

IEEE Region 8 newsletter



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
INCORPORATED

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No. 35

JULY 1976

REPORT FROM THE REGIONAL DIRECTOR



On 26 March the Region 8 Student Contest Final was held in the Maxwell Room of the IEE building in London. A student from the University of Oulu, Finland, Mr. H. Hakalahti, sent in a paper on "The reduction of line raster effects in a reproduction TV system." Mr. A. K. Mashour and Mr. S. E. Noujaim of Cairo-Giza sent in a paper on "Realization, analysis and stabilization of a near time optimal second order control system." For oral representation in London, papers were presented by C. Rossier of the Ecole Polytechnique de Lausanne,

by P. Couvreur of the Université Catholique de Louvain, and by B. Pfister and W. Oehen of the Eidgen. Techn. Hochschule in Zürich. Rossier studied the electric power system of Hydro-Quebec in Canada during a stay in that country. The computer played a prominent role in his discussion. Couvreur discussed the inverse current in thyristors. His work showed a good combination of theoretical insight and practical realization. He had constructed mesa power diodes and he had used a computer program to find the best approximation of the relevant parameters. Pfister discussed a microprocessor implemented recursive adaptive filter for on-line equalization. He had used the Intel 3000, and it responded adequately to channel response curve distortion. Student Activities Chairman, Professor Memelink, welcomed the students, the jury (Prof. Antognetti, Mr. Remy, Dr. Stumpers, Mr. Valster) and interested members of the Regional Committee. After lengthy discussion it was decided to give Rossier third prize, Couvreur second prize, and Pfister and Oehen first prize. As chairman of the jury the Regional Director stressed that there was only a very small difference between these three papers, and that the two papers that had not reached the final were also of good quality. (The jury does not know the names of the competing students or their branches when listing the papers). He also thanked Professor Memelink for his efforts as S.A.C. Chairman Region 8.

In the afternoon of 26 March the Regional Committee meeting started with representatives of the following sections: Benelux, Finland, France, Germany, North Italy, Greece, Yugoslavia, Israel, Poland, Norway, Spain, Sweden, Switzerland, United Kingdom and Republic of Ireland. Also present were representatives of the Publications Committee (Prof. Williams), the Student Activities Committee (Prof. Memelink), the Educational Activities Committee (Mr. Remy), the Membership Development Committee (Dr. Rannestad), and the Fellowships and Awards Committee (Dr. Wellinger). Mr. Russell, past Director, sent apologies due to a coincident business trip; so did Prof. Saunders, R.A.B. Chairman. IEEE Headquarters was represented by Mr. Stewart. Secretary-Treasurer, Dr. de Vrijer, had the minutes of the

Zürich meeting (31 October, 1 November 1975) approved and also the budget for 1976. The Director explained the new formula for Regional rebates, developed by Mr. Gibson. He missed in it an item allowing members of an IEEE Committee in the Region to visit the meetings of Committees of which he is a member. This is a costly item in the distant Regions. He noted that the Treasurer had budgeted for a 300,000 dollar surplus for 1976, and found this too optimistic in view of a loss during 1975 of 500,000 dollars. Nevertheless the President favoured an extra budget of 100,000 dollars for public relations in 1976, increasing to 250,000 dollars in the following years.

The Director mentioned the nomination of Professor Saunders for President of the Institute, and of Dr. Briskman for Executive Vice-President, for 1977. He regretted that two opposing candidates, Dr. Rivers and Mr. Bayless, also members of the Board of Directors, had decided to contest the election. In view of last year's result (Dillard 31,000 votes, Feerst 19,000 votes) this is potentially dangerous. Professor Williams concurred, and thought it bad discipline for members of the Board to oppose a decision of this kind, especially as it was not known at the time of the nomination.

Mr. Stewart gave a general representation of the reorganization of IEEE Headquarters, and answered relevant questions. It was decided to support the Newsletter further and Prof. Williams drew attention to the advantages for Sections accruing from advertisements and inserts originating in their domain.

The Director circulated the budget for Eurocon '77, which was approved, and he drew special attention to the Day for Communications and the Developing Countries at this Symposium. He hoped that some support from the Italian industry would be forthcoming, though the economic situation in Italy is difficult.

The Director thanked Prof. Memelink for his services as S.A.C. Chairman, which he had to relinquish for personal reasons. In consultation with Prof. Memelink, Mr. Remy was asked to be his successor and he accepted.

As candidates for Director for the period 1977-78 the Regional Committee accepted the recommendation of the Nominations Committee: Prof. F. Bolinder, Chalmers University, Goteborg, Sweden, and Prof. J. Tegopoulos, Technical University, Athens, Greece.

The Israel Section announced its plans for closer collaboration with a national society, details to be arranged in consultation with Mr. Stewart. Such agreements are continued in Italy and Poland. The Regional Committee was unanimous in its opinion, that the Rivers amendments (engineers only, examinations for member and professional member degree) were totally unacceptable.

The UKRI Section Chairman, Mr. Wilton, welcomed the delegates and invited them to a dinner on Friday evening, including wives and students, also on behalf of IEE and IERE. At that time Mr. Winton gave a cordial welcoming address, and Dr. Stumpers answered for the guests. Dr. Gainsborough (IEE) and Mr. Sharpe (IERE) also expressed their appreciation. The meeting of the Regional Committee was closed on Saturday around 12.30 hours.

The next meeting of the Regional Committee may be held in Athens, end of October 1976, but this depends on the financial possibilities. The Director attended a meeting of the Steering Committee of Eurocon '77 in Venice, where the accommodation of the San Giorgio convent was visited. Three large rooms (700) and three smaller rooms (200 to 300) are available. In view of the cost of an inaugural meeting at

PUBLISHED QUARTERLY		JAN.	APRIL	JULY	OCTOBER
DEADLINES	News to Editor	Dec. 7	Mar. 7	June 7	Sept. 7
	Advertisements to County Secretarial Services	Dec. 15	Mar. 15	June 15	Sept. 15
	Delivery inserts to County Secretarial Services	Dec. 22	Mar. 22	June 22	Sept. 22

the Palazzo Ducale, this item was deferred until more is known about the number of participants. The delegates of the participating societies were asked to stimulate more papers! (Please, if you know of a suitable paper, send an abstract, or inform us, even if the deadline has passed). It was noted with appreciation that the International Union of Radio Science would co-sponsor this Symposium.

The Director had a meeting in Zürich in preparation of next year's EMC Symposium (28-30 June 1977), and he also addressed the opening meeting of the Symposium on Circuits and Systems in Munich on 28 April. On 29 April the Director consulted with several members of IEEE in Austria on the possibility of founding an Austrian section of IEEE. The prospects look good. At the request of some of those present, contact was made with the Austrian Federation of Engineers and Architects in order to show that no competition is intended, but instead collaboration is preferred. It is hoped that this will lead to a start of the section in the autumn of this year. Dr. Stumpers gave a lecture on "Digital signal processing and digital filters," which led to a good discussion.

In connection with the EMC Symposia in Wroclaw (September 1976) and Montreux, (June 1977) the Director attended the meeting of the CISPR Steering Committee in Nice on 26 May. He also attended a meeting between members of Dr. Rao's committee for the organisation of a day for Communications and the Developing Countries, and members of the ITU staff (Mr. Butler, Mr. Kirby, Mr. Gromov, and Mr. Gadadhar) in Geneva on 27 May. The ITU staff expressed its interest. The Secretary-General, Mr. Mili, who could not be present, will give the keynote address, and the Director of CCIR will probably give a lecture, and chair a forum discussion.

Meeting Board of Directors, Boston, May 1976

As was to be expected, the May meeting of the Board of Directors was largely devoted to financial problems. You may have read the comments of the President of IEEE in the Spectrum of last March. Mr. Dillard is really a very nice person as long as you agree with him, but if not you had better get educated. This applies especially to

Regional Directors and the Executive Vice-President Regional Affairs. It may be necessary to reduce the Regional rebate even for 1976, although most Regional Directors pointed out that their plans had been made already in accordance with the budget agreed upon. One of the reasons seems to be, that the increase in dues led an unexpectedly high number of members to cancel their membership (loss \$200,000). It seems obvious to me, that a further raise in dues is now most unlikely to produce better results, but the President thinks otherwise. Around 20,000 members have not yet paid their dues for this year. **All Section chairmen should by now have received lists of members in arrears** and they are urgently requested to see if something can be done about it.

The Executive Committee sometimes has to take decisions under time pressure, without consulting the Board of Directors. On the other hand it also omits to give the necessary information where this would have easily been possible, e.g. when the Executive Committee agreed to terminate staff at its December meeting, the Board was not informed. Anyway 25 members of the staff were terminated, but the result is, that there are two managerial vacancies and 12 other staff positions to be filled as of 29 April, 1976.

It is very hard for a Director, who is not on the Finance or the Audit Committee to comment on the analysis of the financial condition. However, when one sees that investments give an income of \$175.0K against an expense of \$160.0K, one has the impression, that something is wrong, all the more as the Price-Waterhouse report gives a net investment income of \$320.300 over 1975. Advertising in Spectrum gives an income of \$867.5K but at an expense of \$431.0K. The micro-processor course, which is going very well, income \$81.5K, does not even cover its own administration costs. Member Records cost \$364.9K (net). In my opinion this is a very large amount, as most records will remain unchanged over years, but perhaps with 170,000 members one cannot do better.

The Electro exhibition went very well, could not even accommodate all those willing to take a booth, so perhaps the economy is really picking up, and I will not have to come back to financial problems in later Reports.

F. L. Stumpers.

NOMINATIONS FOR REGION 8 DIRECTOR 1977-78

Prof. E. Folke Bolinder
Chalmers University, Goteborg, Sweden



In the old days people joined IEEE mainly because of the high quality of its technical publications, for instance, the SPECTRUM, the PROCEEDINGS, and the TRANSACTIONS. Today young people also often join IEEE through the Student Branches at universities and institutes of technology. It is therefore important that student activities and student member drives increase. Student Branches should co-operate with national student organizations in common activities and ties should be developed between Student Branches

and local Sections and Chapters. The Student Member is an important part of IEEE. As a former Student Activities Chairman of Region 8 I quite naturally believe that whatever we can do in keeping the student with good technical literature, good technical meetings and conferences, good educational tools, interesting student paper contests, and student exchanges between different countries in Region 8 will be of great value not only to the student but to the benefit of the whole IEEE. The Region 8 Newsletter, which is a good connecting link between all Region 8 members, should be continued by all means.

As Region 8 is composed of countries with different languages, religions, cultural and historical backgrounds, and political and educational systems it is obvious that the job of Regional Director is a very difficult one. It is, however, also a very interesting and challenging task. Some countries have strong national engineering societies and student associations. Therefore, the key word for IEEE in Region 8 is "co-operation." Good examples of such co-operation are the first EUROCON '71, organized by Region 8 in co-operation with leading European national engineering societies, and EUROCON '74 organized by Region 8 and the Convention of National Societies of Electrical Engineers of Western Europe. All signs indicate that this good co-operation continues during the planning of EUROCON '77 which will take place in Venezia, Italy on 3-6 May, 1977. —E. Folke Bolinder.

Prof. John A. Tegopoulos
Technical University, Athens, Greece



IEEE with its international nature, can contribute to the understanding and co-operation of peoples in the world, in an era of ideological contrasts and different ways of life, exacerbated by large scale economic problems. Electrical—engineering and science—can form the common base for such interrelation and intercommunication among electrical engineers first and their countries subsequently.

Europe — Region 8 — presents this picture of the world in a smaller scale but with a relatively large number of countries with a variety of languages, cultures and economic systems. On the other hand it is the purpose of IEEE to enhance the technological level in Electrical Engineering of its members and through them in general of their countries by means of such activities, as publications, educational tools and Conferences.

To make IEEE more effective for both above goals I feel the most important is to keep up with the membership and especially students by organizing and substantiating the activities in every Section, as well as by personal contacts. Second, start a mode of co-operation among Sections by exchanging speakers and discussions so that a cross-fertilization of ideas and methods can be promoted. Third, a continuing effort for contact with the National Societies can definitely be a step forward with mutual benefits. Fourth and last, I feel that the organization of Conferences in smaller or larger scale will help tremendously in achieving the above cited goals.

—John A. Tegopoulos.

SUMMER SCHOOL

on Microwave Antenna Measurements

International Centre for Mechanical Sciences (CISM)

Udine, Italy September 6-10 1976

Topics: Besides introductory material, measurements of pattern, directivity, gain, polarization, reflectivity, near-field and boresight. Instrumentation. Antenna test ranges: Ground reflection ranges, Anechoic chambers, compact ranges, near-field ranges. Near-field far-field techniques. Scattering measurements. Uses of anechoic chambers.

Preliminary list of lecturers:

Jørgen Appel-Hansen	Technical University of Denmark (Denmark)
John Brown	Imperial College of Science and Technology (England)
Giorgio Franceschetti	Università di Napoli (Italy)
Gerald Hickman	Scientific-Atlanta, Inc. (USA)
J. Searcy Hollis	Scientific-Atlanta, Inc. (USA)
Heinrich Hollmann	Fernmeldetechnisches Zentralamt der Deutschen Bundespost (Germany)
Flemming Holm Larsen	Technical University of Denmark (Denmark)

Fee: US \$250 including text and classroom materials. Hotel expenses exclusive.

Enrolment: Persons wishing to attend the course should write to

CISM - MICR
1 - 33100 Udine
Palazzo del Torso
Piazza Garibaldi 18
Italy

before August 1, 1976. In the event of applications exceeding capacity, those received earliest will be accepted.

NEWS FROM REGION 8

IEEE International Symposium on Circuits and Systems, Munich 1976

This international Symposium opened on Tuesday 27 April with speeches by Professor Ghausi, President IEEE Circuits and Systems Society; Professor Grigull; Rector of Munich Technical University; Professor Stumpers, Director Region 8; Professor Kleen, Chairman German Section; Professor Fettweis for the Section on linear and non-linear networks of the German Communications Society; Professor Saal, Munich University, Symposium Chairman. During the following days the participants could choose from nearly 200 lectures, a panel discussion, and a tutorial session on wave digital filters.

The University had made several large rooms available for lectures, as well as for the coffee and tea breaks. Good inexpensive lunches were available at the Mensa. The weather was fine and many participants enjoyed the excursions on Friday, 30 April (Zugspitze, Hohen-schwangen, Neuschwanstein, etc.).

Professor Fettweis chaired the international program committee. The high number of accepted papers led to six sessions in parallel, ranging from classical networks, to digital filters, time varying and nonlinear filters, active filters, microwave circuits, optimization problems, and multidimensional filters.

Among the over 500 participants were quite a large contingent from the countries of eastern Europe.

Mrs. Cauer, the widow of the famous Professor Cauer, attended the Symposium as a guest of honour.



Mrs. Cauer, guest of honour, Director Stumpers, Professor Fettweis, Chairman organizing committee at the opening session.

INSTITUTE NEWS

Emanuel R. Piore Award

News was released on 28 May 1976 of a new Field Award with a due date for nominations of 1 August 1976. The award is for outstanding achievement in the field of information processing deemed to have contributed significantly to the advancement of science and to the betterment of society. It will consist of a medal, a certificate, an

honorarium of \$2,000 and an international travel grant in the amount of \$2,500.

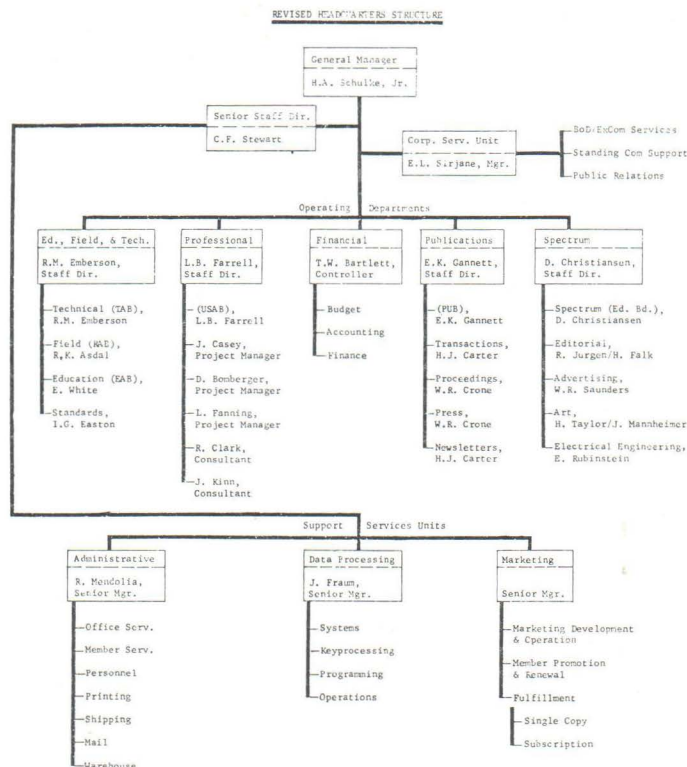
Nomination forms can be obtained from the Staff Secretary of the Awards Board, IEEE Headquarters. It is most important that recognition is given to those who have contributed greatly to our profession. It's up to you to help them receive the recognition and honour they so richly deserve.

Staff at Headquarters

A major reorganization of Headquarters staff is now 90 per cent complete, according to IEEE General Manager H. A. Schulke. The reconfiguration, initiated in January, is aimed at achieving maximum efficiency in Headquarters' operations at a time of severe economic hardship for the Institute. It comes in the wake of an eight per cent reduction in the professional staff—a measure necessary despite this year's increase in the level of basic member dues from \$30 to \$35. As shown in the organization chart, Charles Stewart, formerly Director of Member and Field Services, is now Senior Staff Director in charge of the Institute's support services in Piscataway, N.J. Taking over Mr. Stewart's Field responsibilities is Robert Asdal, who continues, for the time being, in his former capacity as Manager of Student Services. Emily Sirjane, who has served as Manager of Field Services for many years, has assumed the function of Manager, Corporate Services, and will be concerned with services rendered to the Board of Directors, the Executive Committee, and the Awards Board, and with support for IEEE Standing Committee.

Another major change in Headquarters' line-up involves Richard Emberson, the Institute's long-time Director of Technical Services. Dr. Emberson is now Director of Educational and Field Services in addition to his duties as Technical Services Director. Assisting Dr. Emberson are Robert Asdal and Emma White, another experienced IEEE employee who is now supervising Educational Services. And a new face has been added to Dr. Emberson's staff: Ivan G. Easton has been appointed head of IEEE's Standards Program, succeeding Sava Sherr who has become deputy managing director for energy matters at the American National Standards Institute.

IEEE's Professional Services staff has also experienced significant changes. Headquarters in Washington, D.C., Professional Services Director Leonard Farrell's staff has been expanded with the addition of two new Program Managers, Dorothy Bomberger and Leo Fanning. They join Joseph Casey who has shifted his efforts from New York to Washington to become a Program Manager under Mr. Farrell. Acting as Consultants to IEEE's Washington Office are John Kinn, formerly Educational Services Director, and Ralph Clark, well known to those Institute members who have had occasion to drop in on IEEE's Washington Office over the years.



NEWS OF THE SECTIONS

FINLAND SECTION

—Activity Report October 1975-March 1976

A new composition of the Nomination Committee was approved and Section activities were discussed.

A technical meeting at the Technical Research Centre of Finland, where four speakers talked on the subject "Antenna research and development" attracted 21 participants, and a technical meeting in co-operation with EIS on the subject "Optical communication in glass-fibre and in the atmosphere," 30 participants.

Twenty-seven participants attended a technical meeting at the Salora Oy Company in Salo; Mr. J. Nieminen spoke on "The market for Radio Telephones in the late '70's."

At the General meeting of the Section, Prof. T. Stubb was elected as new chairman of the Section. Mr. E. Häkkinen gave a speech on the subject "Auroral Radar." Fourteen members were present.

During an excursion to the Vaisala Oy Company, Mr. O. Järgermalm talked on the subject "The use of the Omega location system in location of radiosounds" with 15 members and eight guests present.

Section activities were discussed at a meeting of the Executive Committee. The Section is going to participate in the Radio Symposium of URSI this autumn.

Present authorities: Chairman: T. Stubb
Vice-Chairman: E. Heikkilä
Treasurer: I. Hartimo
Secretary: H. Sandell

Active membership: 91 members and 75 student members.

GREECE SECTION

—Activity Report October 1975-March 1976

Lectures presented:

1. Man-Machine Communication through Speech
by A. H. Maissis, Public Power Corporation.
2. Speech Synthesis
by A. H. Maissis, Public Power Corporation.
3. Microprocessors as Electronic Components
by C. Halkias, National Technical University of Athens.
4. A New Computer Grammar for Indoeuropean Language Machine Translation—Transliteration Example: English-Greek
by S. E. Diamessis, Nuclear Research Centre "Democritos"

5. Communication between self-organizing systems
by J. S. Nicolis, University of Patras.

Abstracts of Lectures:

1st Lecture—Speech Recognition. The main problem of man-machine communication through natural speech is certainly speech recognition. After a brief introduction to the subject, a recognition system, investigated by the lecturer, was presented. This system works in a phoneme base and is designed to recognize the voice of several speakers. The signal analysis is performed by an approximate model of the basilar membrane of the inner ear. The parameters extracted take into account the way the neural system is excited from the membrane movements. These parameters are then normalized by a non-linear method.

The results obtained are 80-85% correct recognition of phonemes contained in words pronounced by two speakers of different voice characteristics. The mean recognition time is less than 100ms per phoneme.

Attendance: about 60.

2nd Lecture—Speech Synthesis. The principal analog and digital methods used to synthesize speech were reviewed in a critical manner. Two main applications were examined:

- (a) The reduction of speech transmission cost achieved through extraction of a few significant parameters from the signal and reproduction of the speech from these parameters transmitted to the receiving post.
- (b) Synthesis by rule, i.e. generation of connected speech from low-bit-rate representations of speech elements.

For both applications the state of the art was presented and special attention was given to the problems encountered in the effort of improving synthetic speech quality. A recorded sample of synthetic speech was presented at the end of the lecture.

Attendance: about 40.

3rd Lecture—Microprocessors as Electronic Components. Microprocessors and associated ROM, RAM, I/O, etc., chips are fast becoming the new family of electronic components. In this talk we discuss the replacement of random logic with microprocessor components. A complete microcomputer system and the related software are examined and several application areas in medical electronics and

ESSCIRC 76

2nd European Solid State Circuits Conference

Toulouse - France September 21 - 24, 1976

The aim of the ESSCIRC series of conferences is to provide an annual European Forum for presentation and discussion of recent advances in Solid State Circuits Research.

The scientific programme of ESSCIRC 76, which is sponsored by EUREL and EPS includes ten sessions covering the following fields : MOS Circuits, High Speed Circuits, Integrated Injection Logics, Modelling, Design and Testing of Integrated Circuits, Circuits Applications.

Seven invited papers which will be published in the Conference series of the "Journal de Physique" will treat topics like Future of Bipolar Technology, Advanced MOSFET Technologies, GaAs Circuits, Logic Arrays, LSI in watches.

Further information, programme and registrations forms, may be obtained by contacting:

D. ESTEVE,
General Secretary of the Conference,
ESSCIRC 76
LAAS-CNRS
7, avenue du Colonel Roche
31400 TOULOUSE
FRANCE
Tel : (61) 53.11.77 Telex : 520930

instrumentation are presented.
Attendance: about 100.

4th Lecture—A New Computer Grammar for Indoeuropean Language Machine Translation-Transliteration Example: English to Greek. The common linguistic origin of most Western European languages, namely Indoeuropean, is used in a novel way to produce, by use of the computer, dictionary translation and, potentially, sentence translation between pairs of languages, e.g. English and (Modern) Greek (and Latin).

A program is fed into the computer instructing it to print from a list of words in one language their translation in the other. Actually—the novel element in the approach—the computer **transliterates**, rather than translates, employing a **new Grammar**, i.e. a new code for translation.

Attendance: about 40.

5th Lecture—Communication between "self"-organizing systems. The theory of open systems far from thermodynamic equilibrium is reviewed. Subsequently we examine the conditions under which such a system may increase its Redundancy in the presence of Noise—by absorbing information from the environment.

The concept of a multihierarchical—level—system is introduced and constraints necessary for the bidirectional information transfer between two such systems are established.

Attendance: about 50.

Membership Development

Membership of the Section 29 February 1976:

Active membership:	153
Fellows:	2
Senior Members:	12
Members:	101
Associate Members:	11
Students:	27

As compared with Membership February 1975 (total 131) there is an increase of about 17 per cent.

Plans for Future

We are planning to organize educational activities for students and older engineers through films, cassettes and lectures.

POLAND SECTION —Activity Report October 1975-March 1976

1. **The Agreement between SEP and IEEE.** The extension of the Agreement between SEP, the Association of Polish Electrical Engineers, and IEEE has been signed by IEEE President Stern and SEP President Dryzek for the next two-year period 1976-1977.

2. **Visits to Poland Section.** From 19 to 22 November 1975, Prof. F. L. Stumpers, IEEE Region 8 Director, visited Poland as a guest of Mr. T. Dryzek, President of SEP. During his stay in Warsaw, Prof. Stumpers visited the IEEE Poland Section, listened to the report on Section activities presented by Prof. Smolinski, Section Chairman, and gave a lecture on the "Radio Astronomy in the Netherlands." During his visit to Poland, Prof. Stumpers was received by Prof. J. Groszkowski, Vice-President of the Poland State Council and IEEE Life Fellow, and by Prof. E. Kowalczyk, Minister of Post and Telecommunications.

From 29 February to 2 March 1976, the IEEE Poland Section had the honour and pleasure to receive in Warsaw Mr. C. R. Russell, IEEE Region 8 Junior-Past Director, and Mr. Ch. M. Howell from "Microwave Associates," Burlington, USA. A meeting was arranged with both guests in Warsaw during which the organization of the future symposium and numerous technical problems regarding microwave semiconductors produced by "Microwave Associates" were discussed.

Technical Meetings. Because of lack of the Outstanding Speakers Tours in the five months period covered by this report, only three technical meetings have been held at which the following lectures were presented:

"Radio Astronomy in the Netherlands" by Prof. F. L. Stumpers, Fellow, IEEE Region 8 Director, Philips Laboratories, Netherlands. (In Warsaw).

"Optical Fibres and their Applications" by Prof. A. K. Smolinski, Fellow, IEEE Poland Section Chairman, Warsaw Technical University. (In Jablonna).

"Chain of Arcs as a Determining Factor in Explosion of Wires" by Dr. J. Nasilowski, IEEE Senior Member, Instytut Elektrotechniki, Warsaw. (In Warsaw).

The lack of lecturers from America and Region 8 countries is constantly felt as a disadvantage.

4. **Membership.** During the period October 1975-March 1976, the IEEE Poland Section membership has risen by ten to the total of 51 members: 2 Fellows, 36 Senior Members, 10 Members, 2 Associates, and 1 Student.

SPAIN SECTION

—Activity Report November 1975-March 1976

1. **Present Authorities.** Chairman: D. Juan Manuel Rebollo
Vice-Chairman: D. Juan Enriquez de Salamanca
Vice-Chairman: D. Felipe J. Asenjo
Secretary: D. Enrique Lucas
Treasurer: D. Hermenegildo Marin
2. **Section Activities.** The activities carried out during this period are listed below.
2. **Visit to Zorita Nuclear Station.** A visit was paid to the Zorita Nuclear Power Plant, near Madrid.
Attendance: 17 members and five guests.
- Lecture on "Electrical and Electronics Standards."** The lecture was given by Dr. Alfredo Bustinduy, Research Director of ASINEL (Asociación de Investigación Industrial Eléctrica) and IEEE Member.
Attendance: 50 members and 25 guests.
This paper has been published in the Spanish review "Luz y Fuerza."

Local Ceremony. The Certificate of Appreciation mailed by IEEE Headquarters was presented to Dr. Andrés Lara, Outgoing Section Chairman, at a local ceremony attended by personalities from the University, Research Institutes, Electrical and Electronic Companies.

Lecture on "The science of the time and its inverse." This conference was given by Dr. Roger L. Freeman, Senior Engineer of Standard Eléctrica Laboratories and IEEE Senior Member.
The meeting was attended by 30 members and 20 guests.

Spanish Section Award. The Certificate of Recognition, a free membership application to the IEEE for a period of five years and book to the value of 100 US dollars, were presented to Mr. Solana, the winner of the Spanish Section Award "Antonio Fernández Huertas," at a suitable ceremony.

3. **Future Activities.** The following activities are scheduled:
- Lecture on "Organization, Aims and Activities of the IEEE"
 - A visit to the Laboratories of INTA (Instituto Nacional de Técnica Aeroespacial).
 - A joint seminar on "Electronics Telephone Switching Systems" in Barcelona.
 - Two conferences on "Biomedical Engineering"
 - Lectures on "Optical Communications"
 - A joint seminar on "Electronics Switching Systems" in Madrid.
 - A visit to a Power Plant.
 - Lecture on "Integrated Networks"

4. **Membership Development.** The IEEE membership development in the Spanish Section, during 1975, is shown in the table below.

	F	SM	M	A	S	Total
Active membership 31/12/74	1	17	175	19	45	257
Active membership 31/12/75	0	19	198	18	73	308
Membership target 1975						317
Active membership 31/1/76	0	21	201	18	81	321

SWITZERLAND SECTION

—Activity Report April 1975-March 1976

1. The Section sponsored a certain number of technical lectures and joint meetings, mainly held in the Federal Institutes of Technology of Zürich and Lausanne. They were announced in the two Section Newsletters of April (No. 18) and October (No. 19). The highlights were the Electromagnetic Compatibility Conference in Montreux (May 1975), the conferences MIMI 75 and SIMULATION 75 in Zürich (June 1975), the "Journées d'Electronique" in Lausanne (October 1975) and the Zürich Seminar in Zürich (March 1976). Two conferences are planned for the near future: MIMI 76 (Zürich, 31 May-3 June 1976) on "Mini-and Micro-computers and their applications" and the "Journées d'Electronique et de micro-technique" (Lausanne, 19-21 October 1976) on "Electronics—Micromechanics interactions."
2. A Committee Meeting and a General Assembly were held in Lausanne in January. The activities of the Section in 1975 were presented. The formation of a group dealing with "Technique and Society Relationships" has been proposed by Mr. Sarkar, a member of our Section.



When the Institute of Electrical and Electronic Engineers met in London in March the IEE, IERE, and IEEE UK and Republic of Ireland Section were hosts at a dinner for the delegates. Seen L. to R. are: Mr. F. W. Sharp, IERE; Dr. G. F. Gainsborough, IEE, Professor R. C. G. Williams, Region 8 Editorial Board; Professor F. L. H. M. Stumpers, Director Region 8; and Mr. W. H. Devenish, Editor Region 8 Newsletter.

3. Active membership of the Switzerland Section is 649 (91 Students) which represent a 13 per cent increase with respect to February 1975.

UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION

A discussion meeting on "Is the growth of technology compatible with the growth of civilization?" will be held at Imperial College, Exhibition Road, London, SW7, at 6 p.m. (tea at 5.30 p.m.) on 3 November. The opening speaker is Mr. A. R. Cooper, F.I.E.E., Fellow of the IEEE. The IEE has accepted an invitation to make this a joint meeting between the two institutions. Further information from Dr. Brian Cory, Department of Electrical Engineering, Imperial College, London, SW7 2BT. Entry is free, without ticket.

The UKRI Section Circuits and Systems Chapter is organizing a conference jointly with the Department of Electronic Engineering, University of Hull, in co-operation with the IEEE Circuits and Systems Society, on the subject "Computer aided design of electronic and microwave circuits and systems." The meeting will be held on 12 to 14 July 1977 at the University of Hull, and the IEE, IERE and Institution of Engineers of Ireland have been invited to be associated with the conference.

Papers are invited, and should be sent to the Conference Secretariat, Department of Electronic Engineering, University of Hull, Hull, HU6 7RX, to arrive not later than 15 December 1976. The Secretariat can supply information on the format in which papers are required, and on the conference itself.

The Circuits and Systems Chapter is a very active Chapter which would welcome additional support for its work. Would anyone prepared to assist please get in touch with Dr. Tony Davies, Department of Electrical and Electronic Engineering, The City University, St. John Street, London, EC1V 4PB.

The Professional Communication Chapter held a meeting in May, and further meetings are planned. Anyone interested in arranging a meeting in their locality, or helping with the work of the Chapter, should get in touch with Prof. Eric Openshaw Taylor, Clare Cottage, Pett Road, Guestling, Nr. Hastings, Sussex, TN25 4EX.

The Section has formed an important new link with professional institutions in the UK. Dr. A. G. Holme-Siedle has agreed to represent the Section on the Electronics Group Committee of the Institute of Physics.

YUGOSLAVIA SECTION

—Activity Report November 1975-March 1976

Section Officers: The following officers have been elected to serve from 1 January to 31 December 1976:

Chairman: Mirjan Gruden
Vice-Chairmen: Albin Wedam
Ferdinand Gubina
Rudi Zorko
Aleksander Szabo
Bogomir Horvat
Secretary: Joze Furlan
Treasurer: Joze Mlakar

Membership: From 63 members at the end of 1975 there are 51 members who renewed their dues payment through 1976. In 1976 there are four new members and application forms for six additional members are forwarded to IEEE Headquarters.

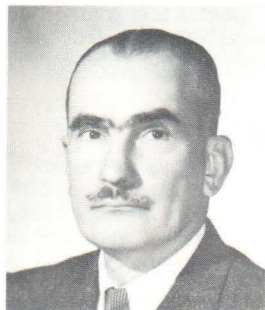
EUROCON 77



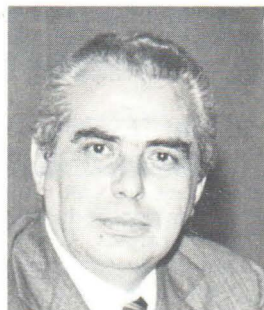
VENICE 3-6 MAY 1977

VENEZIA 1977

EUROCON 77 is taking shape and the programme is being put together under the active guidance of Professor A. Gigli, Chairman of the Conference Steering Committee, and Professor F. Carassa, Chairman of the Technical Programme Committee.



Prof. A. GIGLI, Chairman of Eurocon 77 Conference Steering Committee.



Prof. F. CARASSA, Chairman of Eurocon 77 Technical Programme Committee.

Apart from the technical aspects of the programme, the choice of Venice as the venue will undoubtedly attract many delegates, and during May the city will be at its best.

The Giorgio Cini Foundation administers the island of San Giorgio Maggiore, which is a short distance across the lagoon from St. Mark's Square. It is here that EUROCON 77 will be held. The island is the site of a monastery, famous for its Renaissance courtyards designed by Palladio, and also of a 16th century basilica which houses masterpieces by Tintoretto and Carpaccio.

Altogether EUROCON 77 provides an excellent opportunity to combine attendance at one of Europe's major international technical conferences with a visit to a city of unique interest and beauty.

We remind members of the four sections:

1. **Communications in large power systems:** the integration of communications into surveillance and control equipments in large industrial systems, which produce or consume electric power: electric traction railways, large electric power systems.
2. **New developments in communications:** service systems and technologies with particular reference to improved and new communication services, transmission and switching systems, supporting technology and consumer equipment, supporting technology and customer equipment.
3. **Communications and computers:** Data transmission, architecture of computer networks, experience gained from existing experiments (ARPA, EIN), distributed software for controlling computer networks, microprocessing and new architectures of electronic switching systems, use of mini- and micro-processors.

4. **Communications and signal processing in medicine:** Communication in health services, telemedicine, signal processing in medicine, communication in the living system.

And the special session on **Communications in the developing countries.** Dr. B. S. Rao of India has accepted the chairmanship of the committee for this session, and he has already an international committee around him, including: Dr. J. C. Albernaz of Brazilia (Brasil), Dr. P. O. Akundi of Nairobi (Kenya), Dr. Ali Al-Mashat of Baghdad (Iraq), Mr. W. M. Mangoendiprodjo of Bandung (Indonesia), Dr. F. Reza, Ambassador of Iran in Ottawa, and Mr. Komplita of ITU, Head T.C.D. and one member from French speaking African countries (still in correspondence).

Dr. Rao will shortly be sending a questionnaire to the developing countries, inviting their comments on problems for discussion. He hopes to make the answers available to experts from developed countries in order to obtain their comments.

We recommend this special session to members in countries, or with firms, which have an interest in the market in developing countries, or help them to educate additional personnel. Also to all engineers with a social or technical interest in the problems of those countries. Further information is available from the Regional Director, or from Eurocon '77 c/o AEI, viale Monza 259, 20126 Milan, Italy.

In view of time limitations, please send an abstract as soon as possible to the latter address.



View of the Cini Foundation from St. Mark's.

MEETINGS IN REGION 8

International Conference on Information Sciences and Systems

The first International Conference on Information Sciences and Systems will be held 19-24 August 1976 at the University of Patras, Patras, Greece. The Conference is sponsored by the University of Patras with the co-operation of the IEEE Control Systems Society. Authors were invited to submit papers on all aspects of the theory and applications of information sciences and systems. Topics of interest include, but are not limited to: information theory; coding; signal processing; image processing; pattern recognition; data compression; detection; estimation; system identification; control systems; decision theory; linear and non-linear system theory; stability theory; large-scale systems; distributed parameter systems; adaptive and learning systems; the applications of information sciences and systems to: communications systems, computer communications, remote sensing on earth resources, biomedical systems, process control, economics, urban and transportation systems, power systems, geophysical data processing, and oil exploration.

Further information from: Dr. N. S. Tzannes, Professor, Chair of Information Theory, Department of Electrical Engineering, University of Patras, Patras, Greece.

International Conference on Reliability of Power Supply Systems

This international conference is being organized to take place at the Institution of Electrical Engineers (IEE), Savoy Place, London, between 21-23 February 1977. It aims to carry out the following: to review available reliability techniques for operating, designing and planning of generation (in both firm and non-firm energy systems), transmission, distribution and composite systems; to produce an up-to-date assessment of the reliability practices in use and on the differences between nationally adopted methods; to provoke discussion of new developments in power system reliability evaluation; to consider the effects on the economics of system planning and operating of introducing existing and new techniques and new standards of reliability; to examine what contribution the application of quantitative reliability techniques may have to the decision making in power system management, with particular emphasis on cost/risk judgements; to indicate areas of the subject in which further work would be desirable.

Contributions are invited in the following subject areas: **Planning**—generation, interconnection and pooling of generation; transmission; distribution; composite systems. **Operating**—evaluation or reserve capacity; outage scheduling; system performance. **Management of**

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MIL-STD-462/462B AND SYSTEM-LEVEL EMI TESTING AND CLINIC September 13-17 Munich, Germany

This 5-day course covers instrumentation and test methods and procedures for EMI measurements. Emphasis is placed on MIL-STD-462 and the new -462B conducted and radiated, broad and narrowband, emission and susceptibility measurements. This necessitates a complete review of MIL-STD-461/461B specifications. Test facilities, test plans, and cost analysis are covered together with calibration techniques, test item excitation, loading, and monitoring. System-level EMI testing including MIL-E-6051D and ambient site surveys are also discussed. Price: 575 USA dollars.

Other EMI/EMC and related training seminars to be taught in fall 1976 in USA include: EMC by Design Synthesis using computer aids; EMI Control in Design & Installation of Computers; Grounding & Shielding; Optical Isolators & Fiber Optics; EMC Specifications & Susceptibility; Microwave Solid-State Circuits & Receivers; and Mobile Communications Systems.

Also available for sale by Don White Consultants, Inc. are EMI/EMC Handbooks, calculator and minicomputer programs and video tape lectures.

For information or registration contact:

Mrs. Carla Kuyken
Simac Electronics b.v.
Eindhoveneweg 58
Steensel, Netherlands
Tel: 04970-2011
TLX: 51037

Mr. B. Ammundsen
Sc. Metric A/S
Skodsborgvej 305
DK-2850 Naerum, Denmark
Tel: 09451-1.804200
TLX: 15763

Mr. Dieter Schlinkmann
Nisatronic D. Schlinkmann GmbH
6831 Bruhl/Mannheim
Luftschiiffing, 14, Germany
Tel: 6202-72128
TLX: 466354

Mrs. Muriel M. Moeller
Don White Consultants, Inc.
14800 Springfield Road
Germantown, Maryland USA
Tel: 301-948-0028
TLX: 892766

Systems—risk evaluation in terms of cost, safety and environmental factors; decision making processes. **Information Systems**—performance of forecasting systems; data acquisition.

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

The Organizing Committee invites offers of contributions of not more than 3,200 words (or less if illustrations are included) for consideration for inclusion in the conference programme. Those intending to make an offer should submit a 250 word synopsis to the IEE Conference Department, Savoy Place, London, WC2R 0BL.

Conference on Computer-Aided Design of Electronic and Microwave Circuits and Systems

This Conference, for which further particulars are given in the UKRI Section News, was originally announced for April 1977; the new dates are 12-14 July 1977.

European Conference on Circuit Theory and Design

The Conference is the second of a biennial series supported by eight organizations.

The scope of the Conference will embrace all aspects of the analysis, synthesis and design of lumped, distributed and digital networks, with

particular emphasis to applicative aspects, including modelling of devices and systems. It will be held at the Engineering Faculty of the University of Genoa, Italy, 7-10 September 1976.

Those intending to participate in the Conference are requested to return a Registration Form and to pay the Conference Fee of Lit. 65,000, reduced to Lit. 55,000 for authors and members of sponsoring organizations.

Further information from the Secretariat: 1976 European Conference on Circuit Theory and Design, Istituto Elettrotecnico Nazionale Galileo Ferraris, Corso Massimo d'Azeglio, 42, 10125 Torino, Italy.

Instrumentation in Aerospace Simulation Facilities International Congress

The 7th ICIASF is to be held 6, 7, 8 September 1977 at Royal Military College of Science, Shrivenham, Wiltshire, England. Papers are invited from the following range: (a) Instrumentation of modern aerothermal and aerodynamic facilities; (b) Flow visualization techniques and opto-electronics applications; (c) Digital measurements and novel data processing technology; (d) Ballistic measurements in laboratories and ranges.

Deadline for abstracts is September 1976. Mail to: General Chairman P. W. W. Fuller, R31, RARDE Fort Halstead, Sevenoaks, Kent, England.

Sponsored by the IEEE Aerospace and Electronic Systems Society.

ADVERTISING AND INSERTS

Enquiries to County Secretarial Services, P.O. Box 7, Guildford, Surrey, England GU2 5HH. Telephone 0483 77777. Cable address Coscec Guildford. Delivery address 8 The Flower Walk, Guildford. Deadline dates in box on front page.

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