



IEEE Region 8 newsletter

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Regional Director : Dr. Robert C. G. Williams

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Message from the Regional Director :

On this last occasion on which my name will appear at the head of the Newsletter I have much pleasure in introducing to you Dr. Roger Wellinger, who will be our Regional Director from 1st January for the next two years. Dr. Wellinger is a past Chairman of the Switzerland Section, has served on the Regional Committee, and has played a leading role in electronic research and development in industry.



Dr. Roger P. Wellinger
Regional Director Elect

This is perhaps a fitting occasion to look back on the following developments in the Region during my two-year period of office.

The reduction in the number of references required for membership applications and progress in upgrading; the introduction of the local currency payment system for dues; the inauguration of new Sections in Spain and Denmark and progress towards Sections in Finland and Greece; the centralisation of all

Student matters through the Chairman of the Student Activities

Committee; the introduction of the Section Student Branches and the formation of many new Student Branches at Universities; the drawing up of a definitive list of schools of recognised standing with the inclusion of schools prior to actual student application; the first two Region 8 Student Paper Contests; the recognition of the responsibility of the Section Chairmen for local relations with national societies; progress on the problems involved in the inter-relationship between Groups and Sections—especially important in Region 8; the concept of Section Group Co-ordinators and Correspondents; recognition of the problem of the Regional boundaries in North Africa and the Middle East—not yet resolved; adequate regional representation on H.Q. Committees; the introduction of an IEEE necktie; and finally the publication of the Region 8 Newsletter and Regional Directory.

This progress has only been possible through the loyal co-operation and support of all my colleagues on the Regional Committee and many others who have given their time, energy and enthusiasm to the affairs of the Region, and I am confident that everyone will similarly give their full support to Dr. Wellinger. On behalf of all members I wish him a happy and successful period of office.

Robert C. G. Williams.

INSTITUTE NEWS

Awards in Region 8:

Just before this Newsletter went to press the following results were announced.

Second prize Institute Paper Award to Lars Odman (Chalmers University of Technology). (The first prize was awarded to John Alan Richards of the University of New South Wales—Region 10, so that both prizes were awarded to students outside the United States.)

Fellow awards to Jan F. Schouten and Cornelius J. D. M. Verhagen (Benelux); Roger A. Aubert, Byron L. Havens, Richard Langlois-Berthelot and Louis J. Libris (France); Giorgio Catenacci (North Italy); Geoffrey W. Carter, Eric R. Laithwaite and Raoul Willheim (United Kingdom and Republic of Ireland).

Reciprocal Promotion of IEEE and IEE, London :

Promotion at each other's principal Conventions and Conferences has been approved by the Executive Committee. Similar future agreements with other Societies are not precluded.

IEEE-IEE Joint Publishing Expands :

Co-operatively, four information service journals will be issued in 1969, up from one this year. Two are abstracts journals: 'Electrical and Electronics Abstracts' (EEA) and 'Computer and Control Abstracts' (CCA). Together they cover the entire field of interest of IEEE and IEE in this area, as well as of the Association for Computer Machinery and a few other societies. The other two journals are for current awareness—listing titles, authors and journal references monthly—called 'Current Papers in Electrical and Electronics Engineering' (CPE) and 'Current Papers in Computers and Control' (CPC) and matching the respective abstract journals in subject area coverage. (A new price policy will bring CPE and CPC to IEEE members at

'bargain prices'—\$9 and \$6 respectively; EEA and CCA, designed for libraries and companies, will carry the same price for all. For details see your dues notice.)

Editorial work on the joint information service products continues to be split between IEEE and IEE, with Engineering Index helping out, under contract with IEEE. All four of the information service journals will be produced using computer-controlled photo-composition on a Photon-Lumitype 713 in England. IEEE will send its editorial contribution to England on computer magnetic tape beginning mid-1969. Plans for issuing public magnetic tapes are in an early stage.

Power Meetings :

The Winter Meeting will, as usual, be in New York, from 26th to 31st January 1969. The Summer meeting will be in Dallas, Texas, from 22nd June to 27th June 1969, when the theme of the meeting will be 'Reliability' and the technical programme will encompass all subjects falling within the power field.

Authors should advise the Technical Conference Services Office of IEEE Headquarters without delay of their intent to submit a paper. Headquarters will furnish the author a Declaration of Intent form, an Author's Guide and model paper kits for the typing of manuscript. The Declaration of Intent form should be returned as soon as possible, preferably by return mail, so that preliminary plans may be made to include the paper in the programme.

Deadline date for mailing of papers to be considered for presentation at the Summer Power Meeting is 15th February. The papers will be evaluated for acceptance by the appropriate Technical Committee Chairman. It will be necessary to adhere strictly to the 15th February deadline as the final date for mailing of manuscripts to IEEE Headquarters.

IEEE Neck-ties :

An order form with all details for purchase is enclosed with this Newsletter.

REGION 8 NEWS

REGIONAL MEETING :

Meetings of the Region 8 Committee and of the Student Activities Committee were held in Tel Aviv on October 23rd and 24th immediately after the Annual Conference and Exhibition of the Israel Section. The following items are of particular interest to members.

Up-Grading :

The subject of up-grading was discussed, especially the transfer from Member to Senior Member. It is important to realise that *no increase* in dues is involved. The SM grade requires professional practice for at least 10 years with the attainment of distinction over a period of five. Members who have these basic qualifications should apply for transfer to the grade which recognises their seniority. Either write to your local Section or to Miss Emily Sirjane, IEEE, 345 East 47th Street, New York, N.Y. 10017, U.S.A., for the transfer forms.

Papers from the Region :

The Region, recognising that many members who do not have English as their mother tongue may be inhibited from writing for IEEE publications, invite papers in the author's own language. Papers which have already been published can be considered and help in the translation into English will be arranged. For further details contact Professor F. E. Borgnis, Institut für H.F. Technik, E.T.H., Sternwartstrasse 7, 8006 Zurich, Switzerland. IEEE Publications offer the widest readership of any professional society—Spectrum alone has a circulation of 160,000. All members should consider whether the work they are doing can be written up for this wide readership.

Visiting Speakers :

The Region is interested in encouraging speakers to give lectures to different Sections. Any information on Visiting Professors on sabbatical leave, visitors who plan to arrive in the Region during the next year, or members visiting another country within the Region who would be prepared to give a talk should write to the Editor of the Newsletter.

List of Members in Region 8 :

From the records held at Headquarters in New York a list has been prepared which shows the name and address of each member who lives in the area of Region 8, his grade of membership, and to which Groups he belongs.

It was originally hoped to send a copy to everyone on the list, but this proved too costly so a number of copies have been sent to each Section chairman. Members resident in countries in which no Section is yet in being have each been sent a copy of the list in the hope that this may stimulate contact between them from which an active Section or Student Branch might arise.

There will be a limited number of spare copies and any other member wishing to have one for his personal use will be sent a copy by mail for a nominal charge of one U.S. dollar or equivalent in any currency convertible into sterling (8s. 4d. for UK members), which should be sent with the order to the following address: IEEE, County Secretarial Services, 8 The Flower Walk, Guildford, Surrey, England. Cheques or money orders should be made payable to the IEEE.

Attention of members is drawn to the note on the List restricting its use to professional Institute purposes only.

MEETINGS IN THE REGION :

1969 International Seminar on Digital Processing of Audio Signals :



Prof. Giuseppe Francini
Chairman North Italy Section

A seminar on Digital Processing of Audio Signals will be held from March 12th-14th, 1969, at the ETH, Zurich, Switzerland. The meeting will be co-sponsored by the IEEE Group on Audio and Electroacoustics, the Swiss Section of the IEEE and European professional societies. Invited speakers will talk about computer related problems; digital processing methods; applications such as speech processing; noise control engineering; physical and architectural acoustics; underwater acoustics; shock and vibration. Short contributions are welcome in written form until January 15th, 1969. The Committee may use these contributions for individual presentations or discussions. Further information

from Mr. E. H. Rothausser, IBM Research Laboratory, Säumerstr. 4, 8803 Rüschlikon, Switzerland.

Conference on Lasers and Optoelectronics, to be held 25th-27th March 1969, Southampton, England :

Organised by the Institution of Electronic and Radio Engineers, the Institution of Electrical Engineers (Electronics Division), the Institute of Physics and the Physical Society, the Institute of Electrical and Electronics Engineers (U.K. and Republic of Ireland Section) and the University of Southampton. Papers will be grouped under the following main headings:—

Lasers—Theory and Devices; Non-Linear Optics and Optical Modulators; Opto-Electronics; and New Laser Techniques. Further information and registration forms for the Conference from the Conference Registrar at the Institution of Electronic and Radio Engineers, 9 Bedford Square, London W.C.1, England.

Conference on Switching Techniques is to be held in London, England, from 21st-25th April 1969 and is being sponsored by the Institution of Electrical Engineers, the Institution of Electronic and Radio Engineers, and the Institute of Electrical and Electronics Engineers (U.K. and Republic of Ireland Section). The Conference aims to provide a comprehensive survey of recent switching techniques and its scope will include telephone switching systems; switching and control and management aspects of telecommunication networks; data switching (excluding store and forward techniques); sub-systems, techniques and the applications of devices (with special reference to cross-points); hardware and software aspects of control systems; traffic studies and signalling. Details from IEE, Savoy Place, London W.C.2, England.

1969 IEEE Congress on Nuclear Electronics, to be held 6th-8th May 1969, Ispra, Italy :

Sponsored by IEEE, Euratom, with Consiglio Nazionale delle Ricerche, Comitato Nazionale dell'Energie Nucleare, Associazione Elettrotecnica ed Electronics Italiano, Società Italiane di Fisica. The Symposium will be held in the Palazzo dei Congressi at Stresa. Contributions are being solicited on pre-amplifiers for nuclear detectors; amplifiers, shaping, d.c. restoration, baseline shift; problems of time resolution; pulse height analysers; time sorters; computers on line and data reduction in nuclear experiments; statistics in nuclear electronics. Selection of the papers will be based on a 50 word abstract plus a 500 word summary. The deadline date for submittal is 10th January 1969. Completed manuscripts are due at the Conference. For details write to Professor L. Stanchi, Euratom, Ispra, Casella Postale 1, Italy.

European Microwave Conference 1969, London, England, 8th-12th September :

Sponsored by the Institution of Electrical Engineers (Electronics Division), the Institution of Electronics and Radio Engineers and the IEEE, Region 8. The Conference will be the first in Europe to deal comprehensively with the subject of microwaves. It is hoped it will be the forerunner in a developing programme of major conferences in different European countries on this important topic. The scope of the Conference will include microwave circuits, design and measurement; microwave antennas, elements and associated devices; solid-state microwave devices and applications.

Prospective contributors to the Conference are asked to send a synopsis (approximately 500 words) to the Joint Conference Secretariat, IEE, Savoy Place, London W.C.2, England, by 5th January 1969.

A Conference on Trunk Telecommunications by Guided Waves will be held in London, England, from 15th-17th September 1969 and is being sponsored by the Institution of Electrical Engineers (Electronics Division), the Institution of Electronic and Radio Engineers and the IEEE (U.K. and Republic of Ireland Section). The aim of the Conference is to examine and assess current achievements, problems and prospects in the development of trunk telecommunication systems by guided waves at millimetric and optical frequencies, with special reference to the following aspects: systems aspects and modulation and multiplexing techniques; guiding structures including transmission imperfections and fabrication and installation; terminal and repeater equipment; measurement techniques; components. Offers of contributions of approximately 2,000 words are invited for inclusion in the Conference programme, and synopses of about 250 words should be sent to the Conference Department, the Institution of Electrical Engineers, Savoy Place, London W.C.2, England, by not later than 5th January, 1969. Manuscripts will be required for consideration by 1st May 1969.

1969 International Symposium on Man-Machine Systems, to be held 8th-12th September 1969, Cambridge, England :

Organised jointly by the Group on Man-Machine systems of the IEEE and the Ergonomics Research Society, with the sup-

port of IEE, IERE, IEEE (U.K. and Republic of Ireland Section), at St. John's College, Cambridge. The Symposium will comprise presentations on research and development activities related to the design of man-machine systems. The Symposium Committee will invite papers from specialists in selected topics, and contributed papers will also be welcome. The Symposium proceedings will be in English. Further information and a call

for contributed papers will be available towards the end of 1968. Information will be mailed to individuals who request it from Mr. Robert C. McLane, G-MMS Meetings Chairman, Honeywell Inc., 2345 Walnut Street, St. Paul, Minnesota 55113, U.S.A., or Mr. David Whitfield, ERS Meetings Secretary, Applied Psychology Department, University of Aston, Birmingham 4, England.

NEWS OF THE SECTIONS

BENELUX SECTION :

In the past season three meetings were organised jointly by IEEE and SITEL in Brussels. Professor Dr. G. A. Blauw gave a lecture on 'Computer Architecture, Implementation and Realisation'; Professor R. W. Newcomb on 'Linear Integrated Circuit Synthesis Techniques'; and Mr. P. Blassel on 'Un Projet de Satellite pour l'Eurovision.'

On 25th November a full-day Technical Conference was held in Eindhoven, jointly with the Dutch Radio and Electronics Society NERG. The programme was

—Dr. Stumpers: 'Aims and Structure of the International Union of Radio Science (URSI)'; Professor Dieminger: 'Ionosphere Research'; Dr. van Salben: 'Electrical Currents in the Magnetosphere'; Mr. Baars: 'New Instrumentation in Radio Astronomy'; Dr. de Feiter: 'Space Research and the Netherlands' Contribution to it'; Professor Bremmer: 'Propagation of Long Waves and Plasma Theory'. This meeting was wholly devoted to subjects concerning the URSI.

On 10th January a meeting will be organised in Eindhoven on 'Electronics in Traffic Engineering, Now and in the Future'. Professor Heet-

man will give the general introductory lecture; Dr. Wiemer: 'Necessary Traffic Data and Active Utilisation of Traffic Lights'; Dr. Koldenhof: 'A Computer System in Traffic Engineering'; Mr. Braak: 'Traffic Co-ordination in a Large City'.

In mid-February the Benelux Section has been invited to visit the Extec Space Research Laboratories in Noordwijk. Lectures will be given and a visit to several parts of the laboratories is foreseen.

On 15th-18th April the Intermag Conference will be held in Amsterdam, sponsored jointly by the IEEE Professional Group on Magnetism and several Dutch Societies.

DENMARK SECTION :

A Preparation Committee is being formed for the purpose of nominating Officers and Committee members and for making a proposal for Bylaws. It is hoped to be able to hold the election before Christmas so that the Section can be in full operation from 1st January 1969.

GERMANY (WEST) SECTION :

On 9th November 1968 the German Section had the honour to be visited by Professor F. E. Borgnis, Zurich, member of the IEEE Board of Directors. The Secretary of the German Section, Dr. Burghoff, had arranged a discussion on increasing the Section activities. Professor Borgnis made many useful suggestions for promoting co-operation of the German Section with the Verband Deutscher Elektrotechniker as well as with the Nachrichtentechnische Gesellschaft. Delegates of these two German scientific societies, Dr. Fleischer, Dr. Jacottet, Professor Prinz and Dr. Schnitger, took part in the discussion.

No changes have occurred in the arrangements for the meeting on microwave technique or the meeting on semi-conductor research, but the dates for the meeting on data transmission have been changed to 19th-21st March 1969. Note: In respect of the 'Colloque International sur la Téléinformatique' at Paris, 24th-28th March 1969, the date of the 'Data Transmission Meeting' has been postponed.

ISRAEL SECTION :

The Israel Section had the privilege and the pleasure to host, for the first time, the Region 8 meeting in Tel-Aviv on 23rd and 24th October. Members of the Committee attended the Section's Sixth Annual Convention and Exhibition, in particular

Region 8 Director, Dr. Williams, and Dr. Wellinger, the Region's Director-Designate. The Convention, the most extensive organised by the Israel Section to date, drew 1,300 registrants, 3,000 visitors to the exhibits and 70 technical papers in 16 sessions. Subjects ranging from microwave systems through computer design, medical electronics, control systems, quantum electronics, semi-conductor devices, reliability and power transmission. All in all, it may be said that the IEEE has pooled its efforts on all levels to show the force of its ideas, resources and organisation at one of its more remote reaches. The Israel Section feels most proud and fortunate to have served as the proving ground for such a demonstration.

NORTH ITALY SECTION :

A Section meeting was held in Padova on 7th October. In the meeting the guide-lines for the activity of the Standing Committee were decided and a name for liaison officer of Student Activity has been proposed. The proposal to appoint a Section Group Co-ordinator was discussed and approved, but it was decided that the choice of a name required further consideration.

The Ispra Nuclear Symposium sponsored by the North Italy Section in co-operation with the IEEE Nuclear Science Group has been discussed (see opposite page).

A North Italy Section Student Activity meeting has been held. Professor Jespers, Chairman of the S.A.C., was present and he made an overall examination of student affairs in the North Italy Section area which will result in an improved organisation.

SWEDEN SECTION :

On 24th September a meeting was held at the L. M. Ericsson Telephone Company, Mölndal. It started out with a guided tour through the laboratories and the factory. Some products were exhibited. Then Dr. Per Granholm from the L. M. Ericsson Co. in Stockholm lectured on 'Data Communication System with Banking Applications'. Attendance was about 70, including dinner. The meeting was arranged jointly by the L. M. Ericsson Telephone Co., Mölndal, the Engineering Society of Gothenburg (a National Society), and the IEEE Sweden Section.

On 12th November Messrs. L. Ekroth and C. G. Norlin from the IBM Sweden Co. spoke on 'Communication with Data Machines will be Simplified'. The meeting was organised jointly by the Engineering Society of Gothenburg and the IEEE Sweden Section.

A Student Section meeting at the Royal Institute of Technology was held on 11th November 1968. Attendance was approximately 200. The subject of the meeting was 'Infantocracy'.

SWITZERLAND SECTION :

Our series of lectures and papers, mostly organised jointly with a national body, continue to draw a numerous and appreciative attendance. With an average of one event every fortnight, subjects included synthesis and design of active RC networks and filters; thin-film resistors; computer models for computing non-linear processes; seminar on digital filters; various subjects with regard to defence electronics; supra-conductivity.

A full day was devoted to a conducted tour of the three electronic Institutes (telecommunication, high frequency and systematic electricity) of the Swiss Federal Institute of Technology in Zurich. Special emphasis was laid on their organisation, their facilities and the interplay between teaching and research. The extension of the engineer's curriculum to include post-graduate studies and how to bring it about was the subject of a sometimes controversial discussion between and among the academic staff of the Institute of Technology, industry and engineering societies. While the principle of post-graduate studies is universally acknowledged, the precise form of how to integrate it with the existing and relatively strict educational programme is still open; the dearth of professors is an added obstacle.

Our Student Branch has now some 100 members, organising their own events, mostly of an oriented nature. It is hoped that with the integration of EPUL (Ecole Polytechnique de l'Université de Lausanne) into the Federal Institute of Technology this activity will branch out to the shores of Lake Geneva.

UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION :

Section Group Co-ordinator :

Dr. G. S. Brayshaw, a member of the Section Executive Com-

mittee, has been appointed to the newly-established function of Section Group Co-ordinator. He will receive the Newsletters of all Professional Groups so that the Section is aware of developments of interest to them.

Conferences :

Since the last Newsletter was published the Section has been invited to co-sponsor the following conferences: 'Digital Methods of Measurement', July 1969, organised by the IERE; 'Signal Processing Methods for Radiotelephony', 12th-14th May 1970, organised by the IEE.



Praesidium of the Israel Section's Sixth Annual Convention and Exhibition, from right to left: Mr. Lavi, Israel Section Chairman; Mr. Meltzar, Convention Chairman; Prof. Cederbaum, Member of the Executive Committee; President Herwald; General Zsu Assistant Secretary of Defence; the Keynote Speaker, Dr. Williams; Mr. Galil, Member of the Executive Committee; Mr. Weissenstern, Secretary of Israel Section.

STUDENT ACTIVITY NEWS

Student activities expanded again in 1967-68. A Branch was founded in Lund (Sweden). Our records show 12 Branches, while four are expected in the North Italy Section and one in France in the very near future. On the other hand, a total of about 25 Counselors are acting now in Europe. There is good reason to expect an even bigger expansion in the next few years.

Concern has been expressed several times by many Counselors for increased contacts among students and universities throughout Europe. It is hoped that this regional Newsletter might be used as a link to help students get in touch with students from other schools and other countries. At vacation time, for instance, travelling students could be the guests of other students.

How to start a Student Branch? The procedure is quite simple—

1. The school has to be of recognised standing. If you do not know what this means, give a call to your Section Chairman or your Counselor. He will be glad to give you any information.
2. An IEEE Counselor has to be nominated and subsequently appointed by the Regional Director. If there is no Counselor in your school, call your Section Chairman again.
3. Ten IEEE student members at least have to sign a petition and send it to IEEE Headquarters in New York. The recommendation of the Regional Director will also be required at this stage.

What happens with Student Membership at Graduation Day?

1. Student Members are automatically up-graded to full Member grade as of their graduation date. They continue to receive their IEEE publications that were subscribed for while they were Student Members until their former Student Membership dues expire. (Usually they graduate in June, thus they continue receiving publications until December of that year.)
2. Prior to expiration of their Student dues period (October, November or December) they will receive billing for regular membership dues. (Reduced to \$15.00 per year for the next three years in Region 8.)
3. If a former student who has been automatically up-graded returns to school for graduate work, he can revert to Student status by letting IEEE Headquarters know his new graduation date. A new application is not required.

Activity Reports from Various Student Branches in Region 8 for the Academic Year 1967-68 :

(a) Uppsala (Sweden) :

The Branch at present has 19 members. Most of these are at a relatively advanced stage in their studies towards the doctor degree. They are actively engaged in research and development. All members are enrolled in a Professional Group. A form of meeting which particularly appeals to the students is study visits to industries and research laboratories. Lectures were given on 'Large-Scale Integration', 'Transit Time Semi-Conductor Microwave Devices'.

(b) Gothenburg (Sweden) :

Chalmers University of Technology, Chairman: T. Cato. About 55 members are enrolled in IEEE student activities.

(c) Stockholm (Sweden) :

Royal Institute of Technology—about 25 members are enrolled. Lectures were given on 'Some New Electronic Devices for Education' and on 'Electrical Engineering Education at U.S. Universities'.

(d) Lund (Sweden) :

At Lund Institute of Technology and Lund University a joint Student Branch was formed. Professor L. Stigmark is its new Counselor.

(e) Madrid (Spain) :

The membership increased from 71 to 92 members. This Branch received the Vincent Bendix Award, an amount of \$476.00 to study problems relative to electronic systems for communication and telemetry satellites. Several technical visits were organised—Instituto Nacional de Técnica Aeronáutica; Standard Electrica Manufacturing Plant and Labs; NASA Station of Robledo de Chavela y Fresnedilla, Television Set Manufacturing Plant, etc. Technical panel discussions were held on the following topics: 'New Devices for Telephonic Switching', 'Special Applications of Smith Chart', 'Digital Gates'.

(f) Louvain (Belgium) :

Seventy-three members are enrolled. Twelve meetings were organised this year on various topics. Outside speakers gave lectures on 'Digital Computers', 'Monopulse Radar Systems', 'State-Space Approach', 'Error Correcting Codes', 'Electronic Telephone Systems', 'Television', etc. Two trips were organised to visit foreign industries during vacation—to Paris, France, and Eindhoven, Netherlands.

(g) Padova (Italy) :

The North Italy Student Branch in Padova has been very active. One of the most interesting achievements is the organisation of a course of technical English. The creation of new Student Branches in other Universities in Italy is imminent. Contacts have been made with Genova, Trieste, Milano and the Instituto Tecnico A. Baltrami, Milan. Four new Counselors have been appointed—Professors Biorci, Zoldan, Ferrari and Mosca.

(h) The Netherlands :

We have now three Counselors in the Netherlands, in Delft, Eindhoven and Twente.

(j) Switzerland :

The Switzerland Section Student Branch now has about 100 members. Contacts are established with Zurich, Lausanne, Berne and Basle.