

# IEEE Region 8 News

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Europe, Middle East and Africa



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## Region 8 & "The Institute"

By Prof. Andrei P. Silard

Soon after the completion of my term as Chairman of the Romania Section, I was appointed to the Editorial Board of "The Institute". I address this assignment less as a recognition either of my personal commitment to the goals of the IEEE or of our Section growth since mid-1990, than as a sign of the growing awareness of the importance acquired by Region 8 within the Institute. Ours is the



Region "where the action is"; recent political changes in this part of the world are bringing to life wide segments of the scientific community. The potential is for at

least a dozen new Sections in the near future, they will undoubtedly enhance the vitality of the Institute organisation. By lending a helping hand to many first-rate scientific groups, hidden for decades from the international mainstream, the Institute will enhance its own status as a genuinely international professional association.

I feel that these new realities deserve to be mirrored in the pages of "The Institute" and I am personally committed to increasing Region 8 coverage both in "Spectrum" and in our newspaper. Those having something useful to say to the Electrical Engineering international community, please feel free to contact me; with the support of the Regional Committee and that of the Region 8 News Editor I shall do my best to convey their views to all readers of "The Institute".

We are all aware that "The Institute" and "Spectrum" are sailing now through rather difficult times. It is by constantly improving the content of these publications as well as by developing new ideas that we can contribute to a strengthening of the Institute to which we all belong.

Prof. Andrei P. Silard, Aleea Alexandru 19, Bucharest, 71273 Romania. Tel: +400 331184. Fax: +400 120188.

Because there were  
Insufficient Registrations  
**EUROCON '92**  
Has been Cancelled

## Special Lecturing Initiative for Region 8 Sections.

By Dr. Hugo Rüchardt

The object of this project is: i) to demonstrate to industry the Institute's leadership in technology, ii) to bring the latest technical information to members, and iii) to show that with the cooperation of the Technical Activities Board, Regional Colloquia can be conducted with a minimum of financial support from IEEE central funds. It is expected that some 50% of the lecturers will be chosen from Region 8 and the remainder from countries outside the Region.

This is a cooperative effort in which the Sections will suggest subjects that are of interest to both IEEE members and local industry; they will also choose the venue and make administrative arrangements for the event. Sections should then approach the IEEE Society Presidents in order to obtain appropriate

lecturers and discuss finance and other necessary matters. If the names of Society Presidents are not immediately known to a Section then either Barbara Ettinger at IEEE Headquarters, or Dr. Jan Brown, Fisher Controls, 1212 Centre Creek Drive, Austin, TX-78731 USA; Fax: +512 834-7200; will be able to help. Most of the Technical Societies are anxious to assist in arranging specific lecturing appointments and will support their Lecturers particularly for travel, should that be necessary. About 30 lecturers from Region 8, plus a growing

number of excellent proposals from the US, have been collected so far and forwarded to our Section chairs and Chapter Coordinators. New information about successful itinerary agreements is reaching me almost every week; for those who have not yet responded to my calls I suggest that action should be started immediately.

The following are some of the lecturers which have so far been proposed:

- Prof. Fredo Ivanek - Palo Alto CA. "Wireless PBX and LAN". Society MTT-17
- Several Speakers from France: Engineering in Medicine & Biology. Society EMB-18
- Several Speakers from Germany: Artificial Intelligence and Expert Systems in Industry and Engineering. Society COMP-16, COMM-19, PE--31 and others
- Prof. J.D. van Wyk - R.S.A: Development of Switching Functions, topology and structure in power electronic converters. Society PEL-35, PE--31.



Dr. Hugo Rüchardt, Gartenpromenade 30,  
D-8035 Gauting, Germany.

## Germany

By Professor Dr. E. Handschin

The second meeting of the Executive Committee of the German Section met on October 28th 1991 in Frankfurt, Germany. The meeting, chaired by Prof. Dr. A. Schwab, was attended by 14 members of the Executive Committee. The Conference Officer, Mr. Ney, Philips Aachen, presented the following list of meetings, conferences and symposia, that will be sponsored by the Section.

Micro Electro-mechanical Systems (MEMS): Workshop from 4-7th February 1992 in Travemünde.

Microelectronics for Information Technology: (In cooperation with the ITG of the VDE), 4-6th March 1992 in Stuttgart.

Sensor Technology and its Applications (In cooperation with the GMA/ITG of VDE). 4-5th May 1992 in Garmisch-Partenkirchen.

Pattern Recognition '92 (14th DAGM Symposium). 14-16th September 1992 in Dresden

Membership Development within the Germany Section is satisfactory; at 31st October 1991 there were 2,650 members. The Executive Committee appreciates the effort made by all IEEE members to recruit new members, especially in the universities.

Chapter Activities in the Section were widespread during 1991. The Computer Chapter, headed by Mr. Mathias M. Koehler, organised two events.

■ 11th July: A talk by Prof. Dr. G. Lasker on "Some issues in Cerebromimetic Design of Intelligent Systems"

■ 9th November: Visit to the technical installations of the Germany Post Telekom in Usingen.

■ The MTT/AP Chapter, headed by Prof. Dr. H. L. Hartnagel met four times in 1991 for special events:

■ 12-13th September: Meeting organised by Prof. Dr. F. Arndt on "CAD oriented numerical Techniques for the Analysis of Microwave and mm-wave Transmission Line Discontinuities and Junctions".

■ 10-11th October Meeting organised by Prof. Dr. R. H. Jansen on "Microwave Measurement Techniques."

■ 5-6th Nov. Organised by Prof. Dr. E. Kohn and Prof. Dr. H. Schumacher on "Hetrostructure Technology".

■ 24-25th October: Joint Meeting with the CAS-chapter organised by Prof. Dr. P. Russer and Prof. Dr. J. A. Nussek on "Discrete Time Domain Modelling of Electromagnetic Fields and Networks."

■ 9th November: The CAS Chapter, headed by Professor Dr. D. A. Mlynski, held a meeting with the joint MTT/AP Chapter, and also a one-day seminar:

■ 9th December: Simulation Support in the Design of High speed Electronic Systems, and Research on CAD Systems at MEI.

### Student Branch

The Student Branch Programme is coordinated by Prof. Dr. W. Hahn; there are now nine student branches with 350 members. Increased efforts must be made to recruit more students for the Branches, the motivation to become a Student Member being easier if a branch already exists. Prof. Hahn indicates the difficulties in connection with the payment of membership fees for students. He will devise an efficient way of handling this problem.

### 20 Years Service

At the end of the meeting the Section Chairman held a farewell ceremony for the Secretary, Dr.-Ing. Friedrich Coers. Dr. Coers served as secretary to the Section for more than 22 years, during which period he shaped many of the Section's activities. The Section is greatly indebted to Dr. Coers for his long and successful support; Prof. Schwab wishes him all the best for his future.

The new Secretary of the Germany Section is Mr. R. Theobald, who is also Managing Director of the VDE/VDI Society for Microelectronics. He can be contacted at the following address: Mr. R. Theobald, German Section IEEE, VDU Haus, D-6000 Frankfurt 70, Tel: 069-63 08 330. Fax: 069-63 12 925.

The next meeting of the Executive Committee is scheduled for 26th October 1992, in Dresden.

Section Chairman: Prof.-Dr.-Ing. Adolf J. Schwab, Kaiserstrasse 12, 7500 Karlsruhe 1, Germany. Tel: +49 721 608 25 20. Fax: +33 1 46 30 62 24.

## For Students

By Gözde Bozdagi - Student Representative

Some time ago I was requested to gather together the vacation dates of Universities in Region 8 and publicise them so as to make it easier to plan exchanges. This is what I have up to now:

■ University of Oulu (Finland): June, July, August, 20 Dec-5 Jan.

■ ETSETB (Spain): 11-21 April, July, 23 Dec. - 7 Jan.

■ Tech. University of Munich (Germany): August

■ ETSETB (Spain): 11-21 April, July, 23 Dec. - 7 Jan.

■ Tech. University of Munich (Germany): August

■ Eindhoven University (The Netherlands): 17-24 April, 29 June - 14 August, 23 Dec. - 3 Jan.

■ Helsinki University (Finland): July, August, last week of December

■ Bilkent University, METU, Hacettepe University (Turkey): July, August, February.

### Here is some other news:

For the 93-94 academic year, possible Student Exchange Programmes: the feasibility of developing a pilot programme is under investigation.

A computer disc will be created as the need for more IEEE information becomes evident. I should be glad if you would send me any information you have about the IEEE, which you would consider helpful to a student member; it can then be transferred to a disc.

The Communications Society and Computer Society expect to conduct a trial later this year of an information access service. Users would have on-line access to a database containing for example, workshop and conference announcements, abstracts of articles not yet published. If you are interested in participating, send your name and address to: Peter Mauzey, AT&T Bell Labs., 200 Laurel Avenue, Room 3P-220, Middletown, NJ 07748-4801, USA. E-mail: ptm@mtdec.all.com

A Student Paper Contest will be held during CompEuro '92 on 8th May in The Hague, The Netherlands.

Gözde Bozdagi, Region 8 Student Representative, Dept of Electrical Engineering, Bilkent University, 06533, Ankara, Turkey. E-mail: bozdagi@trbilun.bitnet

## Region 8 Awards

Owing to a typographical error the "1992 Corporate Recognitions" were incorrectly reported; they should have read:

### "1992 Corporate Innovation Recognitions"

"Ericsson Radio Systems": Kista, Sweden. For: "Significant Contributions to the Development and Implementation of Analogue and Digital Cellular Radio Technology."

"Philips Electronics": Eindhoven., The Netherlands. For: "Pioneering Research in Electronics and the Development of much of the Basic Technology Leading to the Creation of the Optical Recording Laboratory"

### IEEE Award in International Communications:

Francesco Carassa (Life Fellow). For: "Original Contributions in the Field of Microwave Radio Relay and Satellite Communications"

The Editor's Apologies to all concerned.



# Region 8 Conference Record

Southampton, England 23-25 Oct. 1992

**EuroForth '92**

EuroForth Conference Organiser, 133 Hill Lane, Southampton, England, SO1 5AF. Tel: +44 703 631441. Fax: +44 703 339691

Tampere, Finland. 17-20 Jan. 1993

**Winter Workshop on Nonlinear Digital Signal Processing**

Dr. Petri Haavisto, Signal Processing Lab., Tampere University, PO Box 553, SF-33101 Tampere, Finland. Tel: +358 31 161 849

Glasgow, Scotland. 11-13 Aug. 1992

**Intelligent Control**

Dr. Ken Hunt, Mechanical Eng., University of Glasgow, G12 8QQ, Scotland. Tel: +41 339 8855 Ex.4406. Fax: +41 330 4343

Liverpool, England 7-8 Sept. 1992

**Workshop on Neural Networks Techniques and Application. (With UKRI Computer Chapter)**

Katrina Houghton, Dept. of Computer Science, Univ. of Liverpool, England L69 3BX. Tel: +44 51 794 3668. Fax: +44 51 794 3715

Nijmegen, The Netherlands. 22-24 June 1992

**Theorem Provers in Circuit Design: Theory, Practice and Experience**

Computer & Communications Group, PO Box 9010, NL 6500 GL Nijmegen, The Netherlands. E-mail: germaine@cs.kun.nl

Lisbon Portugal. 14-18 Dec. 1992

**Compugraphics '92: Computational Graphics & Visualisation Techniques**

Prof. H.P.Santo, Dept Civil Eng., IST Av Rovisco Pais, 1096 Lisboa Codex, PORTUGAL. Tel: +351 1 847 3421 x2351. Fax: +351 1 89 9242. E-mail: d1663@eta.1st.pt

Delft, The Netherlands. 16-18 June 1992

**1992 IFAC/IFIP/IMACS - Artificial Intelligence in Real-Time Control**

AIRTC 1992 c/o KIVI, PO Box 30424, 2500 GK The Hague, The Netherlands. Tel: +31 70 391 9890. Fax: +31 70 391 9840

Rotterdam, The Netherlands 19-24 Apr. 1993

**Third European Test Conference**

Contacts: France - B. Courtois +33 76 57 46 15. Fax: +33 76 47 38 14. UK - +44 508 369 4400. Fax: +44 508 369 6974

Glasgow, Scotland. 11-13 Aug. 1992

**1992 IEEE Symposium on Intelligent Control**

Dr. Eddie Grant, The Turing Institute, 36, North Hanover St., Glasgow G1 2AD, UK. Tel: +44 41 552 6400. Fax: +44 41 552 2985

Halmstad, Sweden 22-25 Sept. 1992

**Parallel Processing in Industrial Real-Time Applications**

Eva Nestius, Centre for Computer Science, Halmstad University, PO Box 823, S-301 18 Halmstad, Sweden. Tel: +46 35 153132

London, England 17-18 Sept. 1992

**Neural Network Technology**

Short Course Programme

Continuing Education Unit, King's College London, Cornwall House Annexe, Waterloo Road, London, SE1 8TX. Tel: 0712 872 3055

Nice, France

**Teaching & Research Assistants to prepare for a Doctorate Thesis in Communications: Multimedia, Enterprise, or Mobile.**

Resume to: EURECOM, 229 route des Cretes, Sophia-Antipolis, 06560 Valbonne, France.

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Editorial and Advertisement DEADLINES

15th January
1st April
1st July
1st October

TO:  
The Editor, Region 8 News, "Sandstones", Crooksbury Road, Runfold, Farnham Surrey, England, GU10 1QB. Tel: +44 2518 2625. Fax: +44 2518 2625



Centrum för Datavetenskap  
Centre for Computer Science

Four-day intensive course organized by  
CENTRE FOR COMPUTER SCIENCE,  
HALMSTAD UNIVERSITY, SWEDEN



## PARALLEL PROCESSING IN INDUSTRIAL REAL-TIME APPLICATIONS

Halmstad, Sweden, September 22 – 25, 1992

This course is based upon an innovative new book published by Prentice Hall.

The specific goals of the course are:

to **gain insight** into the field of parallel processing and to be able to evaluate the potential usage of various alternative solutions in real-time systems

to **stimulate creative thinking** concerning future approaches to parallel processing that can meet the challenges of the future

Presented by three leading experts in the field:

*Harold W. Lawson*, former Professor of Computer Systems at Linköping University, Sweden

*Bertil Svensson*, Professor of Computer Engineering at Chalmers University of Technology, Gothenburg, Sweden

*Lars Wanhammar*, Associate Professor of Applied Electronics at Linköping University, Sweden

Course fee: 11 750 SEK (Swedish Kronor) for non-Swedish Residents, 14 690 SEK (incl. VAT) for Swedish Residents

Deadline for registration: **August 21, 1992**

For further information please contact the course secretary: Eva Nestius

Mailing address: Centre for Computer Science, Halmstad University, P O Box 823, S – 301 18 Halmstad, Sweden

Telephone: Int: +46-35-153132 Fax: Int: +46-35-148533

Email: [Eva.Nestius@cdv.hh.se](mailto:Eva.Nestius@cdv.hh.se)

## UKRI - MTT/ED/AP Joint Chapter

By Mr. Terry H. Oxley

The following are among the Chapter events arranged for 1992.

**3rd June:** King's College London - Evening lecture on "Propagation of Long Electromagnetic Waves in the Earth Ionospheric Space" by Dr. James R. Wait, IEEE AP-S Distinguished Lecturer. The occasion will include the presentation of the IEEE Heinrich Hertz Medal to Dr. Wait. Contact: Dr. N. Williams, ERA Technology Ltd., Cleeve Road, Leatherhead, Surrey KT22 7SA. Tel: +44 372 374151. Fax: +44 372 374496

**24th June:** King's College London - Evening lecture on "Modern Phased Array Systems" by Dr. George Hockham, Technical Director Thorn-EMI Electronics. Contact Dr.J.K.A.Everard, Dept of Electronic & Elec. Eng. King's College, Strand, London WC2R 2LS. Tel: +44 71 873 2744. Fax: +44 71 836 4781.

**8th July:** University of Leeds - One-day Technical Meeting on selected European papers from the IEEE MTT-S Int. Mic. Symp., Albuquerque, USA. Contact: Prof. M.J.Howes, Dept of Electronic & Elec Eng., The University of Leeds, Leeds LS2 8JT/ Tel: +44 532 332002. Fax +44 532 332032.

21st-25th September: The University of Leeds. Microwave Vacation School - Annual short course on "Microwave Sub-system Design." Organised by the University of Leeds in co-operation with the MTT/ED/AP Chapter. An associated Chapter-sponsored evening lecture on "High Temperature Superconductors" by Dr. Andrew Phillips of GEC Hirst Research Centre will be held on 23rd September. Contact: Dr. J.R.Richardson, Dept of Electronic & Elec. Eng., The University of Leeds, Leeds LS2 9JT. Tel: +44 532 332010. Fax: ++44 532 332032.

*Chapter Chairman: Mr. Terry H. Oxley, "Tremont" Back Lane, Halam, Southwell, Newark, Notts NG22 8AG, England. Tel: +44 636 815510. Fax: +44 836 815865.*

## France

By Dr. Frédérique Vallée (Secretary)

The following conferences are in preparation:

**CompEuro '93.** Computers in Design and Manufacturing (Montpellier, 11-14th May 93). Contact: M. Alain Croisier - IBM France, 3-5 place Vendôme, 75001 Paris France. Tel: +33 1 40 15 53 04. Fax: +33 1 42 60 99 75.

I.C.H.P.S.-VI, Paris. (September 94). Contact: M. Gérard Santucci, Club 15 - Réseaux d'énergie, SEE, 48, rue de la Procession 75015, Paris, France. Tel: +33 1 45 67 07 70. Fax: 33 1 40 65 92 29.

## Other French News

Dans le cadre des accords passés entre l'A.R.E. et la Section française de l'IEEE, nous annonçons les conférences suivantes: "La guerre électronique" (par l'IGA Paul Assens, ancien professeur à Supélec - 13 mai 1992)

"La compression de débit dans la transmission des images". (Le nom du conférencier, probablement du C.C.E.T.T., ne nous a pas encore été transmis - 10 juin 1992)

Ces conférences auront lieu à 17h, dans la salle no 11 de la FIEE, située au quatrième étage du 11 rue Galilée, Paris 16ème - Métro Boissière ou Iéna. L'entrée est gratuite, des rafraichissements sont servis pour clôturer sympathiquement la séance. Pour tout renseignement ou confirmation, s'adresser à Mme Birckel, 193 rue du Faubourg Saint-Martin, 75010 Paris, tél: (1) 46 07 40 77.

*Continued on page 8*

## Benelux

By Dr. J. Noordanus

The General Assembly of the Benelux Section was held on January 13th 1992, at the Eindhoven University of Technology. After welcoming the fifty members present the immediate past Chairman Professor Van Dommelen gave a general survey of the Section's activities.

**MEMBERSHIP.** Thanks to the membership information received from Headquarters on diskettes, accurate records could be compiled. Although from a geographical point of view it is not so impressive, the 2,400 members are about 10% of the Regional membership, excluding members in arrears. Some 50% of the members live in the Netherlands, and slightly fewer in Belgium. Only a small number (42) live in Luxembourg. The division, by membership grade is: Fellows 2%, Senior Members 8%, Members 66%, Student Members 23%; the last of these figures is much higher than the regional average of 18%, due to the large number of student members from Belgium. There are still problems with improper registration at Headquarters, resulting in an unnecessary loss of membership.

**INTERNATIONAL ACTIVITIES.** In Brussels, the Board of Directors met for the first time outside the United States in May 1990. The Section was host to this special event. A meeting with European Community officials was arranged for that occasion; immediately afterwards the Section played host to the Region 8 Committee meeting. The IEEE has signed an agreement with EUREL, the European Convention of National Electrical Engineering Societies; it is hoped that this agreement will minimise misunderstanding, and also stimulate collaboration. The Benelux Section sponsored and financially supported an international meeting initiated by our Student Branches; they exchanged information on their curricula and some High Technology topics. They visited, in addition to the Student Branches Home Bases, some cultural cities such as Amsterdam and Bruges. The Section intends to continue the promotion of these activities for and by students. Another important commitment of the Benelux Section was the organisation of CompEurope '92 in the Hague from 4-8th

May 1992. The Section, together with Region 8 carried the financial responsibility.

Conference Co-ordinator J. Vanderschoot  
Membership Development F.V. Jörgensen  
Chairman AP/MTT Chapter K. Van 't Klooster

Chairman IT Chapter E. Van der Meulen  
Chairman CAS Chapter P. Dewilde

Chairman SP Chapter J. Van Ginderdeuren  
Chapter Co-ordinator E. Deprettere

**TECHNICAL MEETING.** Following the closure of the General Assembly, the Technical Programme commenced. Under the Chairmanship of Prof. Schalkwijk and Prof. van der Meulen a series of papers was presented concerning "The first 15 years of public key cryptography". There was an audience of over 100 for this timely and interesting programme, which was organised by the Working Group on Information and Communication Theory, (WIC) and the Information Theory (IT) Chapter.

**MEETINGS & CONFERENCES:** 1991 was an especially fruitful year for technical meetings, which included: Telemetry, High Definition Television, Digital Signal Processing, Superconductivity, Micro-electronic Sensors, The Application of Fuzzy logic, Propagation phenomena in radio communication, Non-linear Microwave Circuits, Information Technology and many others. This reflects in particular, the increase in Chapter meetings and the activities of the Delft and Eindhoven Student Branches.

**FINANCIAL REPORT.** Dr. Maanders presented the 1991 financial report; it showed a healthy positive balance, due in part to the successful ECOC '91 and ISSLS '92.

### 1992-3 BENELUX COMMITTEE.

Chairman: J.R.H. Peek  
Student Activities Chairman: D.M. Van Dommelen  
Vice Chairman: Ch. Trullemans  
Secretary: W. Van Gils  
Past Secretary: J. Vandewalle  
Treasurer: J. Noordanus  
Fellows & Awards: P. Eykoff  
Member: D.H. Rabaey

.Professional Activities: O.E. Marvel

Section Chairman: Professor J.B.H. Peek,  
Dennenlaan 10, NL-5671, BX Nuenen, The Netherlands

## Sweden

By Dr. Anders Derneryd

**GIGAHERTZ '92.** The two-day conference in Linköping on microwave techniques and high speed electronics was a considerable success. Over 100 delegates attended the oral and poster sessions. A membership recruiting booth was well attended, with many new members signing up for MTT.

**INTERMAG '93.** The 1993 International Magnetics Conference will take place in Stockholm on April 13-17th, 1993. The purpose of the Conference is to provide a forum for the discussion of new developments in applied magnetics, related magnetic phenomena and information storage techniques. Please contact the Conference Chairman Prof. K.V. Rao on Phone/Fax +46 87 90 77 71.

**NEW OFFICER.** Arild Moldsvor, Chalmers University of Technology, has been elected Secretary of the joint MTT/AP Chapter. Welcome aboard! We express our gratitude to the outgoing secretary Stefan Johansson for his great efforts in arranging many interesting technical seminars.

**THE 1000th MEMBER.** During March the Sweden Section registered its 900th member. With an annual increase of 11% it seems likely that the 1,000th member will join us in March next year. Unfortunately there is a drop in membership in April each year; members go into arrears. It takes about four months for the Section to recover that loss. Please pay your dues in time!

**ELECTROMAGNETIC DAY.** As a part of the IEEE Europe Colloquium '92, we are planning an Electromagnetic Day for the autumn. It will cover antennas, microwaves, optics, high TC superconductive devices and accurate measurement techniques.

Section Chairman: Dr. Piotr Starski, Chalmers University of Technology, Division of Network Theory, S-412 96 Göteborg, Sweden. Tel: 031-7721734. Fax: 031-7721561. E-mail: piotr@nt.chalmers.se (UUCP).

## Finland

By Dr. Aarno Lehtola and Dr. Jari Jokiniemi

The Section Annual Meeting was held on March at the Technical Centre of Finland; 15 of our 461 members were present. The Chairman, Dr. Oksanen, presented a report on the Section activities for 1991. In order to form new sections we have been successful in finding suitable volunteers in both the Baltic countries and in the St. Petersburg area.

The Officers of our 1992 Executive Committee are as follows:

Chairman: Arno Lehtola - Tel: 358 0 456 6027. Fax: 358 0 456 6027. E-mail lehtola@tik.vtt.fi.

Vice-chairman: Mauri Inha - Tel: 458 31 612 950.

Past Chairman: Dr. Marku Oksanen - Tel: 358 0 4512 263

Secretary: Jari Jokiniemi - Tel: 358 0 456 6009. Fax: 358 0 456 6027. E-mail: jj0@tik.vtt.fi

Treasurer: Prof. Iiro Hartimo - 358 0 451 2454.

**Chapter Chairmen:** Prof. Antti Räisänen (MTT/AP) Tel: 358 0 451 2241. Prof. Olli Simula (Comp.) Tel: 358 0 451 3271. Dr. Petri Haavisto (ASSP/CAS) Tel: 358 31 161 849). Student Branch chairmen: Jahana Jaatinen (Helsinki) Tel: 358 894 9287, and Kari Pulli (Oulo) Tel: 358 81 363 231.

**Technical Programme:** SP/CAS Chapter lecture on Research in a Signal Processing Laboratory - (Taslinn Technical University) by Dr. Ants Meister, 7th May at Tampere University of Technology, Signal Processing Laboratory. Contact: Petri Haavisto - Tel 358 31 161 849. Fax: 358 31 161 857. E-mail pjh@cs.tut.fi

MTT/AP Chapter lecture on The Complex Source Point Technique in Beam Diffraction by Reflectors. 13th May at Helsinki University of Technology. Prof Edward V. Jull of the University of British Columbia, Canada. Also a seminars of nine lectures on High-frequency Asymptotic Diffraction Theory. 21st April - 15th May. Contact: Ari Siivola - Tel: 358 0 451 2267. E-mail: ari.siivola@hut.fi.

Finish Artificial Intelligence Conference, focussing on recent developments. 9-11th June at Helsinki University of Technology. Contact: Dr. Eero Hyvönen, Technical Research Centre of Finland, Labora-

tory for Information Processing, Lehtisaarentie 2A, 003430 Helsinki Finland. E-mail: Hyvonen@tik.vtt.fi.

**Call for Papers:** IEEE Winter Workshop on Nonlinear Digital Signal Processing. 17-20th January 1993, Tampere Finland. Submissions: 3 copies of a 2 page summary by 1st October to Petri Haavisto, Signal Processing Laboratory, Tampere University of Technology, POB 553, SF-33101 Tampere, Finland. E-mail: pjh@cs.tut.fi.f. Fax: +358 31 161 857.

## South Africa.

By Dr. Petri Meyer

The main event of 1991 was undoubtedly the 1991 symposium on "Parallel Processing - Design & Implementation"; a two-day event which proved to be extremely successful. The 70 delegates had the opportunity of meeting two visiting lecturers from Europe - Imperial College London, and University College Dublin. Activities for 1992 include another Parallel and Distributed Computing meeting.

**AP and MTT:** Apart from the annual symposium, two Chapter meetings were held, during the period June-December. The first was a non-technical meeting at which the changing South African electronics environment was discussed, the general concensus being that growth in the future of the South African economy would depend heavily on continued development of technology and industry; concern was expressed that a future government might not recognise this need.

**The Annual SAIEE/IEEE** symposium was held on 29th August, with an attendance of about 150. The invited speakers were Dr. Dirk Baker of the Antenna Division EMLAB and Prof. P.W. van der Walt, Electronics Dept. U.S. There was also a technical meeting on Time-domain Techniques.

**Energy Chapter:** The South African University Power Engineering Conference was held at the Rand Afrikaans University in Johannesburg. The S.A. Energy Chapter Chairman presented an address on possible collaboration between the S.A. Institute of Electrical Engineers and the IEEE. At the Conference there were some 30 oral papers and 20 poster papers, based on power engineering research activities at all the major

universities in S.A. In 1992 we shall try to establish this as an official SAIEE/IEEE conference.

On 28-29th August the **IEEE-IAS International Workshop** was held - "Future of Electrical Power Processing and Conversion". The Proceedings are being printed. There were formal presentations and parallel working groups on Future Applications of Power Electronics in Energy Conversion, Industrial and Manufacturing, Commercial and Residential, Transportation, Aerospace, Automotive and High power.

**Chapter Chairman:** Professor J.A.Ferreira, Energy Laboratory, Rand Afrikaans University, PO Box 524, Johannesburg 2000, Republic of South Africa.

## Greece

By Professor G.I. Stassinopoulos

As the new Chairman of the Greece Section, I should like to greet the readers of Region 8 News. Our Section is approaching one thousand members and is actively supporting scientific knowledge dissemination, with numerous lectures and seminars. Four Chapters - Power, Communications, Control Systems, Electron Devices/Microwave Theory and Techniques are active.

**Forthcoming major events** include a twelve-day (27-7 to 8-8 1992) tutorial workshop on Digital Wireless Communications organised by the Communications Chapter in the Technical University of Crete. Contact: Prof. P.Stavioulakis - Tel: +30 821 46564. Fax: +30 821 41920). In addition there will be "Athens Power Tech" (APT '93) - an International Conference on Modern Power Systems; it will be in Athens from September 5-8th 1993. Contact Prof. B.C.Papadias, NTUA Tel: +30 1 360551. Fax: +30 1 360 5604.

Since we have extensive scientific and professional contacts with the U.S. and European communities, there is an increasing interest in fostering new links with other countries in our Region and members in Eastern Europe.

Section Chairman: Professor G.I.Stassinopoulos, National Technical University of Athens, Division of Computer Science, Heron Polytechniou 9, 15773 Zografu, Athens, Greece. Tel: +30 1 779 3988 Fax: +30 1 775 7501.

# Electrical & Electronics Engineers' Calendar of Conferences in Europe, Middle East & Africa. May 1992

Reproduced in Region 8 News, which is delivered free to all IEEE members in the Region. Dr. J. Baal-Schem, the Regional Conference Co-ordinator, is always interested in receiving information on future Conferences in the Region; information should be sent to him at PO Box 1205, Holon 58112, Israel.

## May 1992

04-08. The Hague, The Netherlands. **COMPEURO'92. IEEE CONFERENCE ON COMPUTER SYSTEMS AND SOFTWARE ENGINEERING.** Prof. P.Dewilde, Delft University of Technology, Dept of EE, P.O.B. 5031, 2600 GA Delft, The Netherlands

04-08 Florence, Italy. **INFOCOM '92. IEEE CONFERENCE ON COMPUTER COMMUNICATIONS.** Dr. M. Decina, Consorzio Cefriel, Via Emanuelli 15, 20126 Milan, Italy

10-15 Nice, France **IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION.** H. Hayman, POBox 3216, Silver Spring MD 20918, USA

25-28. Siofok, Hungary **IEEE INTERNATIONAL WORKSHOP ON PERSONAL COMMUNICATIONS AND INDOOR RADIO.** Mrs Katalin Mitok, HTE, Budapest, Kossuth Lajos ter 6-8, Hungary H-10550

## June 1992

01-05 Florence, Italy **ISATA - 25TH INTERNATIONAL SYMPOSIUM ON AUTOMOTIVE TECHNOLOGY AND AUTOMATION.** ISATA Secretariat, 42 Lloyd Park Avenue, Croydon Surrey, CRO 5SB, England

01-06. Avignon, France **AVIGNON '92 - 12TH INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE, EXPERT SYSTEMS, NATURAL LANGUAGE.** EC2 - 269 rue de la Garenne, 92024 Nanterre Cedex, France

09-12. Paderborn, Germany **5th INTERNATIONAL CONFERENCE ON INDUSTRIAL AND ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS.** IEEE Comp. Soc. Conference Dept., 1730 Massachusetts Av, Washington DC 20036 1903 USA

09-11. The Hague, the Netherlands **SYMPOSIUM ON THE ANALYSIS, DESIGN AND EVALUATION OF MAN-MACHINE SYSTEMS.** Mr Brinkman, c/o Man-machine Systems Group, Faculty of Mech.Eng., Mekelweg 2, 2628 CD Delft, The Netherlands

16-18. Zurich, Switzerland **6th INTERNATIONAL WORKING CONFERENCE ON SCIENTIFIC AND STATISTICAL DATABASE MANAGEMENT.** IEEE Computer Society Conf. Dept., 1730 Massachusetts Av. N.W. Washington, DC 20036-1903, U.S.A.

16-18. Delft, The Netherlands **INTERNATIONAL SYMPOSIUM ON ARTIFICIAL INTELLIGENCE IN REAL TIME CONTROL.** AIRTC 1992, Congress Office KIVI, P.O.Box 30424, 2500 GK, The Hague, The Netherlands

23-26. Madrid, Spain **PESC '92 - IEEE POWER ELECTRONICS SPECIALIST CONFERENCE.** Professor F. Aldana, University Politecnica de Madrid, Ramiro de Maeztu sn, E-28040, Madrid, Spain

23-25. London, England. **SECOND INTERNATIONAL CONFERENCE ON PRIVATE SWITCHING SYSTEMS AND NETWORKS.** IEEE Conference Dept, Savoy Place, Victoria Embankment, London, England WC2R 0BL

## July 1992

03-07. Amsterdam, The Netherlands. **INTERNATIONAL BROADCASTING CONVENTION.** IEE Conference Dept., Savoy Place, Victoria Embankment, London England, WC2R 0BL

13-17. Vienna, Austria. **5TH INTERNATIONAL VACUUM MICROELECTRONICS CONFERENCE.** Professor J. Metterauer, Technical University of Vienna, Gusohansstrasse 27-29, Vienna, Austria

## August 1992

18-20. Istanbul, Turkey. **IEEE INTERNATIONAL BIOMEDICAL ENGINEERING DAYS.** Professor O. Kaynak, Bogazici University, 80815 Bebek, Istanbul Turkey

25-28. Brussels, Belgium. **EUSIPCO '92 - Sixth EUROPEAN SIGNAL PROCESSING CONFERENCE.** ESAT Laboratory, Katholieke Universiteit Leuven, Kardinaal Mercierlaan 94, B-3001 Heverlee, Belgium

19-21. Edinburgh, Scotland. **FIRST INTERNATIONAL CONFERENCE ON INTELLIGENT SYSTEMS ENGINEERING.** IEE Conference Dept., Savoy Place, Victoria Embankment, London England, WC2R 0BL

## September 1992

01-04. Paris, France. **ISSE '92 - INTERNATIONAL SYMPOSIUM ON SIGNALS, SYSTEMS AND ELECTRONICS.** Mrs. Stevanovitch, ISSE '92 - B.P.2, Uccle 3, B-1180 Bruxelles, Belgium.

02-04. Oslo, Norway. **VNIS '92 - VEHICLE NAVIGATION AND INFORMATION SYSTEMS CONFERENCE.** Prof. S. Andresen, Norwegian Institute of Technology, 7034 Trondheim, Norway

02-04. Wroclaw Poland **11th INTERNATIONAL WROCLAW SYMPOSIUM ON ELECTROMAGNETIC COMPATIBILITY.** EMC Symposium, Box 2141, 51-645 Wroclaw 12, Poland

07-09. Sheffield, England **IEEE INTERNATIONAL WORKSHOP - VARIABLE STRUCTURE AND LYAPUNOV CONTROL OF UNCERTAIN DYNAMIC SYSTEMS.** Dr. A. Zinober, Dept of Applied and Computational Mathematics, University of Sheffield, Sheffield, S10 2TN, UK

07-10. Manchester, England. **SIXTH INTERNATIONAL CONFERENCE ON DIELECTRIC MATERIALS, MEASUREMENTS AND APPLICATIONS.** IEEE Conference Dept, Savoy Place, Victoria Embankment, London, England WC2R 0BL

20-24. Portsmouth, England. **WORLD CONFERENCE ON ENGINEERING EDUCATION.** IEE Conference Dept., Savoy Place, Victoria Embankment, London England, WC2R 0BL

21-24. Edinburgh, Scotland. **EIGHTH INTERNATIONAL CONFERENCE ON ELECTROMAGNETIC COMPATIBILITY.** IEE Conference Dept, Savoy Place, Victoria Embankment, London, England WC2R 0BL

21-23. Warsaw, Poland. **INTERNATIONAL CONFERENCE OF MICROELECTRONICS.** J.Grzybowski, IRSEP, Zurawia 26/10, 00-515, Warszawa, Poland

22-24. Ezulwini Valley, Swaziland. **AFRICON '92 - ENERGY SYSTEMS, TELECOMMUNICATIONS AND EDUCATION IN AFRICA.** FRD, PO Box 2600, Pretoria, 0001 South Africa

23-25. London, England. **INTERNATIONAL CONFERENCE ON DATA TRANSMISSION.** IEE Conference Dept. Savoy Place, Victoria Embankment, London, England, WC2R 0BL

27:09-01:10. Berlin, Germany. **ECOC '92 - 18th EUROPEAN CONFERENCE ON OPTICAL COMMUNICATION.** Prof. Dr. C. Baack, Heinrich Hertz Institute, Einsteinufer 37, D-1000 Berlin 10, Germany.

28-30. Liege, Belgium. **INTERNATIONAL WORKSHOP ON ELECTRIC AND MAGNETIC FIELDS.** Mrs. Ch. Lacrosse c/o AIM, 31 rue Saint Gilles, B-4000 Liege, Belgium.

## October 1992

05-06. Ljubljana, Slovenia. **INTERNATIONAL TELECOMMUNICATION SYMPOSIUM VIABLE TELECOMMUNICATIONS.** Elektrotehniska zveva Slovenije, Titova 50, YU61000 Ljubljana, Slovenia.

12-13. Brighton, England. **RADAR '92 - INTERNATIONAL CONFERENCE.** IEE Conference Dept. Savoy Place, Victoria Embankment, London, England, WC2R 0BL

16-18. Munich, Germany. **CNAA '92 - 2nd INTERNATIONAL CONFERENCE ON NEURAL NETWORKS AND THEIR APPLICATIONS.** Prof. J. Nossek, Technical University of Munich, Institute for Network, Arcisstr. 21, D-8000, Munich 2, Germany.

## King's College London

UNIVERSITY OF LONDON

### Centre for Neural Networks

Short Course Programme

## Neural Network Technology

17/18 September 1992

This course will offer a comprehensive introduction to Neural Network Technology, a fast-growing field which is already a \$100 million industry in the US. Through lectures, demonstrations and case studies, it will enable managers, engineers and scientists to assess the importance of Neural Networks for their own areas, and apply this technology to their own problems

Continuing Education Unit, King's College London,  
Cornwall House Annexe, Waterloo Road, London SE1 8TX  
Tel: 071-872 3055/6 Fax: 071-872 3070

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### *Journal pour les Étudiants.*

Afin de promouvoir la recherche de nos membres-étudiants, notre Section lance le journal "IEEE/French Section : Cahiers de la Recherche." Ce journal généraliste couvrira tous les sujets relatifs aux activités d'IEEE : l'automatique, l'informatique, l'électronique,... Le journal sera semestriel. Les papiers réguliers et la correspondance sont soumis au processus d'évaluation effectué par les spécialistes du domaine (français et étrangers). Un membre-étudiant peut être un coauteur d'un papier soumis : il devra être le premier mentionné sur la liste des auteurs, et l'interlocuteur privilégié pour tout contact entre IEEE Section Française et les auteurs.

Pour plus de renseignements vous êtes invité(s) à contacter Mme Edwige Pissaloux, Université Paris XI, Institut d'Électronique Fondamentale, 91405 Orsay Cedex, tél: (1) 69 41 65 72. fax : 60 19 25 93, E-mail: pissalou@FRIUTO11.FR.

Chapter Chairman: Dr. Maurice G. Bellanger, 54 rue de Rennes, 75006, Paris, France. Tel: +33 1 40 94 75 16 . Fax: +33 1 46 30 62 24.

### *Switzerland*

The IEEE Region 8 wishes to thank Câbleries de Cossonay, ASCOM, and PTT Telephone Administration for their generous support during the Regional Executive Committee Meeting



## *Assistant Positions in Communications Systems*

Eurecom, a joint establishment of the "Ecole Polytechnique Fédérale de Lausanne" (EPFL) and the "Ecole Nationale Supérieure des Télécommunications" (TELECOM Paris) is recruiting Teaching Assistants and Research Assistants wishing to prepare a doctorate thesis.

Assistants will work in the research park Sophia-Antipolis (near Nice, France) under the direction of EURECOM faculty members, and will be requested to participate either in research or in teaching.

A gross compensation of 130,000 French francs per annum is offered. Candidates holding an MS in Electrical Engineering or equivalent and fluent in either English or French, are invited to send a full resume to: EURECOM, 2229 route des Crêtes, Sophia-Antipolis, 06560 VALBONNE, France.

### *Research Areas*

*Multimedia Communications:* Digital Video and Speech Coding, Networks, Data Bases, Synchronisation, Cooperative Processing.

*Enterprise Communications:* High Speed and Heterogenous Network Protocols, Resource Allocation and Quality-of-service Support, Network Management, Security, Performance, Availability.

*Mobile Communications:* Radio-propagation, Modulation and Coding, Multiple Access, Mobile Management, Inter-working with Terrestrial Networks.