

Regional Director: 1973-74 Mr. C. Reginald Russell 1975-76 Prof. F. Louis Stumpers





THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

Editor: Mr W.H.Devenish, The Electrical Research Association Ltd., Cleeve Road, Leatherhead, Surrey, England KT22 7SA. Tel. Leatherhead 74151 Telex 264045

No. 29

JANUARY 1975

MESSAGE FROM THE OUTGOING REGIONAL DIRECTOR

A meeting of the Region 8 Committee was held, by invitation of the Yugoslav Section, in Dubrovnik 25-26 October and most of the 18 Sections of the Region were represented (see photograph). Certain items from the agenda are reported on below.

The year 1974 has seen a continuing effort - at both Region and Section level - to increase service to members.

Many Sections have acted as hosts to specialists offering themselves on the Speakers' Tour Program. Please remember that the success of this Program depends on a sufficient number of Speakers coming forward; if you are travelling outside your Section boundaries and



Region 8 Committee meeting, Dubrovnik.

Left to right seated: P. Jespers (Benelux), F. Eggimann (Switzerland), C. Harrison (UKRI), R. Russell (UKRI), R. C. G. Williams (UKRI), F. L. Stumpers (Benelux). Middle row: C. A. Wannerskog (Sweden), J. A. Tegopoulos (Greece), J. G. Remy (France), G. Guekos (Switzerland), W. J. Kleen (Germany), G. L. Francini (North Italy), G. Franceschetti (Middle & South Italy), F. Valster (Benelux), M. E. Tiuri (Finland), A. K. Smolinski (Poland), R. C. Winton (UKRI), L. Vodovnik (Yugoslavia). Back row: A. Wedam (Yugoslavia), J. Voge (France), E. F. Bolinder (Sweden), A. Rannestad (Benelux), C. F. Stewart (USA), R. Wellinger (Switzerland), F. Jimenez-Asenjo (Spain), C. L. Malaguti (North Italy)

would like to give a presentation please write with location, date, title and a brief abstract to your local Section Chairman who will arrange your contacts.

Following the success of the previous two Eurocon conferences of 1971 and 1974, a third is to be held in April 1977 in Venice and again will be a partnership venture between the Region and Eurel (the Convention of National Electrical Engineering Societies of Western Europe). Details will be given in succeeding newsletters.

In order to bring the benefits of IEEE membership to a wider circle of engineers please remember that your colleagues can obtain membership information and application forms from the Region's Membership Development Chairman: Dr. Andreas Rannestad, A. van Dycklaan 13, B-1980 TERVUREN, Belgium.

At this time of the year members may like to note certain by-law concessions regarding dues. The minimum age to qualify for special reduced dues is now 62 (instead of 65 previously).

Also, members who are on periods of compulsory military service can qualify for a reduction of dues during the period of their service. For further details of either of these please contact Miss Emily Sirjane, Manager Member Services, at New York Headquarters.

This year's dues notices are accompanied by an airmail option for those who would like expedited mailing of their publications. This is a special offer for the overseas regions and the surcharges are listed on the green form which is with the billing notice — please complete this and add the extra charges to your standard dues if you wish to take advantage of this offer.

Could I also remind everyone in the Region that the deadline for the receipt of the 1975 dues is **30 April** (in New York!) — after this time the mailing of publications will cease for those in arrears. This deadline is a further concession for overseas members — it used to be end-February — please observe it to avoid a break in your publications. January 1 brings to an end my two years as Director. It has been a pleasure to serve the Institute and its members. I take this opportunity of welcoming my successor, Professor F. Louis Stumpers of The Netherlands. May I wish him, and all of you, a happy and successful New Year.

C. REGINALD RUSSELL

INSTITUTE NEWS

New Appointments

Dr. Herbert A. Schulke Jr. has been named General Manager of the Institute of Electrical and Electronics Engineers (IEEE). He assumed his new duties on January 1 1975. He will leave his current position as Director of Communication Electronics in the Organization of the Joint Chiefs of Staff. He is a Major General in the US Army.

Dr. Schulke succeeds Donald G. Fink who will continue to serve in an executive role until his retirement in 1976. He plans to devote a substantial segment of his time to furthering co-operation by IEEE with other engineering organizations.

Don Fink has been appointed Director Emeritus of the Institute for life in recognition of his outstanding service to the IEEE, its predecessor society, IRE, the AIEE-IRE Merger Committee, and to the professions of electrical and electronics engineering.

New President and Vice-President

Mr. Arthur P. Stern has been elected President of the IEEE in succes-

sion to Mr. John Guarrera. Mr. Joseph K. Dillard was elected to the position of Executive Vice-President.

The Donald P. Eckman Award

A Certificate and Cash Award will be granted to outstanding young contributors for an outstanding contribution to the field of Automatic Control at the 1975 Sixth World Conference of the International Federation of Automatic Control.

Nominations of candidates younger than 30 for the 1975 award will be accepted prior to March 1 1975 by: Prof. Robert N. Clark, Chairman, AACC Awards Committee, Dept. of Electrical Engineering FT-10, University of Washington, Seattle, Washington 98195.

Sixth International Congress on Instrumentation in Aerospace **Simulation Facilities**

This is the sixth Congress held biennially in Europe and North America, intended to provide an opportunity for the exchange and dissemination of information pertaining to all aspects of instrumentation as applied in aerospace simulation facilities. It will be held in Ottawa. Canada, 22-24 September 1975. Please address all communications to: M. K. Ward, Executive Secretary, 6th International Congress on Instrumentation in Aerospace Simulation Facilities, c/o National Research Council of Canada, Ottawa, Canada K1A OR6.

Papers are solicited in, but not limited to the areas covered under the following technical sessions: Flow Diagnostics and Visualization, Aerodynamic Testing, Noise and Turbulence, Non-Aeronautical

EUROCON '74 DIGEST

NEWS OF REGION 8

Copies of this 569-page digest are still available to members or libraries. Topics covered include: Communications for the 1980's (cable networks, digital cable transmission, data networks, modulation and coding, new services and new technologies, mobiles, propagation and antennas, satellite systems, e-m compatibility); Computers (data banks, computers and engineering, computers and management); Instrumentation Electronics (electron microscopyimage processing, radar displays, environmental control, new techniques in check-out); Biomedical Engineering (prosthetics, instrumentation, bio-electric signals, transducers); Controlling the Future (energy resources, storage and transport, new converters for power generation); Education (in developing countries, new curricula for EE, teaching systems and tools).

The price is \$15 (members) \$20 non-members. Order from IEEE 345 East 47 Street NEW YORK NY10017 USA, enclosing appropriate remittance and quote Publication Number 74 CHO 886-2 EURO.

Why not acquire a copy of Region 8's major conference digest for yourself or your library?

Membership Development

New Members

The membership statistics for the end of October, indicate that the increase in IEEE Members in Region 8 will be about 6% in 1974. This is quite good, but not satisfactory, and I am sure that you would all like to see us do better in 1975. For this we need your help. Many of your colleagues would - as you do - benefit greatly from IEEE membership, so bring the opportunity to their attention. A large increase of IEEE members in Region 8 would enable us to increase the benefits and services, so let the goal for 1975 be for each IEEE Member to bring a non-IEEE member into IEEE.

Dues, Arrears and Resignations

The October statistics indicate that about eight hundred members will be lost in 1974, owing to resignations and by failing to pay their dues. This is much too large a loss and I hope it will go down drastically in 1975. If you have not already paid your current dues, I urge you to do so immediately, to avoid the break in shipment of publications and services that will otherwise occur at the end of April. If for any reason

First International Conference on Biomedical Transducers

This conference, co-sponsored by the French Section, will be held in Paris, from 3 to 7 November, 1975. Its aim is to assemble world specialists of biological parameters (scientists, doctors, engineers); to present practical methods and to evaluate how present technological and scientific progress corresponds to improved creation, humanization of biomedical transducers and development of new medical investigations.

Medical technology on the measurement of physiological parameters will be presented in three main orientations: research, diagnosis, monitoring, on the following topics: trend of physical principles and of medical investigations in bio-engineering, recent progress in transducers technology, biophysic medical applications (biopotentials, pressures, flow, etc.), biochemical medical applications (PO2, PCO2, PH, NA⁺, etc.), critical study of transducers signals for computer treatment, standardization works and safety problems of man-machine interfaces.

Four copies of 100-200 word summaries in French and English of proposed papers should be submitted to: Secrétariat du Colloque International sur les Capteurs Bio-Médicaux, F.N.I.E., 16, rue de

Applications, and Data Acquisition and Processing. Papers are selected on 500 word abstracts which must be submitted by 25 April, 1975 to: Dr. E. S. Hanff, General Chairman, 6th International Congress on Instrumentation in Aerospace Simulation Facilities, c/o National Research Council of Canada, Ottawa, Canada K1A 0R6.

Computer Hardware Description Languages

The Third Annual Workshop is to be held in New York City, 3 to 5 September, 1975. Deadline for contributions to be published in the prodeedings: March 1, 1975. Deadline for oral contributions: June 1. 1975. Those European residents interested, please contact Prof. R. Piloty, Technische Hochschule, D-61 Darmstadt, Merckstr. 25, for more information.

you should feel that you are not benefiting sufficiently from IEEE membership, please reconsider all the services that are available. Pay your dues and make suggestions for improvements to your Section Chairman or to me.

Membership Grade

Many of the IEEE Members in Region 8 do not hold the proper Grade. If you are one of them, please take time to fill in the Application Form. It should be noted that the number of Fellows elected each year depends on the number of Senior Members and that only Senior Members may be elected to Fellow. I would also like to remind you that the Fellow nominations must reach IEEE Headquarters by the end of April. If you know of any member that would qualify for the Fellow grade, please make the effort to fill in the Nomination Form or notify your Section Chairman

Dr. Andreas Rannestad

Region 8 Member, IEEE Membership Development Committee and IEEE Admission and Advancement Committee,

A van Dycklaan 13,

B-1980 Tervuren,

Belgium.

Advertisements in the Newsletter

For three years now the Newsletter has been endeavouring to meet part of its increasing cost by carrying advertisements. All Sections were optimistic about obtaining such advertising from their own areas but the total quantity received has been quite small. One of the matters dealt with at the Region 8 Committee meeting in Dubrovnik was how this advertising revenue could be increased.

The other much larger source of income for the Newsletter is the payment received for including inserts. Here the cost to the conference organizers is about half that of a special direct mailing.

In future, half of any income from advertising and one third of any income from the inclusion of inserts will be offset against the levy of 30c per member paid by each Section towards the cost of the Newsletter. It is hoped that with this incentive Sections will become much more active in soliciting advertising because of the resulting direct benefit to their funds.

MEETINGS IN REGION 8

Presles, 75740 PARIS, Cedex 15, FRANCE, or to: I.E.E.E. Section Française, 46, rue Barrault, 75634 PARIS, Cedex 13, FRANCE, before MARCH 1, 1975.

Optical Fibre Communications

This conference, mentioned in the July 1974 Newsletter, has had the deadline for receipt of abstracts at the IEE in London, extended from 3 February, 1975 to 19 May, 1975.

International Conference on Satellite

Communications Systems Technology

This international conference is to be held at the Institution of Electrical Engineers, London, 7 to 10 April, 1975.

April 1965 saw the launching of Earlybird, the first communication satellite intended for regular commercial service. Since then the INTELSAT system has developed so that after ten years it now carries a large share of international telex, telephone and TV traffic. In recent years many regional and national communication satellite systems have been proposed, several have already gone into service and others will follow soon. New techniques, both in spacecraft and in communication systems, must be introduced to deal economically with the

growing traffic.

Thus, it is timely that this conference should be held when many technical innovations are being employed to meet a flood of new requirements and opportunities. Representatives from Canada, Sudan, USA, France, Sweden, Italy and Spain will contribute papers on the following topics — frequency spectrum planning; new applications of satellite communications; maritime satellite communication; spacecraft communications equipment; spacecraft attitude control; search station equipment; multiple access techniques; digital transmission; propagation; time division multiple access, and antennas.

The conference is being organized by the Electronics Division of the Institution of Electrical Engineers in association with the European Space Research Organization, the Institute of Electrical and Electronics Engineers (United Kingdom and Republic of Ireland Section), the Institute of Mathematics and its Applications, the Institution of Electronic and Radio Engineers, the International Telecommunications Satellite Organization and the Royal Aeronautical Society. Registration forms and programme details are now available from the Conference Department, The Institution of Electrical Engineers, Savoy Place, London, WC2R OBL.

European Electronic Circuit Techniques

Organized at the University of Kent at Canterbury, 2-5 September, 1975, by the Electronics Division of the Institution of Electrical Engineers in association with the Institute of Mathematics and its Applications, the Institute of Physics, the Institute of Electronics and Radio Engineers, and other European bodies, to provide a European forum for the presentation and discussion of recent advances in electronic circuit techniques. Emphasis will be placed upon seeking contributions dealing with solid state circuits and devices in their circuit context.

The programme will include a number of review papers. Contributions in the following areas will be welcomed: Integrated electronics either monolithic or hybrid, improvements in standard linear circuits; Consumer circuits, advances in analogue-digital techniques, realization of active (including digital) filters, signal processing by acoustic waves and charge coupled devices; Computer-aided techniques in

First announcement

NATO ADVANCED STUDY INSTITUTE on

SOLID STATE IMAGING

Université Catholique de Louvain, Louvain-la-Neuve Sept. 3 to 12, 1975

The course deals thoroughly with problems related to Solid State Imaging.

TOPICS: Photoelectric effects in semiconductors, Photodiode and Phototransistor Arrays, Surface Channel CCD's, Buried Channel CCD's, Charge Injection Devices (C.I.D.), Noise Sources in Solid State Imaging, imaging system Considerations, Solid State Sensing Systems versus Existing Tube Type Systems

Among the lecturers taking part are:

- G. F. Amelio (Fairchild, Stanford California, U.S.A.)
- J. A. Hall (Advanced Technology Lab Westinghouse, Baltimore, Md. U.S.A.)
- P. Jespers (Université Catholique de Louvain, Belgium)
- C. Sequin (Bell Telephone Lab., U.S.A.)
- F. Van de Wiele (Université Catholique de Louvain,
- Belgium) M. H. White (Advanced Technology Lab,

Westinghouse, Baltimore, Md., U.S.A.)

REQUEST FOR APPLICATION (with Curriculum Vitae) and inquiries to be sent to:

P. Jespers

Batiment Maxwell Université Catholique de Louvain 1348 Louvain-la-Neuve, Belgium.

The number of participants will be limited. There is an amount of money available to help defray the travelling and subsistence expenses of the participants. However it is strongly urged that the prospective participants explore outside sources of funding. Accommodation comprising dinner bed and breakfast is available at the University for the duration of the course. circuit design, modelling, and fabrication; Circuit testing and reliability; Memories, either semiconductor, magnetic or optical, and access circuits; Opto-electronics-displays, addressing techniques, image sensing and storage.

Authors are invited to offer abstracts for consideration for inclusion in the programme. Authors should give details of the paper(s) they wish to offer. Special typescript paper, and guide notes will then be supplied, sufficient for an abstract of approximately 1,000 words. Abstracts must be submitted by 14 April, 1975.

Further information from IEE Conference Department, Savoy Place, London, WC2R 0BL.

Symposium and Technical Exhibition on Electromagnetic Compatibility

The preliminary programme of this Symposium, to be held in Montreux, Switzerland, 20-22 May, 1975, that is co-sponsored by the IEEE Professional Group on Electromagnetic Compatibility and IEEE Region 8, has just appeared in print.

In the opening session the keynote address: "Electromagnetic Compatibility comes of Age" will be given by Professor R. M. Showers. Parallel sessions on EMC and the hospital, EMC problems in high-voltage installations, and Testing and measuring for EMC will follow. The latter subject will extend into the afternoon session when other sessions will be devoted to Legal aspects and Standards, and to the Nuclear Electromagnetic Pulse.

The Wednesday morning sessions will treat: Screening; Immunity and Performance Degradation; Spectrum Management. In the afternoon Sources of Interference and Statistical Considerations will be subjects of new sessions, whereas Immunity will be continued, to be followed by Suppressors.

The Thursday morning sessions will be on Suppressors (2), Ships and Transport, Computers and data processing, Antennas and Propagation. The latter subject continues in the afternoon, to be followed by late papers, which were not received in time to be placed with their main subject. Other sessions will treat Biological Aspects of EMC, and Avionics and Space EMC Problems.

After the Spectrum Management papers of Wednesday morning there will be a panel on EMC Figure of Merit, where five European experts will discuss the proposals for this new concept with representatives of the American Committee that made the proposals.

For limited numbers of specially interested attendees there will be Workshops, one on "Practical EMC Engineering and Theory Application", organized by the Society of Automotive Engineers, one on "The Discontinuous Interference Analyser" by Mr. McLachlan and Mr. Harry of the British Post Office, and one by Mr. D. R. J. White on Application of HP65 Hand Hand Computer to Prediction and Control of EMI. These workshops are limited to about thirty people, so that those present may use the instruments and also to get good audience participation. Their duration will be 1½ to 3 hours.

Simultaneously with the EMC Symposium there will be a meeting on Walsh functions, organized by the Sequency Union. Fourteen papers for about three sessions have been received on this subject. For EMC the largest number of papers comes from USA, followed by Poland, Germany (F.R.), Switzerland and the United Kingdom. Japan, Australia, India, USSR, Czechoslavakia, Sweden, Norway, Denmark, the Netherlands, Austria, Italy, France and Canada also contributed papers.

An exhibition will show new instruments from USA and Europe. A cocktail party and a banquet will promote personal contacts, and a ladies programme will show Switzerland in the spring to the ladies accompanying participants. For further information please contact Dipl. Ing. T. Dvorak, General Secretary. Eidgenoss. Tech. Hochschule, Hochfrequenz Technik, Sternwartstr. 77, Zurich, Switzerland.

Fifth European Microwave Conference

This Conference will be held in Hamburg, Germany, on 1-4 September, 1975. It is the fifth in Europe to deal comprehensively with the subject of microwaves and the aim is to present the latest in research, development, and applications of microwave equipment and techniques by way of short papers, and a general survey of the state of the art by means of "invited papers".

An exhibition will also be held in conjunction with the 1975 Conference. This exhibition to be known as MICROWAVE 75 will enable the Microwave Industry to promote their latest equipment ranging from components through to total systems. This will be independently run by MICROWAVE EXHIBITIONS AND PUBLISHERS LIMITED. Proposed Topic Headings: Microwave Communication, Navigation and Radar Systems; Industrial, Medical, Biological Applications; Microwave Measurement Techniques, High Speed Switching; Antennas, Arrays and Radomes; Passive Circuitry and MIC-Subassemblies; Solid State Devices and Applications; Nonreciprocal Devices; Microwave Acoustics.

Call for papers: Authors are requested to submit five copies of a typed summary of 300-500 words and of an abstract of max. 100 words. The author's name, affiliation and complete return address should be clearly stated at the bottom of the first page. The summary should be forwarded to Dr. H. J. Schmitt, Conference Chairman, Philips Forschungslaboratorium Hamburg, D2 Hamburg Koellnstrasse 30, Germany, before 14 March, 1975. Vogt 54.

Proceedings: A complete manuscript must be received by June 16, all papers presented at the conference will be published in the Proceedings, which will be available to all attendees at the conference.

International Conference on

Advanced Signal Processing Technology

The "Journees d'electronique" 1975, organized by the Swiss Federal Institute of Technology EPFL, and co-sponsored by the IEEE Swiss Section, will be held in Lausanne, Switzerland, from 14-16 October. 1975.

This Conference will emphasize practical implementation of signal processing methods rather than pure theoretical studies. A first day tutorial will be followed by papers on advanced dedicated signal processors using micro-electronic, ultrasonic or optical devices. Applications are expected to be related with industrial control, vibration analysis, communication systems, radar facilities, speech and image processing, pattern recognition, biomedical engineering, scientific research, laboratory instrumentation, etc.

Original papers are invited in this area and should be suitable for a 15-30 minutes presentation in either English or French (simultaneous translation). Authors are requested to submit three copies of a 300-500 words summary before 15 April, 1975. Contact: Secretariat of "Journees d'electronique" EPFL, Bellerive 16,

1007 Lausanne, Switzerland.

The proceeding of the 1974 conference on Microprocessors, binding the full texts of papers, can be ordered for Frs. 50 (400 pages), until out of stock.

Small Electrical Machines

Organized by the Power Division of the Institution of Electrical Engineers in association with the Institute of Electrical and Electronic Engineers (UK and Republic of Ireland Section), the Institute of Mathematics and its Applications, the Institute of Physics and the Institution of Electronic and Radio Engineers. To be held in London, 30 March-1 April, 1976.

NEWS OF THE SECTIONS

With new officers taking up their appointments in most Sections it is hoped that one of them will be made responsible for submitting news of his Section to the Editor. For some years each Section appointed a Contributing Editor and this arrangement provided much more news from Sections than appears in recent issues. Perhaps Sections would consider re-introducing such an appointment and, where this is done, make the submission of information for the Region 8 Page in Spectrum an additional part of the job.

United Kingdom and Republic of Ireland Section

For several years now the UKRI Section has run annually a competition for students in which travelling expenses were paid as prizes. Most of the winners chose to visit the USA. It has now been decided to

ADVERTISING RATES

Display £130 per full page; £70 per ½ page; £40 per ¼ page. Special Section for Appointments/Professional Services/ Publications-£30 per 1/8 page to include setting.

Inserts supplied by advertiser-charges based on page rate.

For further information contact the Advertising Representa-tives: Sweatman & Fordham, Byron House, 7 St. James' Street, London SW1, England. (Telephone 01-930 3637. Telex 262821).

PUBLISHED QUARTERLY		JAN.	APRIL	JULY	OCTOBER
DEADLINES	News to Editor	Dec. 7	Mar. 7	June 7	Sept. 7
	Advertisements to Sweatman & Fordham Delivery inserts to	Dec. 15	Mar. 15	June 15	Sept. 15
	County Secretarial Services	Jan. 1	Apr. 1	July 1	Oct. 1

County Secretarial Services, P.O. Box 7, Guildford, Surrey, GU2 5HH,

The aim of the Conference is to discuss recent and current developments in small, rotating electrical machines, including consideration of such topics as their design, performance, testing, control and application. The Conference topics will include the following: Stepper motors; Permanent-magnet machines; Reluctance, hysteresis, and vernier motors; Instrument-type machines; Brushless d.c. machines; Servomotors and torque motors; Single phase machines; Small machines with unconventional operating principles or geometry (excluding linear machines); Problems of applications and environments.

The Organizing Committee invite offers of contributions of not more than 3,000 words of text for consideration for inclusion in the conference programme. Those intending to make an offer should submit a 250-350 word synopsis not later than 3 March, 1975 to: IEE Conference Department, Savoy Place, London, WC2R 0BL.

Theory and Applications of Walsh Functions Symposium

The Hatfield Polytechnic, in association with the IEEE UKRI Section and the IEE, is sponsoring an international symposium on the principles and applications of Walsh and other non-sinusoidal functions, to be held at Hatfield, Hertfordshire, England, on July 1-3, 1975. This 1975 symposium will combine the two separate symposia which were to have been held in the UK and the USA, and will provide an international forum for discussion of progress in this field.

For further information write to P.D. Lines, Department of Electrical Engineering, The Hatfield Polytechnic, P.O. Box 109, Hatfield, Herts, by 22 November, 1974.

Summer School on Electromagnetics and Antennas

The Benelux Section of IEEE in co-operation with Eindhoven University of Technology, plans a summer school at Eindhoven (Netherlands) from 30 August to 3 September, 1976. It will consist of both tutorial and current state-of-the-art material with applications to antennas, ray optics, geometrical optical theory of diffraction, optical waveguides and numerical approaches to electromagnetic problems. For further information contact Ir Eduard J. Maanders, Eindhoven University of Technology, Electrical Engineering Department, Eindhoven, Netherlands (Tel. 040 473427) or Prof. Raj Mittra, Electrical Engineering Department, University of Illinois, Urbana, Illinois 61801 (Tel. 217 333-1200).

Tentative list of lecturers includes: Drs. H. Bach (Copenhagen), J. van Bladel (Gent), P. J. B. Clarricoats (London), J. Davies (London), A. T. de Hoop (Delft), L. B. Felsen (New York), R. Mittra (Illinois) and H. G. Unger (Braunschweig).

revise this competition so that the travel must be in Europe. Full particulars may be obtained from Prof. C. W. Turner, Department of Electrical and Electronic Engineering, University of London, King's College, Strand, London, WC2R 2LS.

Another introduction also relates to students: any student member of IEE, IERE or the Institute of Engineers of Ireland may, for one year, obtain student membership of IEEE for an additional payment of only one pound. This represents a substantial saving, the cost of which is met from Section funds.

The Annual General Meeting is to be held at the Institution of Electrical Engineers on Tuesday, 25 February, at 18.00 hours. After the meeting all members attending are invited to a buffet supper so that they may meet each other informally.

CONFERENCE INSERTS MAILED WITH THE NEWSLETTER			
Service available for professional meetings contributing to the IEEE learned society programme.			
For full Region 8 coverage copies required 7,000 Insertion and mailing charge (lower for Section coverage and collation charge if more than 1 insert). Weight < 21 g ($\frac{3}{4}$ oz.) $$330$ At present postal rates Weight < 50 g ($1\frac{3}{4}$ oz.) $$405$ Size A5 max or folded to A5 (148 mm x 210 mm)			
Enquiries to County Secretarial Services P.O. Box 7, Guildford, Surrey, England GU2 5HH Telephone Guildford (0483) 77777. Cable address Cosec Guildford. Delivery address for inserts 8 The Flower Walk, Guildford, Surrey GU2 5HH.			

Seven Corners Press Ltd., Woodbridge Meadows, Guildford-76777