-developing technology, its impact on computer science as well as on application areas, and also the increasing awareness of its social implications. The main themes in this continued development are pinpointed in this work by the invited lectures, analyzing the viability of powerful supersystems based upon VLSI devices, the evolution of VLSI technology which will make them possible, and the evolution of society brought up by new electronic technologies. The papers in the work cover topics ranging from sophisticated multi-processor structures to advanced software and to such relevant application areas as telecommunications, industrial control and text processing. Results of recent research from leading scientists, trends both in basic

research and in application-oriented work and assessments of focal points of importance for future research are presented.

## Experimental Computer Performance Evaluation

Lecture Notes of the Second Summer School on Computer Systems Performance Evaluation, SOGESTA, Urbino, Italy, 16-27 June, 1980

edited by **D. FERRARI** and **M. SPADONI**

1981. 272 pages.  
ISBN 0-444-86129-7.  
US \$36.50/Dfl. 75.00

Both to assess the state of the art in experimental performance evaluation and to foster progress in some of its aspects, the SOGESTA Company decided to emphasize experimental subjects during its Second Summer School. This work contains the texts of the contributions to the School. They include both lecture notes and papers submitted by participants. The emphasis is on measurement and simulation, on statistical techniques in tuning and procurement, on workload modelling and forecasting on capacity planning, on computer systems dynamics, and on software physics.

## Computers: Applications in Industry and Management

Proceedings of the International Seminar, Patras, Greece, 29 July -17 Aug., 1979

edited by **C. L. GOUDAS**  
and **G. C. PANDE**

1980. 462 pages.  
ISBN 0-444-86053-3.  
Price: US \$48.75/Dfl. 100.00

The objective of this work is to present the possibilities and the know-how offered by modern hardware and techniques as an essential support in facing the problems of planning, managing and developing of industrial units as well as in structuring and running public and private administrative services that handle large quantities of diverse data.

The broad subject tackled justifies the inclusion of contributions related to the fundamental concepts of the Science of Management, while the need for specific and detailed guidance of the new and old user of modern hardware and software is covered by many practical examples to be found in all contributions. Other lectures cover exclusively important applications of computers.

## Eurographics 80

Proceedings of the International Conference and Exhibition, Geneva, Switzerland, 3-5 Sept., 1980

edited by **C. E. VANDONI**

1980. 364 pages.  
ISBN 0-444-86107-6.  
Price: US \$46.25/Dfl. 95.00

This important publication coincides with the establishment of the European Association for Computer Graphics (EUROGRAPHICS Association). Here is a subject range as wide as Computer Graphics itself, caused by the desire to reflect the interest of all computer graphic professionals. Quintessential aspects of computer graphics are represented here, both of theoretical progress and of practical applications. The main subjects covered are: Man-machine Interactive Systems Based on CORE Standards, Special Algorithms for Computer Graphics, Special Purpose and General Purpose Graphics Packages, Distributed Graphics, Raster Graphics Systems, and Interdisciplinary Applications. Summaries of industrial seminars related to existing graphic products as well as an Invited Paper by *W. N. Newman* are included.

## Computer Communications Increasing Benefits for Society

Proceedings of the 5th International Conference on Computer Communications, Atlanta, Ga., U.S.A., 27-30 Oct., 1980

edited by **J. SALZ**

1980. 898 pages.  
ISBN 0-444-86147-5  
In North America only: US \$50.00  
Price in rest of the world: Dfl. 135.00

This proceedings volume represents the most prestigious international event in the field of computer communications. Held under the auspices of the ICCS, this conference, whose proceedings consist of 38 sessions and 128 papers, emphasizes the potential of computer communication for improving the lives of people everywhere. Speakers were drawn from many countries, and included scientists, planners, builders, administrators, regulators and users of computer communication services. A wide range of issues, encompassing both policy and technology, were considered by ICCS 80's panel discussions and regular sessions.

The work presents a *comprehensive* and *up-to-date* review of the state-of-the-art and directions for the future.

**North-Holland Publishing Company:**

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

### International IEEE/APS Symposium, National Radio Science Meeting and International IEEE/MTT Symposium

The 1981 International Symposium sponsored by the IEEE Antennas and Propagation Society (AP-S), the National Radio Science Meeting sponsored by USNC/URSI Commissions, and the IEEE Microwave Theory and Techniques Society (MTT-S) Symposium will be held jointly at Los Angeles, California, 15-19 June 1981. The technical sessions for IEEE AP-S, the National Radio Science Meeting and the IEEE MTT-S Meeting will be co-ordinated to provide a comprehensive and well-balanced programme. Enquiries regarding the technical programme may be directed to Dr Victor Galindo-Israel, Technical Programme Committee Chairman for AP-S, or Dr Ronald J. Pogorzelski, Technical Programme Chairman for URSI. Their addresses are: Dr Victor Galindo-Israel, 238/737 Jet Propulsion Laboratory, California

Institute of Technology, 4800 Oak Grove Drive, Pasadena, CA 91103, USA.

Dr Ronald J. Pogorzelski, Defense and Space Systems Group, TRW Inc., One Space Park, Redondo Beach, CA90278, USA.

### International Symposium on Electromagnetic Compatibility

Year by year, EMC technology continues to advance on the problems created by the electronics revolution. It is hoped this year to see it "rising to greater heights" as it carries on the crusade for true compatibility among electronic systems. The symposium will be held in Boulder, Colorado, 18-20 August 1981.

For more information contact: Bud Taggart, National Bureau of Standards, Div. 723.03, Boulder, CO 80303, USA. (303) 497-3462.

## NEWS OF THE SECTIONS

### SWITZERLAND SECTION

**Section Officers:** A new Executive Committee of the Switzerland Section was elected in autumn 1980 for the term 1981/82. The officers of the Section are: Chairman, Prof Dr G. S. Moschytz, Zürich; Vice-Chairman, Prof Dr J. J. Neiryneck, Lausanne; Junior Past Chairman, Dr M. P. Forrer, Neuchâtel; Secretary-Treasurer, Dr U. H. Gysel, Zürich; Members-at-Large, Prof Dr F. de Coulon, Lausanne, Dr P. Kartaschoff, Prof Dr H. Mey, Bern, Dr G. de Montmollin, Cortaillod, Dr H. Rudin, Rüslikon, Mr H. F. Wyss, Bevaix.

**Membership:** The membership rose last year by 11% and stands now at 950.

### UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION

**Society Chapters in UKRI Section.** We have four Chapters: Circuits and Systems (CAS); Control Systems (CS); Education (E); and Professional Communication (PC).

Those belonging to the particular Societies are advised of Chapter meetings, but all members are welcome at any Chapter meeting, whether or not they belong to the Society concerned.

Our **Chapter Chairmen** are as follows:

For CAS: Dr J. I. Sewell (University of Hull) Tel. 0482-43611 ext. 7113.

For CS: Dr M. J. Grimble (Sheffield City Polytechnic) Tel. 0742-20911.

For E: Prof J. J. Sparkes (The Open University),

Chapter Secretary is Mr M. A. Giddings on Tel. 052-55-3322.

For PC: Mr B. W. Osborne (Rediffusion Engineering) Tel. 01-942 8900 ext 236.

**The Circuits and Systems Chapter** (in association with The City University, London) will be repeating the three-day Introductory Course on Microprocessors in September 1981. It will be held at the Portland Heights Hotel, Dorset. Further information from Dr A. C. Davies or Miss

Eileen Baker, Microprocessor Laboratories, The City University, London EC1V 0HB. Tel. 01-253 4399 ext 420/425.

Dr M. J. Grimble attended the **19th Conference on Decision and Control** held in Albuquerque, New Mexico in December 1980, and has sent the following report:

"This year's CDC conference was preceded by a day of tutorial sessions. I attended the sessions on stochastic control with about 60 other delegates. These sessions provide a service for engineers that require survey rather than specialist lectures. This is a feature which UK conferences might copy.

"The conference sessions were excellent for both their range of subject material and the quality of the contributions. There was a relatively good representation at the conference by members of Region 8. Prof Howard Rosenbrock of UMIST presented one of the plenary lectures on Human Skill and Automation. It was also announced that Prof David Mayne of Imperial College had been elected a Fellow of the IEEE. He was one of only five members of the Control Systems Society to be awarded this honour in 1980.

"I held discussions with many of the officers of the IEEE CSS on the new United Kingdom and Republic of Ireland Chapter and was pleased to learn of their enthusiastic support for the conference on Multivariable and Adaptive Control to be held at the University of Hull, 1982. There was also considerable support for the idea of holding a European CDC type conference in 1983/84."

**Membership** continues to increase. For membership information and application forms contact Prof D. R. Wilson, Polytechnic of Central London (Tel: 01-486 5811), or speak to IEEE representatives at co-sponsored conferences.

**For your diaries:** There will be an evening meeting in London on 28 October. Full details in the next newsletter.

**Look Ahead:** 1984 is the IEEE centenary, and Eurocon 84 will be at Brighton in September of that year.

## STUDENT NEWS

**Eindhoven University Student Branch.** At the beginning of this year the Eindhoven Joint Student Branch held a contest in reordering the Rubik's Cube. Given a fixed starting position the competitors had to reorder the cube as fast as possible.

This activity was originally set up to promote IEEE membership, but it turned out to be such a success that it has become more than that. The

fastest time realized is 1 minute and 29 seconds.

We would like other branches to contact us to exchange information. Our address is: Joint Student Branch, Eindhoven University of Technology, Department of Electrical Engineering, PO Box 513, 5600 AM Eindhoven, The Netherlands.

### ADVERTISING AND INSERT RATES

Deadline dates in box on front page

#### ADVERTISING RATES

Display - \$1,440 per full page, \$780 per half page, \$420 per quarter page. Page size A4 (296mm x 210mm). These rates are for 'camera ready' copy - a charge at cost will be made for any setting required.

#### INSERT RATES

For full Regional distribution to over 11,000 members in Europe, Middle East and Africa, size A5 or folded to A5 (148mm x 210mm), weight 10gms \$1,440, 20gms \$1,680. Lower rates for distribution to one country only or to a group of countries. Additional charge if collation or folding required. Recommended method of delivery is by direct air mail parcel post (check local postal regulations for maximum weight per parcel) or by air freight addressed to County Secretarial Services. Surface transport is liable to considerable delay at port of entry. Before shipment of inserts check that the deadline date will be met including allowance for customs clearance and delivery to Guildford.

All the above rates are net and include no allowance for discount.

**ENQUIRIES TO** County Secretarial Services, P.O. Box 7, Guildford, Surrey, England, GU2 5HH

Telephone 

National	Guildford 77777 (STD Code 0483)
International	+44 483 77777

Telex 264045 ERALHD G  
Registered telegraphic address COSEC GUILDFORD  
Deliveries 8 The Flower Walk, Guildford, Surrey