

IEEE Region 8 newsletter



THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
INCORPORATED

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REPORT FROM THE REGIONAL DIRECTOR



The Director attended meetings of the Board of Directors in New Orleans (November) and New York (January). December brought the disappointing news that the Institute finances had deteriorated over the year 1975 by about 350,000 dollars. This in sharp contrast to a surplus estimated in May of 150,000 dollars and a break-even budget in September. Obviously it is not very easy to forecast the decrease in advertising and exhibition income, but one can only be disappointed that even short term predictions are so difficult.

With the latest increase in dues, the Board felt it necessary to budget for a surplus for 1976, and after last year's experience the estimates were made conservatively. Only with great difficulty and against the express advice of some prominent members of the Executive Committee, was it possible to get the promised 50cts. extra rebate for Sections (per member).

Though the economy seems to be picking up slowly in the United States, there are still quite a number of engineers out of a job, and this leads to pressures for creating a more closed society, like the American medical profession seems to have. While in a growth economy, the American engineer liked to take the opportunity for a change of job, and he took the risk that the employer might hire and fire as he pleased, because there were enough jobs anyway. In times like this particularly the older engineer finds it difficult to get another suitable job, and discrimination of older engineers is believed to have taken place in large companies, which used cheaper younger engineers instead. This is an important social problem. I do not believe that the answer will be to convince the Universities to make the available numbers smaller by making the examinations more difficult. Yet such suggestions have been made by several sections. One of my colleagues, Divisional Director R. Rivers, has proposed that membership of IEEE be limited by an entrance examination, followed after two years by a professional examination. The first examination would allow an engineer to be a member of IEEE. The second examination would give him the title professional member, which would be required in order to become a senior member later on. In the membership requirements all references to the possible qualifications of other scientists for membership of IEEE would be cancelled. It is obvious, that we now have quite a number of scientists, other than engineers as members of IEEE, e.g. mathematicians in the Information Theory group, physicists in the Magnetics and Electron Devices groups, etc. I do not think it would be wise to invent new limitations for the membership, nor that a numerous clausus would correspond to the American way of life. It is very likely that exceptions will be made for the present membership,

but will they really be better off if we end up with a select body of one hundred thousand, instead of the two hundred thousand we may well expect without a change of rules?

If we examine incoming members, should we not also examine present members, and will that benefit the "working engineer"? I think the proposal rather unwise and unlikely to lead to any positive results. Since it will be difficult to have examinations over the whole world, there will be possible exemptions, but even if it should only apply to USA, we are interested in the well being of the Institute.

At the January meeting the Board of Directors voted for Professor Saunders, Executive Vice-President Regional Affairs, as the candidate of the Board for President 1977, and for Mr. D. Briskman as the Board's candidate for Executive Vice President. We may expect that Mr. Feerst will try again, but it was disappointing to learn that Director Rivers will also try to get himself nominated President, and Director Bayless is a candidate for Vice-President. Although I differ in opinion from Mr. Rivers on certain points, I think he is a diligent worker, who built up his own company and has the interest of our Institute at heart. He might well have become the candidate of the Board at some future time, but to have a three way vote now seems unwise to me and risky for the Institute.

At the January meeting we learned of a very good plan of the US Activities Board to improve the professional image of the engineer, and to give the IEEE member additional benefits (portable pensions). This may well not be realizable in one year, but Professor Mulligan has put forward ambitious and well thought out plans. Better remuneration for patents is also a point for discussion (not an easy one). In December the Regional Director visited Moscow as a guest of the USSR Academy of Sciences, and Warsaw as a guest of the Society of Engineers of Poland. In Moscow he visited the Institute for the Problems of Information Transmission, where he gave a lecture on Digital Transmission of information and digital filters. Further visits were made to the Institute of Radio Engineering and Electronics; the Institute of Magnetics, Radioastronomy and Ionospheric Research, and the Institute of Control Science. Professor Siforov, president of the Popov Society, was a most hospitable host, present on arrival and departure. During my stay a workshop between information theory scientists of the Popov Society and their counterparts of IEEE took place, and I had the pleasure of being invited. A large number of most interesting lectures were given, and English texts of all the lectures by USSR scientists were made available. Visits to the State Circus, the Opera (Rigoletto), to the Bolshoi Ballet (Anna Karenina, Swan Lake) and a banquet provided excellent entertainment.

In Warsaw Professor Smolinski co-ordinated my visits. I had the privilege of meeting the Vice-President of the Polish Republic, Prof. Groszkowski; the Minister of Telecommunications, Prof. Kowalczyk; the Chairman of SEP, Dryzek; the Executive Committee of the Polish Section and the Polish URSI Committee. A lecture on Radio Astronomy research in the Netherlands was well attended. I was invited to an opera, (Popeia by Monteverdi) and apart from Prof. Smolinski, Professors Hanhn, Rotkiewicz and Wojnar did their best to make my stay most pleasant.

The Director also accepted an invitation to be present at a meeting of the UKRI Section. This Section had five new Fellows, one of whom was the President of the IEE, Mr. Clayton. He spoke on behalf of all the new Fellows and complimented the IEEE on the quality of its journals, in particular Spectrum.

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

EUROCON 77—VENICE 3-6 MAY 1977

Second Call for Papers and Special Call for Papers on Communications for the Developing Countries

Papers are invited for the following subjects, and—for the session on 5 May—especially with regard to their application in developing countries: communication systems; electronic equipment; antennas and propagation; remote sensing; training, maintenance and operation; technoeconomic and industrial considerations; satellite applications; frequency considerations; electromagnetic compatibility.

The timetable for authors is: 300/500-word abstracts, in English, to arrive by 1 June 1976. Presentation instructions, together with information on the detailed programme and on Conference registration, are available from the EUROCON 77 Office, c/o AEI, Viale Monza 259, 20126 Milan, Italy, to which abstracts, summaries, and completed papers should also be sent.

Communications for the developing countries

The organising committee asks for special attention to be given to the day (5 May) devoted to communications for the developing countries. Dr. B. S. Rao, of the Indian Space Research organisation in Bangalore, India has accepted an invitation to chair the committee for this session, other members of which are Mr. Okundi, Kenya, and the Brazilian Minister of Telecommunications, while Mr. Mili, Secretary-General of ITU has undertaken to give the keynote address.

Headquarters Reorganizes to Reduce Staff

Two major changes—one, initiated and in process; the other, just completed—have been effected at Headquarters in a drive to economize and help strengthen IEEE's financial position. Completed is the consolidation of operations in the Institute's New York offices, where activities formerly carried out on six floors have been relocated on to four floors. This reduction in space was made possible by and followed the transfer of IEEE's "support services"—including its marketing, data processing, and printing and mailing activities—to the new IEEE building in Piscataway, NJ. Remaining at 345 East 47 Street, New York City, are: IEEE Spectrum, General Manager, Controller, Corporate Services (Committees), Student Services, Publications (IEEE Transactions, Proceedings, IEEE Press, Newsletters), Information Services, Technical Activities, Regional Activities, Educational Activities and Standards. (Professional Activities continue to be at IEEE's Washington, DC, offices).

As for the change still in process, an eight per cent staff cut—affecting approximately 25 executive and supporting staff members out of a total work force of 288—was announced. The impetus for this action was a decision taken by the Executive Committee at its December 1975 meeting. The Committee apparently determined that to produce a 1976 operating surplus, a sizeable staff reduction would be necessary. Inevitably, a personnel cutback of this size will result in a consolidation of staff duties if the level of member services is to be maintained. Dr. Schulke indicated that a "gradual reconfiguration was in process" but that it would be premature to publish a new "line-up." The March issue of IEEE Spectrum will include an in-depth examination of IEEE's present financial difficulties.

New Institute Policy on Electioneering

At the Board of Directors Meeting on 5 December 1975, certain changes regarding electioneering were made in the IEEE's Policy and Procedures Manual. Because the changes are far reaching, a special effort is being made to call them to your attention. Contested elections have become the rule in IEEE and, in view of the Institute's tradition of providing a forum for free expression of ideas, it was determined that the electioneering ban imposed by the old Policy and Procedures Manual had been an anachronism, at best. Further, while the Constitutionally set candidacy deadlines have not been changed, a new deadline (12 o'clock noon of the Friday preceding 1 June) has been set for those petitioners who wish to have their views and rebuttals published in IEEE Spectrum. Reproduced below are the amended articles in the 1976 Policy and Procedures Manual.

12.3 Electioneering. Electioneering activities which provide information to members on issues facing the IEEE are permitted. For example, the editor of any IEEE publication may publish the following as long as the usual standards of accuracy, space limitation and quality are maintained:

A. Statements by those candidates for IEEE offices, whose names will



Logo specially designed for Eurocon 77

The basic objectives of this session are:

- A. to provide an opportunity for the developing countries for
 - (1) understanding the available new technologies
 - (2) projecting their needs and problems
 - (3) getting acquainted with plans and programs of other countries
 - (4) evolving co-operative approaches
 - (5) amending their plans with new inputs
- B. to provide an opportunity for the developed countries for
 - (1) understanding the needs and requirements of developing countries and adopting the new technologies accordingly
 - (2) identifying the needs for training, maintenance and operation
 - (3) evolving systems suited to meet the needs of countries or groups of countries
 - (4) assessing the business potential

An evening forum is also planned.

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be printed on the ballots in accordance with the Constitution and Bylaws, giving their programs, views and rebuttals on issues facing the IEEE, provided that all such candidates for a given office are given equal opportunity to present their views and rebuttals, and that the material submitted is factually correct and does not attack an individual in a libellous manner.

- B. Letters to the Editor stating an intention to seek candidacy for a given position with reasons. The use of IEEE funds for electioneering purposes in municipal, county state or Federal election is prohibited without the consent of the Board of Directors or the Executive Committee acting in their behalf.

12.4 Early Receipt of Nomination Petitions. It is the policy of the Institute to afford to the fullest possible extent, equal exposure to the Voting Members of the views and rebuttals of all candidates in the elections of the Institute, including candidates nominated by petition. One means to this end is the publication in Spectrum and Group/Society/Council, Regional and Section newsletters of candidate views and rebuttals in an issue which reaches the Voting Members prior to the receipt of the ballots. To meet the schedule for such publication petitioners, who wish to have their views and rebuttals published in Spectrum so as to reach the Voting Members prior to the receipt of ballots, are advised that their petitions must be received at IEEE Headquarters not later than 12 o'clock noon of the Friday preceding 1 June. While valid petitions can be accepted up to 12 o'clock noon of the Friday preceding 1 August, the views and rebuttals of nominees, whose petitions are received subsequent to the June deadline, cannot be scheduled for such publication. Newsletter and other editors may set their own deadlines but are responsible for observing the "fairness-to-all" doctrine and the provisions of Section 12.3A.

12.5 Candidate and Initiative Statements. In any IEEE entity where it is the established policy that candidates or proponents of an initiative are invited to submit a statement in support of their candidacy or initiative, a "maximum number of words allowed" shall be stipulated by the editor as soon as the available space to be devoted to such matters in the publication has been determined. Each candidate or proponent would be allowed that many words and no more in his statement. Each candidate or proponent would be invited to provide a rebuttal within his individual stipulated space allocation, after he has seen his opponents' statements. Both the statement and rebuttal shall be published together and timed to reach the Voting Members before the ballot is received. The editor of each publication has the responsibility for and the authority in these matters.

New IEEE Membership Directory

A new IEEE Membership Directory is available containing listings of 150,000 members (other than students), biographies of all Fellows and a list of all past IEEE Awards and winners. Price: \$12.00.

1960-1974 Index to AIEE/IEEE Transactions on Power Apparatus and Systems

This index is now available listing over 4,000 papers and containing over 20,000 index entries; it covers all papers and abstracts published in Volumes 79 through Power Apparatus and Systems—PAS-93 of the IEEE Transactions and its predecessor publication Transactions of the American Institute of Electrical Engineers, Part III: Power Apparatus and Systems. Order from IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. Price to members: \$15.00 for first copy, all other copies at \$20.00.

Inspec Information Services

Housed in England at the Institution of Electrical Engineers (IEE), the Inspec data base is the largest computerized data base in the English language in physics, electrotechnology, computers and control. Recently, the data base has been expanded to include worldwide information on mechanical engineering, production engineering and engineering management.

Designed for readability and comprehension, the Inspec publications have been described as models of composition and appearance. In use, they have been termed "indispensable" by information specialists in industry, education, business and research.

Published monthly and designed for individual use by R. & D. specialists and for smaller, specialized companies and libraries, each of the six Key Abstracts will cover only the most important worldwide developments within its specific subject discipline—no more than 250 items in each issue. Issues will be restricted to 24 pages and will contain complete bibliographic information and a comprehensive abstract on each item. Semi-annual listings of titles and addresses of all abstracted publications are included in the subscription price.

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to desired information: Subject, Author, Patent, Report, Book, Conference, Bibliography, and Supplementary List of Journals. A yearly subscription includes semi-annual Author and Subject Indexes, which contain a complete listing of abstracted journals with the publishers' names and addresses.

Electrical & Electronics Abstracts
Computer & Control Abstracts
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Three low-cost companion journals to the Science Abstracts have the same coverage and arrangement as EEA, CCA and PA, and include full bibliographic data. Issues do not contain the abstracts themselves or the eight indexes. Published monthly—in advance of the main journals—they serve as handy, inexpensive research tools.

Information Services in Mechanical Engineering and Instrumentation/Measurement.

The Ismec Bulletin appears twice monthly and gives notification of currently published papers in all aspects of mechanical engineering, production engineering and engineering management. Metron, published monthly, reviews and classifies the literature on measurement and automatic control.

For further information on these Inspec services, or on many others available, contact Mr. Oliver Ball, Marketing Department, Inspec, Savoy Place, London, WC2R 0BL, England.

Alexander Graham Bell Medal

A new IEEE Major Annual Medal has been established for outstanding contributions to the advancement of telecommunications—the Alexander Graham Bell Medal. It will consist of a medal and an honorarium of \$10,000.

The due date for receipt of nominations was 20 February 1976. Forms required for nominations in future years can be obtained from the Staff Secretary of the Awards Board, IEEE Headquarters, New York.

REPORT ON MEMBERSHIP DEVELOPMENT IN REGION 8

There has been a gradual increase in the IEEE membership in Region 8. The October Newsletter had a table showing the situation up to the end of July 1975. There have been 1,181 new elections to membership in 1975 compared with 977 in 1974. This is a substantial increase and the trend seems to continue as 165 have already been elected new members in January 1976.

The membership target for 1975 was an increase of 25% and although this goal was not reached some sections did very well. Three sections exceeded the target, Finland (60%), Yugoslavia (60%) and Poland (45%); three sections came close, Spain (22%), Iran (20%) and Germany (17%); four were above the regional average of 6.2%; five sections had an increase less than the regional average and three had a reduction in membership. The areas not assigned to any section did very well and had an increase of 12%. Regrettably, this indicates that many sections are not doing a good membership development job. How did your section do, will it do better in 1976?

An increase of 434 in the membership during 1975 is not bad but think how much better the result would have been if we had not lost nearly 900 members (775 dues arrears, 115 resignations) during the year. There must be a reason for these losses and I hope you will help me to find it so that we can reduce the losses substantially in 1976.

I have set the membership target for 1976 as an increase of 25%. With

the large number of electrical and electronics engineers and scientists in Region 8 who could greatly benefit from IEEE membership, this target is realistic and several sections have shown that it can be reached and exceeded. However, if this target is to be reached during 1976 I need your help. I therefore request that you:

1. Check if you have paid your dues for 1976. If the answer is "no," please do so immediately so that you don't lose the IEEE publications and services and are put on the dues arrears list.
2. If you should hear of anyone that has not paid the dues or who plans to resign, please urge them to pay or alternatively to write to the Section Chairman or to me giving the reason.
3. Bring the advantages of IEEE membership to the attention of your colleagues and urge them to join. It should be the aim of each IEEE member in Region 8 to introduce a new member in 1976.

If I can help you in any way, please do not hesitate to contact me. Thank you for your co-operation.

Dr. Andreas Rannestad, Region 8 Member, IEEE Membership Development Committee. Address: 110 Zjvelstrat, B-1960 Sterrebeek, Belgium. Telephone: Private—(02) 731.86.96. Office—(02) 241.00.40, Ext. 2253.

NEWS OF THE SECTIONS

GERMANY SECTION

A Communications Chapter has been established in the IEEE Section Germany (West). On 16 January 1976 its officers were elected at Seckenheim (near Mannheim).

They are:

Mr. Alfred Hollander, Chairman
Mr. Billy Oaks, Vice-Chairman
Mr. Eric Hinrichs, Secretary
Mr. Virgil Siouris, Financial Officer
Col. Arthur La Porte, Membership Committee
Capt. Marc Mills, Publicity Committee

Present at the meeting were:

Prof. Dr. Werner Kleen, Chairman of the IEEE Section Germany (West)
Dr. P. Dietrich, Chairman of the Nachrichtentechnische Gesellschaft (German Communications Society).

They both stressed the benefit of co-operation between IEEE and the relevant national institutions VDE/NTG.

The main purpose of the Chapter is to serve IEEE members who, as members of the US Army, are living in Germany. But of course the

membership of the Chapter is open to all IEEE members. Individuals desiring further information are invited to contact the Chairman: Mr. A. Hollander, 13 Grant Circle, 68 Mannheim 41, or the Secretary: Mr. Eric Hinrichs, Kurt-Schuhmacher-Strasse 20, 6523 Worms-Pfeddersheim.

SWITZERLAND SECTION

Report on the Activities of the Section in 1975 from Dr. M. C. Decreton, Secretary, IEEE Switzerland Section.

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), the conferences MINI 75 and SIMULATION 75 in Zürich (June) and the "Journées d'Electronique" in Lausanne (October).
2. A Committee Meeting and a General Assembly were held in Lausanne on 23 January 1976. The activities of the section in 1975 were presented.
3. Active membership of the Switzerland Section is 616 (81 students) which represent a 10% increase with respect to end 1974.

UNITED KINGDOM AND REPUBLIC OF IRELAND SECTION

Circuits and Systems Chapter

1. Meeting on 26 May at 5.30 p.m. at The City University, London (tea at 5.00): "Symbolic Network Analysis: some methods and improvements" by Dr. J. I. Sewell (University of Hull).
2. A limited number of copies of the course notes (150 pages A4) from the introductory course on Microprocessors, by D. Wright, D. Shipperlee and A. C. Davies, are available for £4.50 (includes packing and postage to any destination within Europe), and may be ordered from Mrs. P. J. Adams, Department of Electrical and Electronic Engineering, The City University, London, EC1V 4PB cheques should be made payable to "The City University, Account No. 05 80 19" and not to IEEE).
3. The Chapter, in conjunction with the University of Hull, is sponsoring a conference on "Computer methods for circuit design and microwave applications" to be held at Hull on 19-21 April 1977. Further details will be available shortly, but in the meantime, information may be obtained from Dr. A. C. Davies at The City University or from Dr. Sewell at The University of Hull.

Professional Communication Chapter

The first meeting of the newly re-activated Professional Communication Chapter (see January Newsletter) will be held on Tuesday, 11 May, at King's College, Strand, London, at 6 p.m. (tea 5.30 p.m.) when Mr. P. H. Walker, M.Sc., F.R.Met.S., M.R.T.S., Lecturer in Television Production and Communication at Heriot-Watt University, Edinburgh, will give a talk on "Introducing Empathy into Electrical Engineering." All IEEE members, students and guests will be welcome to this meeting of the first Professional Communication Chapter to be initiated outside the United States.

The scope of the Chapter is strictly non-technical and covers the study of communication between engineers; between engineers, manage-

ment and the workforce; and between engineers and the general public. It is of interest to engineers of all disciplines but, since the hardware associated with communication schemes is largely electrical, it is not inappropriate for an electrical engineering body to take a lead in furthering activity in this field. The subject matter involved includes human response and memory, preparation, storage, processing, retrieval and dissemination of information, channels of communication, copyright problems and the economics of communication schemes; also included are the application of these ideas to specific purposes such as management, public relations, sales and marketing, report writing, publishing and journalism, broadcasting, training and instruction of personnel and to other instances where effective communication is essential to the successful conduct of an engineering project.

Section Activities

The new Section Committee took office on 1 January 1976 and it includes a Student Member because attempts are being made to plan more activities for students. Membership of the Section has remained essentially unchanged during the year. The distribution of members, by interest and location, has been examined to see whether meetings outside London were desirable but none was found practicable. The Section is co-sponsoring 12 conferences with national societies and has collaborated with City University in running a course on microprocessors which was so successful that it was repeated.

Meeting for Student Members

A meeting has been arranged for IEEE student members at Imperial College, London on Tuesday, 4 May 1976, beginning at 5.30 p.m. After tea there will be a talk by a guest speaker from the electronics industry, and this will be followed by a happy hour at the bar. All student members and any others interested in learning of IEEE activities in the UK are invited to contact Professor C. W. Turner (King's College, Strand, WC2) for further details.

MEETINGS IN REGION 8

International Conference on On-Line Operation and Optimisation of Transmission and Distribution Systems

Registration forms and programme details are now available for the international conference on "On-Line Operation and Optimisation of Transmission and Distribution Systems" which will take place at the Institution of Electrical Engineers (IEE), Savoy Place, London, between 22-25 June 1976.

Sessions will take place on the first three days of the conference covering the following topics: state estimation; dynamic equivalents; simulation; on-line algorithms; implementation experience—distribution, and implementation experience—transmission.

In addition, there will be a Technical Visit to the Imperial College of Science and Technology on the morning of Friday, 25 June 1976, to view on-line digital control of a model power system; the use of microprocessors for digital protection of sub-stations and the micro model studies.

Registration forms and programme details from the IEE Conference Department, Savoy Place, London, WC2R 0BL.

1976 Microwave Power Symposium

The International Microwave Power Institute's 11th Annual Microwave Power Symposium will be held at the Katholieke Universiteit Leuven (Louvain), Belgium, on 27-30 July 1976.

The symposium will include technical sessions as well as short courses on microwave power and an exhibition on microwave power products and equipment. Original and review papers are being solicited which describe new technical contributions in non-communication areas of microwave power, such as: microwave instrumentation for industrial processes; industrial microwave systems; microwave power generation, transmission and rectification; microwave chemical and plasma processes; biological effects of microwaves; medical and biological applications; microwave properties of materials; microwaves in the food industry; microwave ovens and heating systems; engineering economics and marketing research; microwave applicators; and equipment safety and interference.

Further information from: Pieter J. Luybaert, General Organizing Committee Chairman, 1976 IMPI Symposium, Department of Electrical Engineering, Division Microwaves and Lasers (MIL), Katholieke Universiteit Leuven, Kardinaal Mercierlaan 94, B-3030 Heverlee, Belgium.

NATO Advanced Study Institute of Signal Processing with Emphasis on Underwater Acoustics

This Institute is a Summer School for post-doctoral and post-graduate students interested and/or already working in the field of signal processing. It will be held at Portovenere (La Spezia), Italy, 30 August-11 September 1976.

Professors from universities and research scientists from different countries will be the lecturers of the tutorial courses and interlocutors of discussions on the following subjects: properties of time-space transmission channel and underwater communications; detection estimation and tracking techniques; time-space processing and adaptive processing and normalisation; quantisation methods; displays, pattern recognition, human decision; relevant inputs from other fields; and modern processors, architecture and techniques.

Advanced research papers will be presented by specialists in the different subjects.

Post-doctoral and post-graduate students who wish to attend this Institute are requested to send their applications as soon as possible to the Director of the Institute: Prof. G. Tacconi, P.O. Box 19026 (S. Bartolomeo), La Spezia, Italy.

Applicants should provide the following information: Name, address, age, scientific background, present affiliation, in receipt or not of financial support.

6th European Solid State Device Research Conference—ESSDERC 1976

ESSDERC is an annual international conference to provide a forum for the open discussion of current topics in the field of solid state devices research. In 1976 it will be held in Munich from 13-17 September. ESSDERC 1976 is sponsored by IEEE Region 8, Institute of Physics (IOP), European Physical Society (EPS), German Physical Society (DPG) and Nachrichtentechnische Gesellschaft (NTG).

The conference will cover—as the previous ones—the following headings: new solid state phenomena and devices, novel device technologies and improved device design. Special emphasis will be put on switching, memories, imaging, opto-electronic and acous-to-electric devices, and high power devices. Included are also technology and material problems, surface and interface phenomena.

Nine invited papers, which will be published in the Conference Series of the IOP, will treat topics like memories and computer elements, power devices, lasers and IR-detectors, high frequency devices and molecular beam-epitaxy.

Persons intending to contribute papers to the ESSDERC 1976 should submit summaries of no more than 400 words before 10 May 1976 to the conference chairman: Prof. Dr. R. Müller, Technische Universität München, Arcisstr. 21, D 8000 München 2. These summaries should be ready for printing. The conference language is English.

Third International Symposium on Electromagnetic Compatibility 20 to 24 September 1976 in Wroclaw, Poland

This symposium, co-sponsored by CISPR, URSI and IEEE Region 8 is held in alternative years with the Montreux Symposium and covers all aspects of electromagnetic compatibility. Languages are Russian and

YOUR INVITATION TO

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... to attend the integral conference, organised by the Institution of Electrical Engineers, at which some 100 papers will be presented, in three parallel sessions on each day

... to hear speakers of international stature at the full programme of social events

... to discuss common interests with other visitors — Communications 74 attracted 9,500 visitors and 750 conference delegates, from 51 countries

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FOUR DAYS — FOUR THEMES

Each day of the exposition highlights a single theme which is co-ordinated throughout the official four-day programme of the conference, the associated Inward Mission scheme and the social events calendar

- 8 June — civil fixed radio communications
- 9 June — civil mobile radio communications
- 10 June — civil public and private telecommunications
- 11 June — defence communications

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More than sixty papers by leading experts from countries around the world will be presented during the fourteen sessions of the Technical Programme. They cover new techniques, systems, developments and trends which will be of interest to engineers concerned with all aspects of broadcasting.

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A special session will highlight Electronic Journalism (or Electronic News Gathering) using lightweight camera, recording and transmission equipment specially designed for this purpose and now being produced by many manufacturers for increasing use around the World to cover news events for television.

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