

# IEEE Region 8 newsletter



A CENTURY OF ELECTRICAL PROGRESS

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS  
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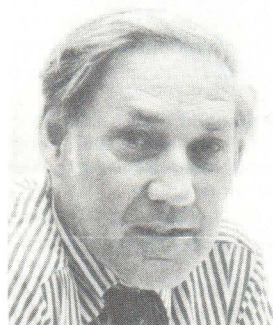
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26th SEPTEMBER '84 – **EUROCON '84** – 28th SEPTEMBER '84

BRIGHTON CONFERENCE CENTRE, BRIGHTON, ENGLAND

COMPUTERS IN COMMUNICATION AND CONTROL



Dr. John Brown  
Chairman, Steering Committee,  
EUROCON '84

In seeking a theme for EUROCON '84 the steering committee wished to avoid the many individual subjects which are covered by regular conference series. Further it was felt that since relatively few opportunities exist for crossing the boundaries between major disciplines an attempt should be made to cover as wide a field as possible. The view thus emerged that the interaction between developments in computers with both communications engineering and control engineering provided the kind of interdisciplinary mix which the committee was seeking.

Two additional factors reinforced this choice; ESPRIT the European Strategic Programme for Research and development in Information Technology set up by

the European Community and the similar UK programme which has followed the publication of the Alvey Report, now well and truly launched. The timing of EUROCON '84 seemed right for an exposition of the aims of these programmes. The identification of keynote speakers was an easy task and the steering committee was gratified by the willingness with which Michel Carpentier (Director General, Information Task Force – EEC), John Alvey (Engineer in Chief, British Telecom) and Brian Oakley (Director of the Alvey Programme) accepted invita-

tions to deliver addresses. EUROCON delegates can thus look forward to authoritative accounts of progress on these two major programmes.

The response to the general request for papers has been very satisfactory with well over a hundred contributions from a wide range of countries being selected either for oral presentation or in poster sessions. These papers reflect the steering committee's wish for topics which cover at least two of the three disciplines mentioned in the conference title. The extent of real engineering applications is exemplified by the concern shown in a number of papers for aspects such as the quality and reliability of software, security of communications and legal issues in respect of data handling and storage.

EUROCON is organised by the IEE and sponsored jointly by EUREL and IEEE. As members are well aware 1984 is the IEEE Centennial year and this makes EUROCON '84 a special occasion, one of particular pleasure to the UK hosts. In addition to the technical sessions there will be an educational workshop on Tuesday 25th September 1984 embracing many of the attractive sights in the vicinity of Brighton. The social programme will include a reception at the Corn Exchange, hosted by the Mayor of Brighton and a conference dinner which will be chaired by Mr. M. N. John, this year's President of EUREL.

For further information please contact: The Manager, Conference Services, The Institution of Electrical Engineers, Savoy Place, London WC2R 0BL, England.

DR. JOHN BROWN  
Chairman, Steering Committee, EUROCON '84

## REPORT FROM THE REGIONAL DIRECTOR

In March the sad news came that Dr. Donald D. King had died. I met Dr. King several times after he became President Elect. Even though this was a very short period, I learned to know him as a man who was dedicated to his profession and to his activities in the IEEE. Dr. King was a man highly respected by everybody who knew him. Due to his work and his many travels outside the USA he had a good understanding of the needs in Region 8 and he intended to make quite an effort to improve the situation for us. His passing is a big loss for our Region and for the IEEE and we join his family in mourning a great man.

In this newsletter I would like to report about two items that were discussed at the last regular Board of Directors meeting in Washington

DC in February this year. They were (a) a membership incentive programme, and (b) a survey of membership expectations and opinions about the services of the IEEE, which is one of the activities in connection with the centennial year.

The main purpose of the membership incentive programme is to encourage Sections to increase Society membership. The incentive provided by the programme is \$5.00 (US) to the Section for each new Higher Grade first time Society member recruited by the Section. The same incentive is provided to each Society for each new Higher Grade member recruited through that Society's efforts. In both cases this must be documented according to certain specific procedures. This programme was unanimously approved as a pilot programme to be

## CONTENTS

Regional Director's Report .....	1
EUROCON '84 .....	1
Conference Activities in Region 8 .....	2
IEEE Awards .....	2

Special Centennial Article .....	3
Continuing Education .....	3
News of the Sections .....	4
Meetings in Region 8 .....	4



reviewed after a year. The programme will be initiated in 1984 and I hope that this will motivate the Sections to help increase the Society membership substantially and at the same time assist in reaching the goal of 250,000 IEEE members during the Centennial year.

The other item is a survey of expectations and opinions of constituent members of the major Boards on IEEE services. Replies to the following questions will be asked for:

1. What did you expect to get when you joined the IEEE and what are you not getting?
2. What is the best service you get from the IEEE?
3. In all your activities, what might the IEEE do to help you function better as a professional in your field.



Dr. J. Baal-Schem  
Region 8 Conference Co-ordinator

One of the main aims of the IEEE is its scientific and educational purpose, directed toward the advancement of the theory and practice of electrical engineering and related arts and sciences. The holding of meetings for the reading and discussion of professional papers is seen as a major means of accomplishing this aim.

Region 8, covering all Europe, the Middle East and Africa, has 15,000 professional members. The state of technological development throughout the 73 countries in the region varies and it is not only important that there is a transfer of knowledge from the highly developed to the lesser developed but also that conferences are specifically designed to cater for the very different needs in each area.

For this reason the Region 8 committee has expanded its original idea of a single European conference – EUROCON (first held in 1971) – and in 1980 held the first MELECON. Last December the first AFRICON was successfully held in Kenya and it is hoped that there will be a second AFRICON in 1986.

All Region 8 conferences are interdisciplinary and cover several subjects but the main themes are geared to the specific technical needs of the organizing country. For example, at MELECON solar energy is always one of the main topics while at AFRICON hydro-electric power was given prominence. Students are actively encouraged to attend and special visits to companies and laboratories are arranged for them as well as tutorials lectures and usually a student paper contest is held at EUROCON and a "Young Engineer Paper Contest" at MELECON.

One of the special characteristics of Regional conferences, as with most

The responses will be presented at the August Board of Directors' Meeting. With these programmes the Board of Directors will have the opportunity to learn what the members feel are the most needed services, assess what the Institute has done in the past and consider options for the future.

I hope that all members in Region 8 who are included in this survey will take advantage of this opportunity to input their ideas so that we can improve services that are important to us.

KARSTEN E. DRANGEID  
Rueschlikon, Switzerland

## CONFERENCE ACTIVITIES IN REGION 8

IEEE conferences, is that they change venues from one year to the next. This is one of the main reasons for their success. Most participants, especially in MELECON and AFRICON, are engineers who did not participate in the past and who probably would not have participated in the future in an *international* technical conference which might be held thousands of miles from their home and work. For most lecturers this is the first time that they present a technical paper and also the first time that they come into contact with a transnational audience. In our fast changing world it seems that this acquaintance is of paramount importance and should certainly not be underestimated.

Because the changing of venues and the consequent changing of organisers might lead to a lack of continuity and experience on the conference steering committees, the Region 8 Committee decided in 1981 to appoint a Regional Conference Co-ordinator who has the task of assisting the steering committee in the organisation and management of conferences as well as co-ordinating the dates and venues. The RCC (I have held this post since its creation) also prepares a calendar twice yearly which is distributed with the Region 8 newsletter and lists, as far as possible, all forthcoming conferences and exhibitions organised or sponsored by the IEEE or EUREL (Convention of National Societies of Electrical Engineers of Western Europe).

In terms of finance, it is the general policy of Region 8 that conferences should at least break-even overall although new and experimental activities might have to be subsidised. A special reserve fund has been set up in order to advance money to approved conferences.

It seems that the best proof for the importance of regional conferences to engineers is the size and variation of the audience. Regular reports in this newsletter speak for themselves on the importance of technical conferences and it is my belief that their organisation is one of the most important services provided by Region 8 to its members.

DR. J. BAAL-SCHEM  
Region 8 Conference Co-ordinator

## IEEE AWARDS



E. Folke Bolinder, Chairman,  
Awards and Fellows, Region 8

In this concluding article in my series on IEEE Awards, I would like to remind members that they can borrow a copy of the IEEE Awards Guide from their Section Chairman. This brochure gives full details of the nomination procedure and describes all the awards in full.

### David Sarnoff Award

For outstanding contribution in the field of electronics.

### Charles Proteus Steinmetz Award

For major contributions to the development of standards in the field of electrical and electronics engineering, to an individual

### Nikola Tesla Award

For outstanding contributions in the field of generation and utilization of electric power

### Vladimir K. Zworykin Prize Award

For the most important technical contribution to electronic television.

### IEEE SERVICE AWARD

#### Haraden Pratt Award

For outstanding service to the Institute. Annually. The recipient has to be a Senior Member or Fellow of IEEE.

### IEEE PRIZE PAPER AWARDS

These annual awards can be given to individuals outside the Institute.

#### W. R. G. Baker Prize Award

Outstanding paper reporting original work in any of the IEEE TRANSACTIONS, JOURNALS, MAGAZINES or PROCEEDINGS issued between January 1 and December 31.

#### Donald G. Fink Prize Award

Outstanding survey, review or tutorial paper in any of the IEEE TRANSACTIONS, JOURNALS, MAGAZINES or PROCEEDINGS issued between January 1 and December 31.

### Browder J. Thompson Prize Award

Outstanding paper by author(s) under 30 years of age in any IEEE publication issued between January 1 and December 31.

### IEEE SCHOLARSHIP AWARD

#### Charles LeGeyt Fortescue Fellowship

To a student of electrical engineering who has received a degree from a recognized college or university. (Final date for receipt of applications at Headquarters, January 15).

#### Volta Scholarship

To an Italian citizen with degree in electrical engineering not over 30 years of age.

### ANNUAL AWARDS

Nominations must be received by the Awards Board by the following dates:

Medal of Honor	June 1	(with supporting letters)
Major Annual Medals	June 1	(with supporting letters)
Field Awards	April 1	(with supporting letters)
Service Award	June 1	(with supporting letters)
Prize Paper Awards	July 1	

Some awards may be given to more than one individual.

### IEEE Fellows

The number of members who can be given the Fellow grade is limited in any one year, for example, to a total equal to six-tenths per cent of the number of Senior Members enrolled as of December 31 of the year preceding. A Fellow grade nomination kit can be obtained from the Headquarters in New York. If a Nominator in Region 8 certifies inability to furnish the names of five Fellow grade references on the nomination, the Fellow Committee may accept other references from Senior Members.

Besides the Section Chairmen, the Region 8 Director, Mr. Karsten Drangeid, and I will be most happy to help with all information required in connection with the nomination of a candidate.

E. FOLKE BOLINDER  
Chairman, Awards and Fellows, Region 8





Robert C. Winton  
Secretary, Region 8

In the last newsletter I listed some of the major events that bridged the gap between the technical knowledge a hundred years ago and the present day state of the art. To look back in this way helps us appreciate not only the progress that has been made but also the way in which it was made – as it still is today – each discovery or invention providing a stepping stone to the next. Below are some of the landmarks in the field of communication and measurement and an extract from *Discoveries and Inventions of the Nineteenth Century* (published in 1890).

- 1876 Bell invented the telephone.
- 1890 London to Paris telephone line opened.
- 1891 Start of wireless telegraphy, based on the work of Herz.
- 1892 Heavyside forecast his layer.  
Strowger constructed the first automatic telephone exchange at La Porte, Indiana.
- 1893 Thomson developed waveguide theory.
- 1896 Marconi demonstrated the practicability of wireless telegraphy on Salisbury Plain, UK.
- 1899 Wireless telegraphy link from UK to France.
- 1901 Marconi transmitted morse signals by wireless from Poldhu, UK, to Newfoundland, USA.
- 1902 Telegraphy used on ships.
- 1927 Radiotelephone communication established across the Atlantic.  
Automatic telephone introduced in London.
- 1931 Microwave communication link demonstrated in Italy.
- 1945 Clarke forecast satellite communication.
- 1956 First Transatlantic telephone cable.
- 1960 Bell Telephone Company introduced electronic telephone exchanges.
- 1962 The USA launch the first telecommunication satellite – Telstar.
- 1964 Baran forecast packet switching.
- 1966 Kao & Hockham forecast optical fibre communication.

ROBERT C. WINTON  
Secretary, Region 8

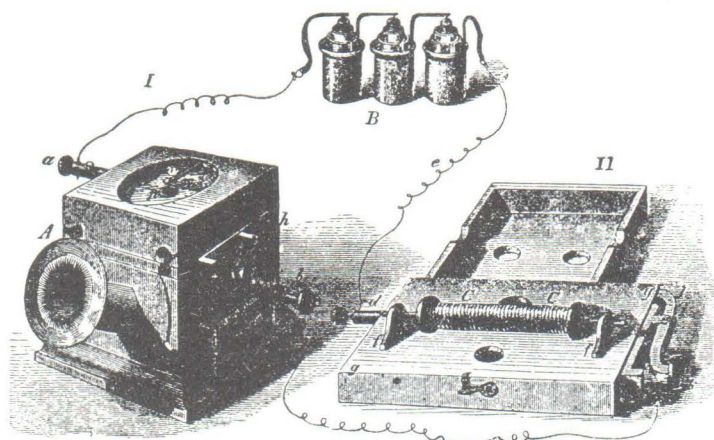


Fig. 302a – Reiss' Musical Telephone

M. Reiss finally produced his telephone in the form shown in Fig. 302a, where *I* is the receiver; *B*, the voltaic battery; *II*, the receiver; *cc* is a coil of insulated wire, surrounding a slender iron rod, mounted on the supports, *ff*, which rest on the sounding board, *gg*. The transmitter consists of the hollow box, *A*, provided with a trumpet-mouthed opening in one side and having at the top a circular piece cut out, across which is stretched a membrane with the little disc of platinum, *n*, fixed in its centre. When a person applying his mouth to *A* sings into the box, the membrane is thrown into vibrations corresponding with the notes, and at each vibration a contact is made and a click is emitted from the distant sounding box. The tones are concentrated by covering this box with the perforated lid.

## CONTINUING EDUCATION



Dr. Karl Goser  
Continuing Education,  
Region 8

In the fast changing field of technology the continuing education of engineers becomes more and more important. I am surprised that the response to articles on this subject in the newsletter has been very low. I believe that we have a unique opportunity to take advantage of the latest and most up-to-date material available from the IEEE Service Centre in New York. During the course of this year I will be describing the various types of material available to members. The first of this series of articles appeared in the February newsletter and described "Short Courses". This issue contains details of "Conference Proceedings" and how to order them and in the August and November issues I will give information on "Video Tapes" and "Books".

I appreciate that the cost of some of these is fairly high, but members might like to consider the possibility of encouraging their employers to buy them as part of their own "in-house" continuing education programme. After they have been used to the full they could be passed on to student branches.

I would be glad if members would write to me and give any views they have on this subject and on the broader aspects of continuing education as a whole.

The following Conference Proceedings are currently available and details of how to order are given below.

Please order these proceedings by writing to my office. You can enclose the payment (make check payable to IEEE) or charge to your credit card (Master Card, American Express, VISA, with card number and expiration date). The best way for payment is the credit card.

Continuing Education Office of IEEE Region 8: Prof. Dr. K. Goser, Fern Universität, P.O.B. 940, D-5800 Hagen 1, West Germany.

PROF. DR. K. GOSER  
Continuing Education, Region 8

### 1983 CONFERENCE PROCEEDINGS AVAILABLE

Conference Title	Catalogue Number	Member Price
IEEE 1983 Int'l Conference on Plasma Science	83CH1847-3	\$22.00
IEEE 1983 International Microwave Symposium	83CH1871-3	\$32.00
IEEE 1983 Int'l Communications Conference	83CH1874-7	\$56.00
IEEE 1983 Int'l Conference on Magnetism	83CH1895-2	\$24.00
IEEE 1983 Industrial Electronics Conference	83CH1897-0	\$25.00
7th Annual Symposium on Computer Applications in Medical Care	83CH1934-9	\$45.00
IEEE 1983 Petroleum & Chemical Industry Conference	83CH1943-0	\$30.00
IEEE 1983 Int'l Symposium on Information Theory	83CH1948-9	\$22.00
IEEE 1983 International Electrical/Electronics Insulation Conference	83CH1952-1	\$27.00
IEEE 1983 Int'l Electrical Electronics Conference	83CH1955-4	\$33.00
IEEE 1983 Global Telecommunications Conference	83CH1956-2	\$53.25
IEEE 1983 International Electron Devices Meeting	83CH1973-7	\$37.50
IEEE 1983 National Telesystems Conference	83CH1975-7	\$29.95
IEEE 1983 ECOMPON – 1st Educational Computing Conference	83CH1979-4	\$21.00



## NEWS OF THE SECTIONS

### Germany Section (Chairman: Prof. Dr. R. Saal)

**Centennial Activities.** IEEE-Centennial will be commemorated at a special meeting during the Interimag Conference in Hamburg on April 9, combined with a regional member meeting. Centennial medals have been awarded to Professor Kleen, senior past Chairman, Dr. Coers, Secretary of the Section, and several other members with outstanding continuous service to the Institute. New Fellows to be honoured in Hamburg are H. Beneking, Aachen, E. Feldtkeller, W. Harth and K. Stein, Munich.

**Membership Development.** Membership continued to grow, reaching 1054, with 102 student members. The 1000 mark was passed in September 1983. A membership roster is available on request: Contact Dr. F. Coers, Stresemannallee 15, VDE-Haus, 6000 Frankfurt 70.

**Student Branches.** The Stuttgart Branch set up successful lectures and excursions. A course on artificial intelligence is under discussion, possibly at the Soeller-Hütte in the Alps. Several other Universities are approaching the critical number (20!) for students branches, including Munich, Karlsruhe, Bremen and Aachen.

**Conference Activities.** In 1984 the Section supports and co-sponsors the Conferences "Sensoren" (19/21 March, Bad Nauheim); "Architektur und Betrieb von Rechensystemen", (26/28 March, Karlsruhe); "Intermag '84" (10/13 April, Hamburg, including the special IEEE-evening) "ECOC '84" (3/6 September, Stuttgart); and "OFS '84" (6/7 September, Stuttgart).

**Executive Committee.** The Committee met on 12/13 March at the University of Karlsruhe. Problems discussed included ways and means to support transnational activities, i.e. participation of German members in Groups and Societies and the ensuing travel costs. An attempt will be made to bring this problem to the attention of relevant Government agencies. It is hoped that, in view of the international importance of IEEE for science and industry, lasting solutions can be found. On an *ad*

*hoc* basis the Section can support important IEEE travel up to a maximum of DM500,—/US-trip by agreement of the Chairman.

**Member Meeting.** About 30 members of the Karlsruhe/Stuttgart area joined for a dinner at the guest house of the University, for commemoration of IEEE History and discussions of IEEE matters. A particular point was the wish for intensified local contacts, also in areas which are not immediately near major technical centres. It is hoped that e.g. the above mentioned member roster may help to bring IEEE members closer together.

### UKRI Section Centennial Lecture Electrons in Theory and in Technology

September 28 to October 1 will be a period of considerable activity in the UK among electrical engineering societies, culminating in the UKRI Section Centennial Lecture on October 1 by Dr. H. G. B. Casimir, For. Mem. R.S. — former member of the Philips Board of Management. Dr. Richard J. Gowen, IEEE President and the Chairman of the meeting, will give a short talk on the history of the IEEE, and there will also be short addresses by the President and Immediate Past President of the British national society, the Institution of Electrical Engineers.

All Region 8 members are welcome to attend the meeting, which will be held at 5.30 p.m. (tea from 5.00 p.m.) in the IEE building, Savoy Place, London. W.C.2. Admission is free, without ticket.

On September 28 there will be meetings of the General Assembly of EUREL (the Convention of National Societies of Electrical Engineers of Western Europe). EUREL are partners with Region 8 in the organisation of EUROCON Conferences, and these arrangements will no doubt be among the subjects discussed at a joint IEEE/EUREL meeting on the following day. This will be followed by separate meetings of the IEEE Executive Committee and a two-day meeting of the Region 8 Committee. The UKRI Section Committee will meet during the afternoon on October 1.

## MEETINGS IN REGION 8

### Conference on Precision Electromagnetic Measurements — CPEM 84

The 1984 CPEM — the world's leading international biennial conference for electromagnetic metrology and related fundamental constants — will be held August 20th to 24th, 1984 at Delft University of Technology, The Netherlands. It is sponsored by Region 8, the Benelux Section and the IEEE Society for Instruments and Measurements.

Over 100 papers will be delivered in sessions entitled: EM-based Fundamental Constants and Standards; Direct Current and Low Frequency; Time and Frequency; Antennas and Fields; Microwaves and Millimeter Waves; (Micro) Computer-Aided Measurements, Converters; Infrared, Visible and Ultraviolet Radiation; Electro Optics, Fiber Optics; Lasers; Cryo-Electronics; Technical Calibration Services.

Further information from: Mrs. I. J. Smits, Department of Electrical Engineering, Delft University of Technology, P.O. Box 5031, 2600 GA Delft, The Netherlands. Tel: +31 15 781736. Telex: 38151.

### Conference on the Impact of Information Technology in Engineering

This conference will be held on August 28–30, 1984 at Erlangen-Nuremberg, Germany. It is organised by The European Society for Engineering Education (SEFI) and sponsored by the IEEE. The following topics will be presented and discussed in 53 presentations structured into 14 sessions:

- Computers and Education, as well as Engineering Education
- Computers in Computer Science, Electrical, Mechanical, Civil and Chemical Engineering.

- Computers in Administration, Planning and Control.

- Learning and Laboratory Systems.

- New Media in the Lecture Room.

- Engineers as Communicators and Users of Information.

The deadline for advance registration is July 16, for hotel accommodation at reduced rate is August 3. Any inquiries about the conference, its programme and registration should be directed to Prof. D. Seitzer, Universitaet Erlangen-Nuernberg, Sauerstr. 9, D-8520 Erlangen, Federal Republic of Germany.

### Tenth European Conference on Optical Communication (ECOC)

The conference is to be held on September 3rd to 6th, 1984, Stuttgart Liederhalle, Berliner Platz, Federal Republic of Germany.

Scope: Fibres and cables; Active and passive components; Integrated optics; System design and applications.

ECOC '84 is linked with the 2nd International Conference on Optical Fibre Sensors (OFS) being held at the same place on September 5th to 7th, 1984. Attendees of both conferences will pay reduced fees.

The conference will be accompanied by a national non-commercial laboratory exhibition showing new components and systems hardware, fibre-optic applications and measuring equipment.

Further information can be obtained from the Conference Secretary ECOC '84 — K. Hess, SEL-Research Centre, Hellmuth-Hirth-Str. 42, D-7000 Stuttgart 40. Tel: +711/821 5553. Telex: 72 526-0 sed.

### MOS IC TECHNOLOGY: PROCESSES, DEVICES AND DESIGN Dewitt G. Ong

This comprehensive book examines MOS technology from device physics, through chip processing and manufacturing to MOS circuit design. Both analog and digital MOS devices are covered together with computer-aided design, chip layout, quality control and CMOS.

07 047709 4 384pp April 1984 £28.75

### HANDBOOK OF BATTERIES AND FUEL CELLS David Linden

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07 037874 6 1024pp September 1983 £61.50

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### Semiconductor Materials and Process Technologies. -034-

August 19—24, 1984. Silja Line, Stockholm, Sweden/Rantasipi Turku, Åbo, Finland.

**K. Bean**, Texas Instruments. **S. Broydo**, Thomas Group. **B. Deal**, Fairchild. **P. Ho**, IMB. **G. McGuire**, Tektronix. **B. O'Mara**, Rose Associates. **A. Neureuther**, Berkeley. **H. Grinolds**, Hewlett-Packard. **J. Thornton**, University of Illinois.

The core subjects to be covered are the basic materials and processing technologies used in the fabrication of integrated circuits. The areas that will be covered include Crystal growth, Wafer preparation, Process induced defects, Oxidation, Chemical vapor deposition, Chemical etching, Evaporation, Sputtering, Plasma polymerization, Plasma assisted CVD, Plasma etching, Thermal diffusion, Ion implantation, Lithography, Metallization systems, Packaging, Characterization techniques, and Contamination control. In each of these areas the scientific background, basic technology, advantages, limitations and applications are discussed.



Meet "Mr Silicon"

### Compound Semiconductor Materials and Process Technology. -037-

August, 19—24, 1984. Silja Line, Stockholm, Sweden/Rantasipi Turku, Åbo, Finland.

**T. J. Anderson**, University of Florida. **J. R. Arthur, Jr.**, Oregon State University. **H. C. Casey, Jr.**, Duke University. **G. E. McGuire**, Tektronix. **B. G. Streetman**, University of Texas. **G. Y. Robinson**, University of Minnesota.

The core subjects to be covered are the basic materials and processing technologies of compound semiconductors. The primary emphasis will be devoted to III-V compound semiconductor, however, other compound semiconductor materials will be discussed as well. The topics that will be covered include: Crystal growth, Wafer preparation, Process induced defects, Epitaxial growth techniques, Ion implantation, Dielectrics, Metallization systems, Device processing, Characterization techniques, and Solid State devices. In each of these areas, the scientific background, basic technology, advantages, limitations, and applications will be discussed.

### MOS Integrated Switched- Capacitor Circuits for Signal Processing, Filtering and A/D-D/A Conversion -030-

September 10—14, 1984. University of Stuttgart, West Germany.

**W. C. Black, Jr.**, Consultant. **R. Gregorian**, American Microsystems, Inc. **G. S. Moschitz**, ETH-Zürich. **G. Müller**, ANT-Nachrichtentechnik. **J. A. Nossek**, Siemens AG. **G. C. Temes**, UCLA, Los Angeles.

This course will cover all important aspects of switched-capacitor circuit design: Basic theory, Description and demonstration of available CAD tools for analysis and design, Device physics and technology, State-of-the art filter and A/D-D/A converter design, and the application of switched capacitor circuits in telecommunications as well as in speech processing.

Please send more information on Course Number: \_\_\_\_\_

Title/Name: \_\_\_\_\_

Company/Institute: \_\_\_\_\_

Box/Street: \_\_\_\_\_

City: \_\_\_\_\_ Contry: \_\_\_\_\_

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**Mail to: Continuing Education Institute-Europe, Rörstorpsvägen 5, S-612 00 Finspång, Sweden.**  
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# 14<sup>th</sup> EUROPEAN MICROWAVE CONFERENCE 84

THE INTERNATIONAL CONFERENCE DESIGNED FOR THE MICROWAVE COMMUNITY

Conference

10th–13th September 1984

Workshop

14th September 1984

**PALAIS DES CONGRÈS, LIÈGE, BELGIUM**

*The invited papers include:*

Dr. Baets	Belgium	Advances & CAD Modelling in Integrated Optics & Optoelectronic Devices
Prof. Beneking	F.R. Germany	Submicron Devices and their Applications in View of Integration
Prof. Clarricoats	United Kingdom	Recent Advances in Microwave Reflector Antennas
Dr. Collette	Belgium	A Future for European Space Activities
Dr. Grousseau	France	Phased Array Antennas for Microwave Landing Systems
Dr. Vokurka	The Netherlands	Advanced Antenna Measurements
Prof. Ziemer	United States	The Future of MM Wave Communication Systems
Prof. de Hoop	The Netherlands	Computation of Electromagnetic Fields
Prof. Neirynek	Switzerland	Design Method for the Classical Filter
Dr. Besser	United States	Computerised Microwave Circuit Layout and Mask Generation
Dr. Fitzpatrick	United States	Computer Assisted Measurements
Dr. Vlaardingbroek	The Netherlands	Preparing for Mass Production: A Satellite TV Downconverter

*A Tutorial Session is also planned with three papers on CAD/CAM:*

Prof. Hoffman	Belgium	Principles and Terminology
Ir. Debois	Belgium	A Case Study on Active Circuits
Prof. Bandler	Canada	A Case Study on Passive Circuits

**PLUS** Over 120 papers are scheduled to be presented during the four day conference.

**PLUS** On Friday 14th a **One Day Workshop** will cover many aspects of CAD/CAM.

The programme is not intended for specialists and there will be presentations on modelling active and passive components, simulation, tolerancing, layout and graphics, monolithic microwave integrated circuits, hardware-software compatibility, automated measurements and the economic aspects.

**It is planned to have working demonstrations available for delegates.**

**The conference "Book of Abstracts" is now available.**

*Why not write, telephone or telex the organisers for a copy:*

**MICROWAVE EXHIBITIONS AND PUBLISHERS LTD.,**

**Convex House, 43 Dudley Road, Tunbridge Wells, Kent, England TN1 1LE Tel: (0892) 44027 Telex: 95604**

## ADVERTISING AND INSERTS IN THE IEEE REGION 8 NEWSLETTER

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### INSERT RATES

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	News to Editor	Jan 7	April 7	July 7	Oct 7
	Advertisements to County Secretarial Services	Jan 15	April 15	July 15	Oct 15
	Delivery inserts to County Secretarial Services	Jan 22	April 22	July 22	Oct 22