

IEEE

Region 8 News

No 109 - February 1995

Europe, Middle-east and Africa



Editor

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From the Regional Director

For more than thirty years the Directors of Region 8 have consistently improved the services provided for members. We are greatly indebted to Charles Turner for the distinguished leadership which he has shown during his two years as Regional Director, a standard of leadership which it will be difficult to maintain. The Regional Director is supported and guided by a group of appointed or elected representatives with experience in the many facets of IEEE management, half of them are past directors.



The number of Sections in our region is steadily increasing, partly as a result of recent changes in Eastern Europe; the number of Chapters too is increasing in

many countries. For most members in our region, IEEE publications are of the utmost importance in their professional work; they are the prime reason why members join the IEEE. The professional image of the IEEE in our Region comes from technical and scientific meetings organised by the Sections and their Chapters, from large scale international conferences organised by the technical Societies and from scientific and technical publications.

The Region is administered by a Committee consisting of the Chairman of each of the Regional Sections, together with a number of elected specialists in the many facets of IEEE administration. The Committee is very much concerned with increasing the number of members in Eastern Europe; however, due to the low incomes of professional engineers in these countries it is very difficult for them to afford the normal membership fees, and even the reduced fees for those with annual income less than \$US 8,000 are not affordable. The Regional Committee and the Technical Societies are creating special programmes for supporting sections or individuals in these countries... In 1993 Region 8 obtained approval from the Board of Directors for the collection of individual donations to support these programmes. For the same purpose Region 8 will contribute an amount equal to the individual donations (up to \$US 10,000). In 1994 we

also supported the establishment of a joint IEE/IEEE office in Budapest, and the shipment of donated issues of IEEE publications to Technical Libraries in East European countries. Applications from Sections with limited financial resources are particularly welcome. Special projects can also be supported at the Regional Director's discretion.

Many electrical engineers live in the Middle East and Africa, but for a variety of reasons it is difficult to extend IEEE membership to many in those countries. It is my hope that in the future we shall be able to serve better all the countries of the Middle East and Africa; the *Africon* and *Melicon* conferences serve this purpose well, but other methods must be developed.

Membership of IEEE is attractive for students; for only \$US36 annually they may join two IEEE Technical Societies and thereby receive a continuous flow of up to 36 issues of IEEE publications. When students graduate they should be aware of the graduated membership fee programme, which brings them up to the full fee in five years. If the automatic renewal system permits them to jump directly to the highest fee, the section Membership Development officer should be notified. If you have thoughts about the issues mentioned above, or you feel that other matters are not handled properly, send me a note by fax or E-mail, or contact your section committee. All Sections/chapters are encouraged to establish an E-mail network for effective communication among their members.

Every section presents their concerns and successes at the Regional Committee meeting, held twice a year. The Committee can ask the Regional Director to raise key issues with the Board of Directors, which meets four times a year. The IEEE President is elected for only a one-year term and the Directors for two years; consequently the "forgetting-factor" is rather high on the Board; most directors, coming as they do from the US, do not understand the special conditions present in regions 7 to 10. It is an obligation of the Regional Director carefully to follow the discussions and decisions of IEEE bodies and to ensure that our Region is treated properly. As Director-Elect I have already taken part in several of these meetings and I hope that I am now prepared for the forthcoming strategic planning discussions.

As a member of the IEEE, you will have professional, technical and scientific support to face the challenge of an interesting engineering career. I wish you a happy and prosperous New Year!

P. Martin Larsen
Director



ENGINEERING WITH WILEY...

■ High Capacity Optical Transmission Explained

Edited by D M SPIRIT, BT Laboratories, UK and M J O'MAHONY, University of Essex, UK

The recent development of optical fibres has brought marked changes in transmission technology, the most dramatic of which is the extremely low loss and high bandwidth of the transmission medium. Covering the most up to date research, this book provides practical advice on the design and implementation of advanced fibre systems. The authors focus on issues which are specific to high capacity optical systems and aim at the practising communications engineer.

0471 95117 X January 1995 250pp £29.95/\$47.95

■ Total Area Networking

JOHN ATKINS and MARK NORRIS, both of BT Laboratories, UK

This highly readable work details the very latest advances in data communication networks. The authors trace the developments in ATM, frame relay, SMDS and LAN technologies. The features, performance and relevance of each technology are evaluated and practical applications are detailed. Looking ahead to the future of data communications, the book concludes with an examination of how networks will develop into the next century.

0471 95480 2 April 1995 225pp £21.95/\$32.95

■ Electronic Component Reliability Fundamentals, Modelling, Evaluation and Assurance

F. JENSEN, Reliability Consulting ApS, Denmark

The first title in a new series, this text approaches the quality and reliability of electronic components from a unique standpoint. Traditionally, the twin subjects of reliability physics and reliability statistics have been treated as separate entities. Here, the author examines both areas and reveals how physics and statistics can determine how components fail and how failures develop over a period of time. Important reliability terminology and concepts are identified and the three key areas of modelling, evaluation and assurance are also examined.

Wiley Series in Quality and Reliability Engineering
0471 95296 6 February 1995 300pp £39.95/\$63.95

A major new looseleaf reference work...

■ Electronic Components Selection and Application Guidelines

by Victor Meeldijk

The electronics engineer is faced with thousands of choices when selecting the proper electronics component for a new design or replacement part. This essential guide gives proper guidelines to aid this process, in order to reduce costs, avoid component over- and under-specification problems and understand device parameters.

Details of where to find suppliers of parts, including 'obsolete' devices for older systems. Data from hundreds of catalogs, reference books, textbooks, newsletters, trade papers and journals. Fully self-contained chapters. Countless photographs and illustrations

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Technische Universität Wien, Vienna, Austria

The Department of Electrical Engineering invites applications for the newly endowed position of **Full Professor of Communication Networks**.

The holder of the chair will be responsible for teaching (in English or German) and for research. Extensive experience is required in one or more of the following fields:

- *Network Architecture and Design*
- *Intelligent Networks & Services*
- *Communication Protocols and Signalling*
- *Modelling & Simulation of Communication Networks*
- *Switching*

The candidate will be expected to address applications and take into account the social implications of communication technology. Outstanding scientific qualifications, teaching ability, and industrial or industry related research activities are essential. A Ph.D. in electrical engineering or in related areas is a formal requirement. A working knowledge of German would be appreciated. The Technische Universität Wien is an equal opportunity employer and welcomes applications from women.

Send applications, including curriculum vitae, list of publications, reprints of five significant articles, list of courses held (if applicable) and summary of current research activities to:

Prof. Dr. Alexander Weinmann, Dean, Dept of EE, TU Wien,
Gusshausstrasse 27-29/350, A-1040 Wien, Austria, not
later than **March 15, 1995**. Fax: +43-1-505 89 07.

E-mail: weinmann@iert.tuwien.ac.at

Honours and Awards

By Professor E. Folke Bolinder

IEEE HONORARY MEMBERSHIP to:

Lars Henry Ramquist (Non-member)

President and Chief Executive Officer, LM Ericsson, Stockholm, Sweden. "For distinguished and far-sighted leadership of the Ericsson Group in a period of rapid technology change and market development"

IEEE MEDALS

Richard W. Hamming Medal to:

Jacob Ziv (F'IEEE)

H. Gross Professor of Electrical Engineering, Faculty of Electrical Engineering, Technion-Israel Institute of Technology, Haifa, Israel. "For contributions to information theory, and the theory and practice of data compression"

and

IEEE Heinrich Herz Medal to:

Jean Van Bladel (LF'IEEE)

Professor of Electromagnetism and Acoustics, University of Ghent, Ghent, Belgium "For major contributions to fundamental electromagnetic theory and its application to electrical engineering"

Chairman of Fellows & Awards Committee: Prof. E. Folke Bolinder,
Kyrkasvag 9, S-43640, Askim, Sweden. Tel: +46 31 772 1739.
Fax: +44 63116 4513 E-mail: piotr@nt.chalmers.se

NEWS FROM THE SECTIONS

Germany

By Prof. Dr. E. Handschin

The German Section Executive Committee held its last meeting on September 13th 1994 in Munich. Mr. Cain, the Institute's president elect, presented the following five items of the IEEE strategic paper: this Section supports those aims.

- 1: Raising the educational qualifications for IEEE membership.
- 2: Developing the IEEE into an international organisation which will cooperate with the national Societies.
- 3: Improving the IEEE administrative organisation.
- 4: Converting the IEEE documentation to electronic media.
- 5: Protecting the public interest and emphasising the public responsibility of the IEEE.

The Section Membership increased by 10% during the last year. The executive committee is devoting much of its effort to addressing new members in order to have a wide and strong platform for the IEEE activities with the German section. The Advanced Technology Society is planning a new chapter in the near future within the German Section.

Cooperation with the German electrical engineering association (VDE) will be further strengthened; the President suggested in a letter to VDE, that there should be a common IEEE-VDE workshop dealing with standards. The following conferences are sponsored by the Section.

- 11th International Symposium on *Visual Languages* (VL95) from 4-8th September 1995, will be held in Darmstadt.
- IEEE Workshop on *Optical Access Networks* will take place from 24-27th February in Nürnberg.
- International conference on *Distributed Platforms* will take place 27th February to 1st March in Aachen.
- 4th international symposium on *Spread Spectrum Techniques* and applications will be held on 22-25 September '96 in Mainz.

Further information concerning these meetings may be obtained from the Section Conference Officer, Prof. Dr. H. Ney, Technical University of Aachen, Tel: (0241) 80 21 600.

The second workshop on *Hierarchical Test Generation* will take place from 24th - 26th September 1995 at the premises of the microelectronics technology park near the Gerhard-Mercator University in Duisburg, Germany; the general chairman is Prof. Dr. W. Geisselhardt and the programme chairman is Mr. Th. Vierhaus, Gesellschaft für Mathematik und Datenverarbeitung, PO Box 1316, D-53731 St. Augustin, Germany. Tel (02241) 142 633. To maintain the focused format of the workshop, participation will be limited. Interested participants should apply not later than April 28th 1995 to the programme chairman, summarising their background and their interest in hierarchical test generation. Notification of the acceptance will be sent out on 19th June 1995. The overhead foils must be submitted not later than 1st September 1995.

Section Chairman: Prof. Dr.-Ing. Adolf J Schwab, Kaiserstrasse 12, 76128 Karlsruhe, Germany. Tel: +49 721 608 2520. Fax: +49 721 69 52 24. E-mail: schwab@ieh.etec.uni-karlsruhe.de

U.K.R.I.

MTT-ED-AP-LEO Chapter

By Mr. Terry H. Oxley

The following officers have been elected, or re-elected, for the term of office ending December 1995:

Chairman: Terry Oxley - Private Consultant
Chairman-Elect - Neil Williams - ERA Technology Ltd.
Treasurer: Roger D. Pollard - University of Leeds
Secretary - J.A. Carson Stewart - Queens University, Belfast
Publicity - Steve Nightingale - Thorn EMI Electronics Ltd.

Six events held during October to December 1994, completed the Chapter activity schedule of fourteen events for the 1994 calendar year. Full-day meetings included:

- Workshop on "*CAE, Modelling and Measurement Verification*" at the Wembley Conference Centre London, on 24th October. This was held in conjunction with "Microwave '94" and in cooperation with the MTT Society and the national IEE. The event successfully combined an excellent technical programme with good organisation. The one-day programme opened with a keynote Address by Linda Katehi of the University of Michigan, followed by a coffee-break poster session, and then moved to parallel sessions incorporating some 24 papers. A second Keynote Address by Steve Tucker, from Hewlett Packard, introduced the afternoon presentations. The fifty-five delegates enjoyed a well balanced interactive discussion forum
- Chapter Booth at Microwaves '94. This was held by courtesy of Nexus Business Communications Ltd., ERA Technology Ltd., and Thorn EMI Electronics Ltd. Members of the Chapter AdCom attended the booth. The event prompted many IEEE new membership application enquiries.
- "*Devices for Microwave and Optoelectronic Applications*" at King's College, London. This was organised jointly with King's College in cooperation with the ED Society, the MTT Society and the national IEE. The one-day programme presented eighteen papers with many overseas contributions. The event was considered by the delegates to have provided an excellent technical programme with informative interactive discussion.

1995

The 1995 activities programme is almost finalised. Currently some eleven events are planned. Events of international interest are summarised below:

- A Modular "*Microwave and Millimeterwave Short Course*". 3rd-5th April. Contact: Dr. J.R. Richardson, Electronic & Elec. Eng., The University of Leeds, Leeds LS2 9J1, England. Tel +44 113 233 2010. Fax: +44 113 233 2032. E-mail: jrr@elec-eng.leeds.ac.uk
- "EDMO '95 Workshop on "*High Performance Electron Devices for Microwave and Optoelectronic Applications*". 27th November '95 at King's College London. Contact: Dr. A.A. Rezazadeh, Electronic & Elect Eng, King's College London, WC2R 2LS. Tel: +44 171 873 2879. Fax: +44 171 836 4781.

- "A Tutorial Meeting on "MMIC's" - 28th November 1995, Kings College London. Contact: Ms Alison Dewhurst, Electronics Division, IEE Savoy Place, London WC2R OBL. Tel: +44 171 344 5423. Fax: +44 171 497 3633. E-mail: adewhurst@iee.org.uk
- A symposium on "Microwave & Millimeterwave Communications". 29-30th November '95 Kings College London. Contact: Dr. S.J. Nightingale, Thorn EMI Electronics Ltd, Sensors Division, Manor Royal, Crawley, W.Sussex RH10 2PZ UK. Tel: +44 1293 644575. Fax: +44 1293 542812.
- Finally: A Symposium for the Presentation of Research Student Papers, is being planned for the Autumn of 1995 at Queen's University Belfast. Contact: Professor J.A.C. Stewart, Dept of Electronic and Electrical Engineering, Ashby Building, Stranmillis Road, Belfast BT9 5AH. Tel: +44 1232 335440. Fax: +44 1232 662135

Chapter Chairman: Mr. Terry Oxley, "Tremont", Back Lane, Halam, Southwell, Newark, Notts NG22 8AG England. Tel: +44 1606 81550. Fax: +44 1636 815865.

Israel

By Professor Ady Seidman

The 18th Convention of IEEE Israel. Some 150 papers were submitted to the 18th Convention of Electrical and Electronics Engineers, to be held in Tel Aviv from 7-8th March 1995. The papers, will be published in English in the Conference Proceedings.

Key speakers include Dr. Irwin Jacobs, CEO and Chairman of the Board of Qualcomm Inc., and Dr. Charlie Cox of the M.I.T. Lincoln Laboratory. For an advance programme and registration information, please contact: IEEE, Dept. of Electrical Engineering, Tel Aviv University 69978, Ramat Aviv Israel.

Section Chairman: Prof. Ady Seidman, Tel-Aviv University, Faculty of Engineering, IL 69978 Ramat-Aviv, Israel. Tel: 00972 3 640 7559. Fax: 00972 3 642 3508. E-mail: seidman@eng.tau.ac.il

Saudi Arabia

By Dr. Khaled H. Biyari

The Saudi Arabian Section has continued its activities. The Section is organising the second "Technical Exchange Meeting" for members of the Section. This will be held on 30th May 1995. The purpose of this meeting is to discuss topics of special importance to electrical engineers in the Kingdom. A similar meeting held last year was very successful in bringing together people from industry and academic institutions

We have continued our seminar activities by sponsoring monthly events. Additional seminars and dinner meetings are being planned.

Approval has been received from Headquarters for the formation of a Student Branch at King Fahd University of Petroleum & Minerals; a new Power Systems chapter has been formed. Chapter activities are coordinated by Mr. Mohammed Al-Mubarak of Saudi Aramco. The petition to form a Communication Systems chapter has been sent to Headquarters for approval.

Section Chairman: Dr. Kahasled H. Biyari, PO Box 711, Dhahran 31261. Tel: 966 3 860 4263. Fax: 966 3 860 3535. E-mail: k.biyari@iee.org

France

By Mme Frédérique Vallée

- **OCEAN CITIES.** First International Symposium on Ocean Cities, Nov. 1995, 20th-23rd Monaco. Deadlines: February 1995 (Submission of abstracts) - 31 August 1995 (Submission of texts). The aim of the "Ocean Cities" workshop is, first, to develop a schedule of events to be adopted and, second, to set up an international lobby capable of taking on and putting into action a large-scale programme of this type. The symposium's objectives are: 1) to produce a comprehensive assessment of ocean city projects already in existence around the world; 2) to provide a forum for international promoters of ocean city projects to meet; 3) to identify the necessary conditions for the construction of hygienic, safe and environmentally sound ocean cities; 4) to identify the technical challenges presented by ocean cities, such as equipment, energy, communications and biology, 5) to enable the specialists designated to resolve these problems to work as a team, 6) to predict the role of ocean cities in society, the problems they may pose for humanity and to propose solutions, 6) to evaluate the current and future financial viability of ocean cities 7) to examine the feasibility of their industrialisation, 8) to identify legal, judicial and other obstacles which might impede the development of ocean cities, 8) to establish a convincing argument as to precisely what contribution ocean cities can offer towards solving the problems of global living conditions. (inf.: Ocean Cities'95 General Secretary, SEE, 48 rue de la Procession, 75724 Paris Cedex 15 - Phone: 33 1 44 49 60 60 - Telex: SEE 200565 F - Fax: (33) 1 44 49 60 44).

- **JICABLE'95,** 4th International Conference on Energy Insulated Cables, organized by SEE, June 1995, 26th to 30th, in Versailles, France.

We have pleasure in announcing that the Computer Society will sponsor the **1995 Workshop on On-Line Testing**, 4-5th July 1995, in Nice, France.

NEWS IN FRENCH

Conférences de l'A.R.E.: Dans le cadre des accords passés entre l'A.R.E. (Conférences du soir des Anciens de la Radio et de l'Electronique) et la Section française de l'I.E.E.E., nous annonçons les conférences suivantes:

- "Le 4ème Programme cadre de la Recherche de l'Union Européenne" par M. Pierre Lepetit, directeur de la Coopération à Thomson, le 15 mars 1995.

- "Sociétés Savantes et Associations d'Ingénieurs" par M. Jean Lebel, le 12 avril 1995.

- "L'organisation et le point des normes principales en électronique" par M. Marcel Thue, Ingénieur Général des Télécommunications, le 10 mai 1995.

- "Les problèmes généraux de répartition des fréquences" par M. Michel Popot, Ingénieur Général des Télécommunications, le 7 juin 1995.

Ces conférences auront lieu à 17h, dans la salle n° 11 de la FIEE, située au quatrième étage du 17 rue Hamelin, PARIS 16ème - Secrétariat: Mme Birckel 46 07 40 77 - Métro Boissière ou Iéna. L'entrée est gratuite, des rafraîchissements sont servis pour clore agréablement la séance.

CONFÉRENCES ORGANISÉES PAR LE CHAPITRE EMC

- "Atelier sur la prise en compte de la Directive européenne sur la CEM" - Présentation de "EUROMAZE", disquette interactive d'aide à la mise en œuvre de la Directive CEM - Avril 1995.

Cette conférence aura lieu à 17h30, à l'ISEP (Institut Supérieur d'Electronique de Paris), 28 rue Notre Dame des Champs, 75006 Paris - Métro: "Notre Dame des Champs" ou "Montparnasse". Téléphoner pour toute inscription à la SEE, Club 25, 48 rue de la Procession, 75724 Paris Cedex 15, tél.: (33) 1 44 49 60 17. (Droits d'inscription: 100 F pour les membres IEEE et 150 F pour les non membres SEE & IEEE). Continued on p6 »»

Perth, Western Australia

27 Nov. - 1 Dec 1995

1995 International Conference on Neural Networks (ICNN '95)

Paper Deadline: 5th May 1995

Contact: Peter Noakes, Dept of Electronic Systems Eng., University of Essex, Colchester, CO4 3SQ, UK. Tel: +44 1206 872 907
Fax: +44 1206 872 900. E-mail: pdn@essex.ac.uk

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Asynchronous Transfer Mode Networks: Performance Issues

by Raif O. Onvural

This book takes you from the application integration problems of today's networks to the virtually limitless realm of tomorrow's ATM networks, providing you with practical methods useful in understanding and co-ordinating ATM networks. The author fills in the previously existing information gaps with valuable insights into: Protocols; Reactive and preventive congestion control mechanisms; Routing virtual paths and virtual circuits; Traffic characteristics of new applications; Call admission procedures; Bandwidth allocation; Switching requirements.

Hardcover. 259 pages. 1994. £52.00
ISBN: 0 89006 662 0
Order Book RN662

Integrated Optics: Design and Modeling

by Reinhard März

Written by one of the field's top experts, this is certain to become the new standard text in the field. It is the only book to comprehensively address integrated optics from both the theory and practical modeling standpoints – describing the most recent work on beam propagation, planar spectrographs, four-wave coupled mode array, CAD for integrated optics, and component cost modeling.

Hardcover. 330 pages. 1995
ISBN: 0 89006 668 X
Order Book RN668 £63.00

Applications of High-Power Microwaves

Andrei V. Gaponov-Grekhov and Victor L. Granatstein, Editors

In a single volume, the text brings you up to date on all the important research in relativistic microwave electronics in the past two decades – advances that have greatly enhanced both the peak power and the average power capabilities of microwave oscillators and amplifiers especially at millimeter wavelengths. The book provides a comprehensive coverage of relativistic vacuum high-power electronics development – showing you the principles and capabilities of relativistic microwave generators and describing the interaction of high-power microwaves with matter.

Hardcover. 442 pages. 1994
ISBN: 0 89006 699 X
Order Book RN699 £70.00

Mobile Antenna Systems Handbook

K. Fujimoto and J.R. James, Editors

Mobile Antenna Systems Handbook is your one-stop source for real-world design techniques, comparative performance data, vital manufacturing aspects, newest innovations, mathematical analysis, measurements, and more. Packed with the design insight of leading international experts in the USA, Japan and Europe, this new reference reduces your preparation effort and lowers your overall cost.

Hardcover. 617 pages. 1994.
ISBN 0 89006 539 X
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For Students

By Dr. Levent Onural

I am honoured by my appointment as the SA Chairman for the next three years. I should like to thank the Region 8 Committee members and Director Turner for their decision.

Amongst the projects on which I shall be working are:

- An awareness of the activities of the EE and CS students will be heightened. One immediate project will be the regular incorporation of IEEE information and application forms through internet groups, which are used mostly by students.
- More student tours which will be mostly of a tourist nature, but will include technical site visits. To increase numbers in these tourist activities, tour companies will be contacted for their lowest prices. Subsidies from industry will be sought. In time these tours may become Student Camps.
- Volunteer student representatives will be in those institutions which have no student branch. The goal is to have a student branch in **all** Region 8 EE departments.
- Chairmen of all student branches will be informed by sending material and holding workshops on the operation of their branches. The Deans of the Schools and the Chairmen of Departments will be asked to include the IEEE regularly in their departmental orientation programmes for freshmen and the more senior students. The traditional student paper contest will be expanded to include a best student software contest and best student design contest.

- Information regarding university exchange programmes will be compiled and sent to student branches.

*Student Activities Chairman: Dr. Levent Onural, Electrical Eng. Dept.
Bilkent University, R-06533 Ankara, Turkey. Fax: +90 312 2666 4126.*

E-mail: onural@ee.bilkent.edu.tr

FINLAND

by Arno Lehtola and Jari Jokiniemi

A Section AAnnual Meeting was held on December 16th 1994 in the Parliament House of Finland. The major changes made to our old byelaws are (1) The committee will be extended to include chapter chairmen as members. (2) The Section Executive Committee will be elected for a period of two years instead of one. (3) The voting members needed to set up a committee list are decreased from 5% to 3% (4) The election schedule will be one month earlier in order to allow the new Executive Committee to be elected in time, should a postal ballot be necessary.

Discussions at the meeting included membership development, adding technical institutes to the Recognised Educational Programmes list, increasing EDS activities. Co-operation with national technical societies, and the election of the new executive committee

Chairman: Dr. Jorma Lilleberg. Tel: +358 81 888 6139.

E-mail: Jorma.Lilleberg.

Secretary: Tero Ojanperä, Tel: +358 81 888 6285.

E-mail: TIO@nmpou.nmp.nokia.com. (Continued on p6)

Letter To The Editor

Montreal Quebec

Dear Mick

Through your Region 8 News I should like to thank all the members of Region 8 for their encouragement and support during the recent IEEE election. As your President for 1996, it will be an honour and a pleasure to work with Director Peer Martin Larsen in furthering the aspirations in your corner of the IEEE world.

In the meantime we must not slacken our efforts to make the IEEE an exciting and pleasurable environment for all those wishing to take part in its activities. I know President Tom Cain and Past President Troy Nagle will be pushing hard in 1995 to pursue the goals set forth in our strategic plan. I too shall be enthusiastically supporting that effort.

Our new plan places a great deal of emphasis on the recognition of the IEEE as a truly international organisation. But, that image and that reality must not be mistaken for a cry for greater centralisation of control over our activities. On the contrary, we must protect local authority, cater for local interests, improve local services and encourage and empower Sections and Chapters to do more for themselves. Let us remove any handcuffs that impede member performance at the local level, for it is through participation in IEEE activities that we learn the Institute's true value; it is in achieving successes by working with peers in our profession that we derive great personal satisfaction.

We live in a world that has reached its advanced state because of the contributions of our technologies and our profession. Let no-one underestimate that fact. Each of us needs to be proud of an association with that record and be prepared to do more. I look forward to working with each of you in meeting the challenges in store for us tomorrow. Thanks again for the opportunity.

My very best wishes to you and your families; sincerely

Wallace S.Read (1995 President Elect)

France - Continued from page 4

"PARIS - SUP TELECOM"

10 Mai 1995

ANTENNE ET TRAITEMENTE DE SIGNAL

Journée d'étude dédiée aux interactions entre le traitement de signal et les capteurs en particulier l'impact sur l'architecture des sous réseaux - Langue française.

Renseignements: SEE, Rue de la Procession 75724, Paris

Tel: +33 (1) 44 49 60 00 - Fax: +33 (1) 44 49 60 49

Surplus IEEE Publications for East Europe

The response to the Region 8 appeal for donations of IEEE publications no longer required by members has been very encouraging. The first shipments are now under way and we intend to continue the scheme as long as it produces useful results. Please let me know if you are willing to provide IEEE journals to help libraries in Sections which are short of recent issues. Region 8 is willing to bear the cost of shipping if necessary.

Prof. C.W.Turner, Dept of Electrical Engineering, King's College, Strand, London England WC2R 2LS. Fax: +44 71 836 4781

I wish to donate to a library in East Europe, publications for which I no longer have a need.

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Finland: continued from p5

Vice Chairman: **Jorma Kyyrä**, Tel. +358 0 4512 436.

Treasurer: Pof. **Iiro Hartimo**, Tel: +358 0 451 2454.

E-mail: Iiro.Hartimo@hut.fi)

Past Chairman: **Aarno Lehtola**, Tel. +358 0 456 6032,

E-mail: Aarno.Lehtola@vti.fi

MTT/AP Chapter

The Chapter has elected a new executive committee:

Chairman: **Dr. Ari Sihvola**, Tel: +358 0 451 2261.

E-mail: ari.sihvola@hut.fi

Vice-chairman: **Jouko Aurinsalo**, Tel: 358 0 456 5606

E-mail: jouko.aurinsalo@vti.fi

Past Chairman: Tel: **Esa Kemppinen**, Tel: +358 0 5117637

E-mail: esa.Kemppinen@ntc.nokia.com

SP/CAS Chapter

The 1994 Annual General Meeting of the Chapter was held on December 9th. Dr. Olli Vainio gave an invited talk "Analogue predictor circuits". We now have a new Associate Editor for IEEE Transactions on IP, Prof. Moncef Gabbouj. Prof. Jaakko Astola is a the new Associate Editor for Electronic Imaging.

The Chapter has now a WWW-homepage, URL: <http://www.cs.tut.fi/~saari/SPCASchapter.html>. It contains some general information and announcements of our activities. For more information, please contact:

Vice Chairman: Moncef Gabbouj - moncef@cs.tut.fi, Chapter Chairman, and Kari Saarinen - saari@cs.tut.fi, Chapter Secretary.

Section Chairman: Dr. Jorma Lilleberg, Nokia Mobile Phones, Oulu, P.O.Box 50,

FIN - 90571 Oulu, Finland, Tel. +358 81 888 6139,

Fax +358 81 888 6667, E-mail: Jorma.Lilleberg@nmp.nokia.com



LOW-POWER / LOW-VOLTAGE IC DESIGN

Course 1 : June 26-30, 1995

Low-Power / Low-Voltage IC Design : An Overview	M.DECLERCQ & R.ZINGG, EPFL
CMOS -SOI Technology for LP-LV Applications	J.-P. COLINGE, IMEC
MOS Modeling for LV-LI Circuit Design	C. ENZ, EPFL
Low Power Digital Circuit Design - Basics	A. CHANDRAKASAN, MIT
LP Design at Architectural and Syst. Level	A. CHANDRAKASAN, MIT
Ultra-Low-Power Digital Design	C.PIGUET, CSEM
Low-Power Microprocessors and Memories	C.PIGUET, CSEM
Limits to Low-Power/Low-Voltage Analog Circuit Design	E.VITTOZ, CSEM
Basic Analog Circuit Techniques for Micropower	E.VITTOZ, CSEM
Analog Micropower Building Blocks and System Design	E.VITTOZ, CSEM
Low-Voltage SC and Continuous-Time Filters	R.CASTELLO, UPV
LP Building Blocks for ADCs & DACs	V. VALENCE, MEAD
The Design of LP, High-Speed ADCs	P. GRAY, UCB
Low-Power Oversampled A/D Converters	E. DIJKSTRA, CSEM
Supply Voltage Down- and UP- Converters	G. TEMES, OSU
Low-Power Mixed-Signal Design for Medical Devices	D.WAYNE, DMA, Inc.
LP Interface Circuits for Sensors	M. DEGRAUWE, CSEM
Practical Problems and Solutions in LPV	I. HOEGLUND, ABB HAFO

RF IC DESIGN FOR WIRELESS COMMUNICATION SYSTEMS

Course 2 : July 3-7, 1995

Overview of Radio Systems and Mobile Comm.	J. RAPELI, NOKIA Mobile Phones
RF Signal Synthesis, Modulation and Freq. Hopping	J. RAPELI, NOKIA Mobile Phones
Archit. and Design of CMOS RF Transceiver Impl.	P. GRAY, UCB
Wireless CMOS Receiver Front-End C&S	M. STEYAERT, KUL
GHz Low Phase Noise VCO's and Prescalers	M. STEYAERT, KUL
Mixer Fundamentals	B. GILBERT, ANALOG DEVICES
Active Mixer Design	B. GILBERT, ANALOG DEVICES
Monolithic Limiting-Logarithmic Amplifiers	B. GILBERT, ANALOG DEVICES
Parasitic Effects in High-Frequency ICs	B. BLAUSCHILD, PHILIPS
High-Frequency PLLs for Transceivers	B. BLAUSCHILD, PHILIPS
RF-Heterodyne Receiver Design Technique	J. FENK, SIEMENS
Power Amplifiers for Wireless Comm. Handsets	C. KERMARREC, ANALOG DEVICES
T/R Switching and Time Division Duplex (TDD)	C. KERMARREC, ANALOG DEVICES
Principles of GaAs RF Design	V. NAIR, MOTOROLA
GaAs RF for Wireless Systems I	V. NAIR, MOTOROLA
Mixed-Signal IC Techniques for Comm. Systems	B. ABDI, MOTOROLA
Mixed-Signal IC Design / Layout for Comm.	B. ABDI, MOTOROLA
BiCMOS for IF/RF ; Systems Design Issues	K. HANSEN, MOTOROLA

Deadline for Registration : **May 31**

Registration Fees : Any One Course = 2'700.- CHF, Both Courses = 4'400.- CHF

ADVANCED ENGINEERING COURSE ORGANIZED BY
Electronics Laboratories of the Swiss Federal Institute of Technology Lausanne, Switzerland

ADVANCED CMOS & BiCMOS IC DESIGN '95

August 21 - September 8, 1995

EPFL, Lausanne - Switzerland

ADVANCED DIGITAL IC DESIGN

Session I : August 21-25

Evolution and Trends of Microelectronics	M.DECLERCQ, EPFL
CMOS & BiCMOS Static Logic	P. DUCHENE, EDAS
Dynamic Logic Structures	B.HOCHET, EPFL
High-Speed Single-Phase Dynamic Logic	C. SWENSSON, Linköping Uni.
Very High Speed CMOS Design Tech.	J. YUAN, Linköping Uni.
Ultra Low-Power Digital Design	C. PIGUET, CSEM
High-Speed BiCMOS Circuit Techniques	H.-J.PFLEIDERER, Uni. Ulm
Clocking Strategies	K.ESHRAGHIAN, E. Cowen Uni.
Systolic Arrays	H.-J.PFLEIDERER, Uni. Ulm
Memories and Regular Structures	K.ESHRAGHIAN, E. Cowen Uni.
PLA, Latch-up and Protections	K.ESHRAGHIAN, E. Cowen Uni.
I/O and Chip Assembly	K.ESHRAGHIAN, E. Cowen Uni.
VHDL for VLSI Design	A. VACHOUX, EPFL
Design for Testability	A. OSSEIRAN, EPFL

ADVANCED ANALOG IC DESIGN

Session II : August 28 - September 1

MOS and Bipolar Transistors	E. VITTOZ, CSEM
Modes of Operation and Models	E. VITTOZ, CSEM
Passive Components / Parasitics	E. VITTOZ, CSEM
Analog Layout Techniques	E. VITTOZ, CSEM
Elementary Building Blocks	E. VITTOZ, CSEM
Analog Functional Blocks	W. SANSEN, KUL
Opamps and Comparators	W. SANSEN, KUL
Voltage References	E. VITTOZ, CSEM
Oscillators	E. VITTOZ, CSEM
BiCMOS Building Blocks	H. CASIER, MIETEC
Off-chip Drivers	R. CASTELLO, UPV
Delta-Sigma Data Modulators	G. TEMES, OSU
Low-Noise Amplifiers	C. ENZ, EPFL
Future Trends in Analog ICs	E. VITTOZ, CSEM

PRACTICAL ASPECTS IN MIXED-MODE

Session III : September 4-8

Trends in VLSI Technologies	G. DECLERCK, IMEC
Mixed-Signal Circuit Layout Techniques	T. SCHMERBECK, IBM
Noise Coupling in Analog ICs	T. SCHMERBECK, IBM
Design Reducing Noise Coupling	T. SCHMERBECK, IBM
Practical Aspects of SC Circuit Design	G. TEMES, OSU
Nonideal Effects in SC Circuits	G. TEMES, OSU
CDS and Chopper Stabilization Techniques	G. TEMES, OSU
Potentials and Limitations of SI Circuits	P. DEVAL, MEAD
Battery Backup Circuits, OpAmps and Bias	A. GANESAN, Consultant
Practical Aspects of Delta-Sigma Converters	A. GANESAN, Consultant
Video D/A Converters	A. GANESAN, Consultant
Full-Custom Mixed-Mode IC Design	H. HAERINGER, ITT
On-Chip Voltage References, Grounding	P. BROKAW, Analog Devices
MOS Modeling for LV-LI Circuit Design	C. ENZ, EPFL

Deadline for Registration : **June 30**

Registration Fees : Any One Session = 2'600.- CHF, Any Two sessions = 3'600.- CHF, All Three Sessions = 4'600.- CHF

Course Directors : Michel Declercq, Gabor Temes, Vlado Valence and Eric Vittoz

Contact : V. Valence, EPFL-LEG, EL-Ecublens, 1015 Lausanne, Switzerland, Tel : +41-21-693-3975, Fax : +41-21-693-3640, e-mail : valencic@elde.epfl.ch

- EPFL is member of the ESPRIT VLSI Design Action of the European Communities -

*Instructor of Technical Writing/Communication.
Manager of Large Technical Literature Projects.
Manager of Technical Documentation Departments.
Senior Editor/Writer.*

IEEE Associate Member since 1986 seeks permanent position. Able to relocate, single, no dependants, enjoy other cultures and learning other languages. Native Speaker of American English, able to read Engineering specs in both German and French (I have also studied Arabic, Hindi, Urdu, Panjabi, Swedish, Spanish, and Hungarian); 8 years experience in Switzerland, Germany, and France; specialities include Computers (HW/SW) and Controls (HVAC under PCs and UNIX).

Among other projects, I managed the documentation set for a NOTES/e-mail system for the World Economic Forum (DEC) and co-ordinated the documentation for the HVAC system at the München airport (Honeywell). Other clients have included H/P, Bull and Rayovac.

I earned a Ph.D. in Linguistics from the University of Wisconsin - Madison and taught in the Electrical and Computer Engineering Dept. there for four years. I edited for Harvard Press for 3 years. I am conscientious, a hard-worker, able to make difficult decisions, and enjoy learning new technologies/subjects.

I presently hold permanent German residency and a German work permit; I am a US citizen.

For more information or a CV and references by return mail, please contact:

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Saudi Arabia West

By Dr. Mehoob E. Ansari

We have written several letters to Jordan in an attempt to establish a sub-section, but without any tangible result. Members in Jordan are requested to co-operate with Mr. Mehboob E. Ansari, Section Secretary to form a sub-section so that Jordan members also could be represented in Region 8.

Several seminars were arranged during 1994 but the most successful and significant was the seminar on "Solid Waste Management Systems". It was held in the Hotel Intercontinental, Jeddah

An IEEE members annual dinner will be held on 31st January 1995 in the Hotel Intercontinental, Jeddah; with a keyword speech by Eng. Mehboob E. Ansari on "Airport Meteorological System Upgrade design for King Abdulaziz International Airport, Jeddah. All members are cordially invited.

Section Chairman: Dr. Mahamed A.I. Turki, PO Box 771, Jeddah 21423, Saudi Arabia. Fax: +966 2 669 0256
Tel: +966 2 665 1686.

*Region 8 News is not an official publication
of the Institution of Electrical & Electronics
Engineers. The views expressed are those of the
Authors*

Region 8 Conference Record

Metropole Hotel Brighton, England 16-18 May 1995

European Convention on **Security and Detection**

Contact: IEE Conference Services, Savoy Place, London WC2R 0BL. Tel:
+44 0171 344 5478. Fax: +44 0171 497 3633.
E-mail: conference@iee.org.uk

University of Cambridge, UK 19-21 April 1995

2nd International Conference on **Control & Instrumentation in Nuclear Installations**

Contact: Institution of Nuclear Engineers, 1 Penerley Road, London
SE6 2LQ. Tel: 0181 698 1500 or 4750. Fax: 0181 695 6409

Heriot-Watt University, Edinburgh, Scotland 3-6 July 1995

Fifth International Conference on **Image Processing & its Applications**

Contact: IEE Conference Services, Savoy Place, London WC2R 0BL. Tel:
+44 0171 344 5478. Fax: +44 0171 497 3633.
E-mail: conference@iee.org.uk

London, UK 27th November 1995

E.D.M.O. '95

Electron Devices for Microwave and Optoelectronic Applications

UKRI MTT-ED-AP-LEO Chapter

Contact: Ali Rezazadeh, Electrical & Electronic Engineering
King's College London. Tel: +44 171 873 2879. Fax: +44 171 836 4781.
E-mail: a.rezazadeh@uk.ac.klc.cc.bay

IEE, London 5-7 September 1995

International Conference on **100 Years of Radio**

Contact: IEE Conference Services, Savoy Place, London WC2R 0BL. Tel:
+44 0171 344 5478. Fax: +44 0171 497 3633.
E-mail: conference@iee.org.uk

Kruger Park Game Reserve, S.Africa 15-17 November 1995

ISSDT '95

4th International Seminar on Simulation Devices and Technology

CEFIM University of Pretoria South Africa, & Institute of Computational
Technology - Russian Academy of Sciences. Fax: 27 12 807 1699.
Tel: +27 12 807 0869. E-mail: simdev@ee.up.ac.za

Vienna, Austria 26-27 September 1995

FeT '95

First International Conference on Fieldbus Technology

Technische Universität Wien, Institut für Computertechnik,
Gusshausstrasse 27-29, A-1040 Wien, Austria.
Tel: +43-1-58801-3829 Fax: +43-1-50538984 E-mail: ki@ict.tuwien.ac.at

Brussels Convention Centre 8-11 May 1995

13th International Conference and Exhibition on **Electricity Distribution**

CIREC '95 Conference Secretariat, c/o AIM, 31 rue Saint Gilles, B-4000
Liège, Belgium. Tel: +32 41 222 946 Fax: +32 41 222 388