

IEEE

Region 8 News

No 111 - August 1995
Europe, Middle-east and Africa



Editor

Dr. G.H. Byford
"Sandstones", Crooksbury Road
Runfold, Farnham, Surrey
England GU10 1QB
Tel: (+44) 1252 782625
Fax: (+44) 1252 783020

From the Regional Director

Hallo, Hallo

The new Information System in Piscataway is still operating unsatisfactorily. During the Board of Directors meeting in Washington DC in June, ways of improving this system were discussed at considerable length. Most Regions and Sections report that members are complaining about delayed renewal of membership, disrupted delivery of publications, and the lack of feedback on requests.

The staff in Piscataway has made an extraordinary effort to remedy the deficiencies and we apologise for the inconvenience imposed on members.

A consulting company, Transition Partners, has analysed the present situation, and found that the staff is competent, but in need of training; the department is understaffed. The Hewlett Packard system and the Oracle software are excellent products, but Membership and Order Processing is unreliable. These deficiencies resulted in an average handling time for new applications of 30 working days and in a few cases up to 3 months. The Membership department has consequently decided to respond to new applications within a week and it will also attempt to mail the acknowledgement package after 20 working days.

There is still a long way to go. The Transition Partners has recommended an improvement plan and the the Board of Directors

has approved an expenditure up to \$2.9 million over the next four years, this figure includes \$50-75,000 for hardware.

Rise in Membership Dues

Apart from the cost of the improvement plan for the Information system, the cost of postage and paper has increased by 20% over the last two years. Consequently, the Board decided to increase membership dues, for grades above that of student, by \$6.00 per year. If the dues were not raised, the overall budget would show a deficit of approximately \$1.2 million on top of a budgeted deficit of

\$3.2 million due to several temporary administrative expenses. The General Fund for Operational Reserves has previously covered budgeted deficits, but that would not be realistic for more than a few years.

All Regional Directors were very concerned about increases in dues with the Information system in its present state. The problem of paying even half dues is very serious in the developing countries, where engineers' incomes are low. Within Region 8 many sections have considerable problems in expanding their membership; the possibility that special

low membership dues might be introduced is being carefully investigated. The average annual cost of servicing one member is close to \$40.00 a year; lower rates for some members would imply a reduction in services for all members.

Best wishes for the rest of 1995

P. Martin Larsen
Director



At the Dublin meeting of the Region 8 Committee Dr. Jacob Baal-Schem receiving from the IEEE president, a certificate in recognition of the 18 years over which he has served the Institute in a variety of capacities: Chapter chairman, Section chairman, Regional conference coordinator and Computer Society chapters coordinator. Congratulations and many thanks. The next 18 years will be even more arduous!

The address of the IEEE Brussels Office is: Mr. Jacques Kevers, 13, Avenue de l'Aquilon, B-1200 Brussels, Belgium
Tel: +33 2 770 2198. Fax: +33 2 770 8505 E-mail: memservice.europe@ieee.org

Dick C. Poortvliet

It is with great sadness that we record the death, after a long illness, of Dick Poortvliet, who was for such a long time a prominent member of this Region of the Institute of Electronic & Electrical Engineers. Dick joined the IEEE as a Student member in 1961, became a Member in 1963 and a Senior Member in 1978. He was throughout that period a member of the



Dick Poortvliet Receives from the President, Tom Cain, his IEEE certificate for long and meritorious service in the interests of the Institute.

electroencephalography department of the Research Unit for clinical neurophysiology at the Westeinde Hospital, the Hague, Netherlands: in 1982 he became chief engineer of the Unit.

He was always an enthusiastic champion of students' activities, amongst which were: student paper contests, inter-branch programmes, social and cultural exchanges between branches in other countries.

Dick was Regional Director from 1979-1980 and following that term of office was elected to the post of IEEE Secretary; he chaired the Students Activities Committee from 1984 to 1994. Dick worked easily with his colleagues, listening readily to their advice and always willing to share his experience and expertise.

We extend our sincere condolences to his wife Hilde, who was herself a very popular visitor on IEEE social occasions. Good bye Dick, you will not be forgotten



Université Catholique de Louvain Louvain-la-Neuve, Belgium

The Department of Electrical Engineering at the UCL invites applications for a tenure-track position at the Assistant Professor level or higher, according to the experience of the applicant, in the area of **electromechanical systems**.

We are seeking an individual with promise as a researcher and a teacher. Responsibilities include direction of theoretical and practical research activities in the field of electromechanical systems control. The applicant should be able to cooperate with other research groups (automatic control, signal processing,...).

The teaching activities (in French) are relative to the design and applications of electromechanical converters and their control systems.

The position requires a Ph.D. degree in engineering and an experience of research and teaching activities in the area of electromechanical systems. The applicant must be skilled in both writing and speaking French.

Apply by December 15, 1995 to the Vice-Chancellor of the University (Place de l'Université, 1, B-1348 Louvain-la-Neuve, Belgium), mention the reference 96/21.

Applications should include a certified copy of the diplomas, a full curriculum vitae, a bibliographic list and a copy of five most significant publications. They should mention the name and address of four referees (not member of the UCL and at least two outside Belgium).

More information about the position can be obtained from the Dean of the Faculty of Engineering (Rue Archimède, 1, B-1348 Louvain-la-Neuve, Belgium).

St. Petersburg - Russia

By Prof. Ari Sihvola (Finland)

A new joint Electron Devices/Microwave Technology and Techniques Chapter was formed in St. Petersburg, Russia on April 6, 1995. This is a result of the joint initiative of the MTT and ED Societies for aiding Eastern Europe and the former Soviet Union by promoting in those countries the formation of MTT-S and ED-S chapters.

The Initial Events Were:

An invited lecture: by Prof. F. Barnes, Distinguished Lecturer of the ED Society, whose subject was "Voltage tunable dielectric films in making microwave phase shifters, voltage tunable oscillators and phased array antennae". The lecture took place at the St. Petersburg Electrotechnica University.

Eastern Europe Chapter Meeting: held on May 23rd during the 1995 International Symposium on Electromagnetic Theory. The co-chairmen were Ari Sihvola, Finland and Sergei Tretyakov, ED/MTT St. Petersburg Chapter chairman. 20 representatives from Russia, the Ukraine, Belarus, Bulgaria and IEEE enthusiasts from other Western countries participated.

During the meeting, the present state, and the problems associated with the formation of new IEEE chapters in the area were discussed. At present, one more chapter, in Moscow, is under development. Three representatives of the Moscow community were present: Y. Shestopalov, A. Vinogradov, V. Kaloshin. In the Ukraine, represented by V. Veremey, two recently formed chapters are active: they are based in Lviv, Western Ukraine, and Kharkov, East Ukraine.

The problems of fast communication, access to the World Wide Web, and participation in international meetings sponsored by the IEEE were also considered.

Chapter Chairman: Dr. Sergei Tretyakov, St. Petersburg Technical University
195251 Polytekhnicheskaya 29, St. Petersburg, Russia. Tel: 7-812 552 76 85. Fax:
7812 552 60 86. E-mail: tretyakov@rphd.stu.spb.su

Pretoria, South Africa

16 November 1995

LEOS/EDS '95: LASERS, ELECTRO-OPTICS & ELECTRONIC DEVICES SYMPOSIUM

Contact: LGI Short Courses, PO Box 30536, Sunnyside, Pretoria 0132, South Africa. Tel: +27 12 012 436625. Fax: +27 12 012 342 4151

Lille Grand Palais, Lille, France

28 Aug - 5 Sept 1996

URSI - XXVth General Assembly of the International Union of Radio Science

AG URSI, Prof. P. Degauque, Univ. Lille 1, F-59655 Villeneuve d'Ascq Cedex, France. Tel: 33 20 33 72 06. Fax: 33 20 33 72 07
E-mail: agursi@univ-lille1.fr Server: <http://www.univ-lille1.fr/ursi96>

Pretoria, S. Africa

16 November 1995

COMSIG '95: Communication and Signal Processing Symposium

Contact: LGI Short Courses, PO Box 30536, Sunnyside, Pretoria 0132, South Africa, Tel +27 12 012 436625. Fax: +27 12 012 342 4151

Pretoria, South Africa

17 November 1995

AP/MTTS 95: Antennas & Propagation, Microwave Theory & Techniques Symposium

Contact: LGI Short Courses, PO Box 30536, Sunnyside, Pretoria 0132, South Africa, Tel +27 12 012 436625. Fax: +27 12 012 342 4151

Your Scientific Paper - or Be Kind to the Editor

By Dr. G.H. Byford

There are those authors of scientific papers who believe that a Journal Editor and his acolytes have but one aim: to place every possible obstacle in the path of publication. Naturally the paper which you have submitted is of the very highest quality and is impeccably written; your meticulous care has ensured that all the requests in the Journal's Notes for Authors have been followed precisely. You will of course have considered the audience for which your manuscript is intended and used words appropriate to their background and understanding of the subject. Perhaps there is just a very slight possibility that you have overlooked some minuscule detail which the editor and referees have quite unjustifiably magnified and criticised.

You, the author, are well paid because of your excellent reputation; the editor in turn is the editor because of his reputation, which he is not anxious to lose; the referees are chosen on the basis of their reputations; and the publisher makes a commercial success of his journal because it has a good reputation. It is therefore in everyone's interest that well written, scientifically sound papers should appear in print. Writing a scientific paper is a considerable labour, the culmination of months or years of scientific endeavour - you should not squander all that superhuman effort in one hurriedly produced manuscript and its associated illustrations. Look at it from your own point of view; yours is the reputation at stake, the referees and editors are there to help, criticising in private - the only alternative to that private process is public criticism, after publication, from your colleagues in opposition. Once lost your reputation is very difficult to recover. How do you set about getting these editorial helpers on your side?

Proceed as follows!

1. Write so that reading your manuscript is a pleasure; the editorial staff is not there to correct your spelling, grammar and syntax.

2. Avoid acronyms at all costs - they can make understanding almost impossible. Consider the following extract from the concluding paragraphs of a paper on heart valves: "... only one class were removed from the CKRT, BSA, DBP, SPVV, EDD, SV, FS were removed from CKRT before surgery, while BSA and PP were removed from CKRT after surgery. You can't make anything of it can you? Neither could the editor - the paper was rejected.

3. Do not use staccato sentences punctuated only by full stops; it is very difficult to string them together to reveal a logical meaning; and boring to read. From a recently submitted manuscript:

In the present study numerical simulation is performed using a 3-dimensional 90 degree model. The pulsatile flow pattern is analysed corresponding to a velocity pulse waveform occurring in the coronary artery. The calculation is carried out for a mean inflow Reynolds number $Re=80$ whereby the radius of the vessel is used in the definition. Flow in the branch is assumed 30% of the entrance flow rate".

Now let us rewrite that paragraph without changing the words:

i) In the present study numerical simulation is performed using a three-dimensional 90 degree model.

ii) The pulsatile flow pattern is analysed corresponding to a velocity pulse wave form occurring in the coronary artery.

iii) The calculation is carried out for a mean inflow Reynolds number $Re=80$ whereby the radius of the vessel is used in the definition.

iv) The flow in the branch is assumed 30% of the entrance flow rate". Nothing much more than a boring list, is it not?

A different version of the same paragraph: "*In our study we used numerical simulation to establish a 3-dimensional 90 degree model, the pulsatile flow being analysed in terms of a velocity pulse waveform in the coronary artery. The calculation uses the mean in-flow Reynolds number $Re=80$; the vessel radius is included in the definition and the branch flow is assumed to be 30% of that at the entrance".*

Nothing difficult there, only a very little thinking required ("Flow rate" has the dimensions of acceleration, which is not what the author intended to say).

4. Do number your manuscript pages; an elementary but essential requirement. In these days of sub-contracting and "distributed printing" the typesetter may be in a town hundreds of miles from the publishing office or from you the author. Your precious paper might be dropped on the floor and be picked up by some helpful fellow to whom your words of wisdom are a foreign language. The result: delay, frustration unlimited and frayed tempers everywhere.

The Abstract

You have something to sell and the Abstract is your shop window. You should make it quite clear what it is that you have in the shop and encourage the customer to enter - if he doesn't understand he will pass on to something else. Include: why you undertook the work, how you did it, and what were the principal results. Avoid jargon and unnecessarily long words, references to the literature are not permitted, and please no acronyms; remember too that the reader will be influenced not only by the information content of the abstract but also by the way in which it is written - there is no excuse for short disconnected sentences, bad grammar or bad syntax. It is not easy to write a good abstract.

Drawings, Photographs and Graphs.

Good illustrations are very helpful and save wordy explanations, but they are expensive to produce. Drawings should be black lines on white paper and if possible produced by a professional draughtsman or technical illustrator. Do bear in mind that your pictures, of all kinds, may be reduced to a one column width; it is, however, still necessary to read the axis legends and other information of value to the reader. Some of the worst drawings are produced on those ubiquitous dotmatrix printers, often with a ribbon that is long past its useful life; they are readable on A4 (foolscap) paper, even with 0.1" lettering, but completely useless when reduced for printing. Do number the figures, otherwise the referee will return the paper with little in the way of helpful comment.

Photographs too are very helpful to the reader. If they are to be reproduced well they should have good contrast and preferably be printed on glossy paper. Resist the temptation to include attractive blondes in the picture; their rightful place is in "Playboy", not as a distraction from your elegant engineering masterpiece. They too (not the blondes) will be reduced for reproduction. Concentrate the picture on the essential part of your apparatus.

Graphs are unavoidable and a great aid to understanding, but do treat them with care. That "curve" in which all the points lie precisely on the same straight line, arouses the utmost suspicion in the editorial mind. Was the instrument of sufficient precision to reveal departures from this ideal line? - an instrument in which the overall linearity is ideal is very much a rarity. More convincing in this case would be a regression equation with its associated measure of variance; if the device is really as accurate as your curve would suggest then a few words are sufficient to tell the reader so.

Layout.

The "Notes for Authors" will almost certainly ask you to type your manuscript on one side of the paper in double spacing with wide margins. The reason is that on the complicated journey through which your paper passes on its way to publication, it is necessary for the editor, the referees, the sub-editor and typesetter to write corrections or instructions between the lines or in the margins. It is nearly impossible to edit a single-spaced manuscript; the paper will almost certainly be returned without its being read seriously.

References

Not all journals use the same conventions for the Bibliography or List of References, the two most common are Author, Name & Year - in alphabetical order at the end of the manuscript; and Superscripts - in numerical order from the beginning to the end of the paper. To change from one system to the other presents a considerable problem, since a part of the paper has almost to be rewritten. The "Notes for Authors" will tell you which system is in use by your chosen journal. The idea behind a reference is that it

saves space in the paper and the reader can obtain the full document to which you refer, from any reasonable scientific library. It is therefore essential that you quote only those journals that are held in the libraries of Universities and other professional Institutions. "Journal of Saharan Sports Medicine", or even worse "J.Sah-Sp.Med.", will not do. Quoting Conference Proceedings is not generally satisfactory, since such proceedings are rarely held in libraries and are for all practical purposes not available. "Private Communication" references are unacceptable. You should always give sufficient detail for the reader to purchase the publication or find it in a library; reference to a PhD or other Thesis must give the University and its Address. If the information in a difficult-to-find reference is essential to the development of your argument then summarise the key points in the paper itself or in an appendix.

Mathematics

The joy which formulae give to mathematicians is not always shared by those who wish to make some practical use of your results. There are, too, authors who believe that a page of formulae lends an air of scientific erudition to the paper; that is untrue and with only a modest editorial competence the deception is easily unmasked. Mathematics are essential to the development of a theory, but nothing deters the interested reader more effectively than a page of unrelieved formulae.

The pinnacle of your mathematical development is an equation; use it in the body of the paper but don't forget to define the symbols; the proof should be in the Appendix, so that those wanting to verify your work can do so without difficulty. Never say of a formula "the proof of formula is left as an exercise for the reader"; the reader is not going to make the slightest effort to take that exercise.

Never write "It has been shown that..."; if it has been shown then add a respectable reference to who did it, where and when; should it be necessary but you can find no reference then you must prove it yourself, in an Appendix. If you cannot suggest a practical outcome for your formulae then very few readers will take an interest in a paper which, in essence, is little more than an intellectual exercise. Consider the engineer who has persuaded a surgeon to donate a selection of kidney stones from recent surgery. It is not difficult to make a legion of physical measurements on his specimens: size, weight, centre of gravity, resistivity, and so on - but to what end? You must provide good arguments to illustrate the actual or potential benefits conferred upon society by your work.

Statistics

There can surely be no other "exact" science which is so neglected or so abused. It is recognised that in all branches of science, measurements are subject to "errors" or "variability", but all too often nothing is done to invoke the one science which could assess and use profitably those variable measurements. You may with great precision measure the heights of 1,000 Japanese men and 1,000 Norwegian men, and with impeccable arithmetic accuracy produce a "mean" value for the height of each group. That the two means are different gives you no right whatever, politicians excepted, to assert that the male populations of Japan and Norway are different in height; that assertion can be upheld only with a knowledge of the variability of your measurements (in the simplest terms the standard

deviation) and the results expressed as a probability that the two populations are different.

Engineers, and others, have a great love of the "Power Spectral Density" and will cheerfully produce two graphs of frequency vs. power, which they will then go on to claim are "clearly" different. Certainly the pictures are different, but that difference does not constitute evidence that the two processes represented by the two spectra are in any way different; again a probability (much more difficult this time) and a statistical test of significance are required.


There are times when one might question the value of all those statistical packages for computers, accompanied by their deceptively simple recipe book. The value of statistics is dependent on knowing which statistical process to use under the conditions of your experiment, or perhaps more correctly, how to conduct your experiment so as to extract information, the validity of which can be supported by statistical evidence. There is no such thing as statistical **proof**, only statistical evidence. Time spent, before and after the experiments, in the company of a professional statistician will not be wasted.

British and American English

We are all perhaps, witnesses to the early stages in the development of a new language, American English, a development which brings with it no little difficulty for those who write for, or edit and publish English-language Journals. It has to be accepted that for the scientific community, some form of English is essential, but great care is necessary to avoid ambiguity when the transatlantic meaning of words has undergone changes; "momentarily" and "presently" for example have almost exactly opposite meanings in British and American English. Jargon and colloquial phrases are even more difficult to deal with, a problem which is exacerbated by the almost complete absence of a grammatical structure in the scientific community's use of the United States version. Perhaps future languages will follow this distressing trend towards unjustified euphemisms, pointless acronyms and a total lack of respect for grammatical form. The new simplified version of English - "Me Tarzan you Jane" and the new simplified tertiary counting system - "one two plenty".


Many European scientists have spent long periods in the United States and return with the American English language modified by a "translation" based upon European grammatical usage. The one characteristic of the transatlantic language which is best avoided altogether is the excessive verbosity introduced by the desire for euphemistic expression. The Chrysler Corporation in Wisconsin, "downsized" one of its factories and "initiated a career alternative enhancement Program"; English would have preferred "parts of the factory were closed and some workers

It should not be imagined that the English professions are drawn entirely from those whose English writing is beyond criticism; or that editors are endowed with something akin to papal infallibility. Doubtless new versions of the English language will arise, but like professional translators, an English editor is competent to write only in his mother tongue; but he may need to translate from one version of English into the "original"; it is, however, to be hoped that in so doing he will not add too many bricks to the scientific Tower of Babel.



IMPERIAL COLLEGE

of Science, Technology and Medicine
University of London



Microsystems Technology

25 - 29 September 1995

An EPSRC Short Course Module

An inter-disciplinary programme covering the science, technology and application of microsystems - i.e. sensors, actuators and other 3D-structures of emerging importance. Topics covered will include materials, fabrication, devices and applications. Presented by leading academics from Imperial College active in microsystems research programmes, together with external experts. It will include lectures, course and project work. It will be of relevant to physicists, materials scientists and electrical engineers wishing to obtain an understanding of the principles and application of Microsystems Technology.


Intelligent Electricity Supply Systems

25 - 29 September 1995

A 5-day course for electricity supply system managers, planners, operations and research staff, consultants and academics wishing to update and expand their expertise and obtain a state-of-the-art appreciation of all aspects of the modern intelligent electricity supply system. Topics covered include generation, transmission, distribution, utilisation, management and will encompass planning, operational and economic aspects. Presented by leading experts from the Electrical & Electronic Engineering Department of Imperial College together with speakers from industry.

Both courses are recognised by IEE for Professional Development Units.

Further details from:
Sally Verkaik, Continuing Education Centre, Imperial College, Room 558 Sheffield Building, Exhibition Road, South Kensington, London SW7 2AZ, UK.
Tel: +44 (0)171 594 6882/1 Fax: +44 (0)171 594 6883
E-Mail: cpd@ic.ac.uk



Russia

By Dr. Henrich Lantsberg

Prof. Yuril Gulyaev 1995 Academy of Sciences Award

Prof. Yuri Gulyaev, Director of the Institute of Radioengineering & Electronics of the Russian Academy of Sciences, President of the Russian Popov Society for Radioengineering, Electronics & Communications, and chairman of the IEEE Russia Section, received the A.S. Popov Gold Medal on May 4, 1995 during the International Conference "The Centenary of the Beginning of the Application of Electromagnetic Waves For the Transmission of Information: the Birth of Modern Radiocommunication". The event also commemorated the 50th anniversary of the formation of the Russian Popov Society. Prof. Gulyaev was welcomed by the IEEE President Prof. James T. Cain - head of the IEEE delegation and Prof. Peer M. Larsen, Director of Region 8. This event attracted an attendance of over forty members and colleagues.

Prof. Yuri Gulyaev, a well known Russian scientist was cited 'for his outstanding contribution in developing the world and Russian radioengineering, electronics and communications'. The award is given every five years to an individual in recognition of "a contribution of far-reaching significance in radioelectronics." It was named after a Russian physicist and electrical engineer who in May 1895 demonstrated a device for receiving electromagnetic waves from a distance.

Entrepreneurs' Problems in Russia

This International Symposium, held in Moscow on May 6th dealt with young companies in electronics, computers and the information market; practical experience was discussed and useful lessons learned. It should be stressed that this symposium was initiated by the IEEE Russia Section and the Russia Chapter of the Professional Communication Society; it was organized in cooperation with the Russian Popov Society and the International Centre for Scientific & Technical information. The idea of convening the symposium was supported by President Prof. J.T. Cain and Past President T. Nagle, and approved by the Board of Directors. The purpose of the symposium was to introduce Russian colleagues to the experience of starting their own companies. Case studies by successful entrepreneurs were presented from the USA as well as from Russia. The organizers of the event paid special attention to the symposium because problems of small businesses are very important for Russia.

The symposium, chaired by Dr. T. Hissey - IEEE Executive director and Dr. Henrich Lantsberg - member of the Russian Popov Society Board, vice-chairman of the Russia section and chairman of PCS Russia chapter, was attended by Russian specialists, engineers and managers. The conference participants, and speakers from Russia and USA, discussed the problems facing Russian entrepreneurs in the market economy policy. The USA speakers shared with the audience their experience in developing small business.

Section Vice-chairman: Dr. Henrich Lantsberg, 8 Bolshaya Dorogomiklofskaya, Apt 86, Moscow 121059 Russia. Tel: +7 095 203 8414.
Fax: +7 095 203 4985. E-mail: hlants@ire.uucp.free.ne

London, England

13-14 September 1995

Non-Stationary Signal Analysis

COMETT course on time-frequency methods and applications

Prof. L. De Wolf, Groep Institute of Technology, Leuven, Belgium
Tel: + 32 16 23 08 50. Fax: + 32 1 6 22 83 43

The News

From Region 8 News

Circulation

If the folks in Piscataway are to be believed, a count of all heads in the Region would reveal a "membership" of some 45,000; however the number of genuine paid up members, i.e. excluding Associates and the like, is in the region of 30,000. The reason for this statistical estimate rather than the certainty beloved of mathematicians, is that the Institute's new database, which was conceived some three years ago in the expectation of a short gestation period, is still in the hands of the gynaecologists; it looks as if it will be a difficult pregnancy.

Apart from the members of Region 8, R8News is distributed to about 150 members of the Institute in Piscataway, to the Directors of all Regions and to certain public libraries, e.g. the Science Museum library in Munich, the UK central science library and several European National Societies.

Articles for Region 8 News.

Anyone may write for R8News, its pages are not reserved for members of the Regional Committee. Particularly welcome are "Letters to the Editor"; suggestions and critical comment are a valuable means of bringing your views to the notice of more than 30,000 scientists and engineers, from the IEEE board room seniors to the most junior of "scientific apprentices". Help in the writing of articles is always available.

There is no exclusion zone around the American Continent. Most of the Region's members know very little of the way in which the Institute's functions are organised or what purpose its numerous committees serve. It would be helpful if we, immersed in our cultural antiquity, could be persuaded of the value of these modern committees and learn something of the practical ways in which they operate to the benefit of distant members.

How to submit your manuscript

These are the media which may be used to submit "copy" - i.e. articles - to R8 News. E-mail will be added when I have learned how to use it.

1. Typewritten sheets: please use a new ribbon, single or double spacing are equally acceptable since an electronic scanner will be used to read and translate either spacing into computer acceptable characters, so that they may be displayed on the screen for editing and layout.

2. Fax Transmission: the quality of a fax page is very variable and although the scanner includes an "interpreter" which attempts to make up for transmission defects, good quality received copy is best obtained by transmitting a page on the **fine** setting. If handwritten comments are written on the fax sheet, please use upper or lowercase letters and a black pen - handwriting makes life very difficult for the editor.

3. Discs - 3 1/2" or 5 1/4": It is not essential but it does help if you use a label and write the name of the text file, the programme used to record on the disc, and the source, e.g. Ruritania Section. The following formats are acceptable:

Word star (.doc)	Rich Text Format (.rtf)
Word Perfect 5 (.doc)	Microsoft Works (.wps)
Word Perfect 4 (.doc)	Dos Text (.txt)
Word for Windows (.doc)	DCA/RFT (.rft)
Word for DOS (.doc)	ASCII Text (.txt)
Windows Write (.wri)	1st Word Plus (.doc)

Forthcoming Attractions

E-mail: The R8News E-mail address will be published in the November issue.

Also in the next issue we shall discuss advertising and insert services available from Region 8 News

"Communication Networks"

Continued Education Program - September 1995 - March 1996



Courses organized by the Swiss Federal Institute of Technology in Lausanne, Switzerland
in cooperation with IEEE Switzerland and SIA/GSC - SIA/FGK

5 - 8 Sept. 1995 - Module M2 Broadband Network Technologies : <ul style="list-style-type: none"> • ATM in public and corporate networks, SONET/SDH, ABR; • alternatives to ATM for LAN and WAN; • CATV network evolution; • optical networks. 	Lecturers: Prof. J.-Y. Le Boudec - Y. Despond - Prof. P.- G. Fontollet - M. Goud - S. Manthorpe, EPFL, Switzerland J. Armitage, Photonic Networks, BT Labs, UK W. Denzel, IBM Zurich Research Lab, Switzerland Prof. P. L. Heinzmann, ITR, Computernetwork Lab, Switzerland R. Oechsle, Fachhochschule Trier, Germany D. Pitt, Hewlett Packard Laboratories, USA
11 - 13 Sept. 1995 - Module M3 Distributed Systems: <ul style="list-style-type: none"> • High performance, distributed computing; • Distributed File Systems; • Large distributed system case study. 	Lecturers: Prof. C. Petitpierre, Prof. A. Schiper, EPFL, Switzerland Farhad Ghavami, Digital, Switzerland Lori Grob, Chorus Systems, France Mark Madsen, APM, UK
14 - 15 Sept. 1995 - Module M4 Network Planning and Performance Analysis: <ul style="list-style-type: none"> • Networks Planning methods and tools; • Network Performance Analysis. 	Lecturers: Prof. J.-Y. Le Boudec - S. Robert, EPFL, Switzerland Dr. R. Gruenenfelder, Alcatel STR, Switzerland Prof. R. Marie, IRISA, France Prof. J. Walrand, University of California, Berkeley, USA
19 - 21 Sept. 1995 - Module M5 Communication Services Engineering: <ul style="list-style-type: none"> • Service creation concepts, engineering and validation; • Intelligent networks, virtual private networks; • Intelligent Agent technologies. 	Lecturers: Prof. J.-P. Hubaux - P.-A. Etique, J.-P. Gaspoz - Dr S. Znaty, EPFL, Switzerland Dr Colin Harrison, IBM Watson, USA Dr Y. J. Lin, Bellcore, USA
12 - 13 Oct. 1995 - Module M6 Network Management: <ul style="list-style-type: none"> • Network Management concepts and protocols; • SNMP, CMIP/CMIS, MIB; • Network Management Tools. 	Lecturers: Prof. J.-P. Hubaux, EPFL Switzerland Prof. J. Labetoulle, Institut Eurécom, France Prof. T. Saydam, University of Delaware, USA
17 - 20 Oct. 1995 - Module M7 Communication Software Engineering: <ul style="list-style-type: none"> • Methods for communication software; specification and validation (SDL, Spin, Random Walk); • Object Oriented protocol and application design; • tools 	Lecturers: Prof. C. Petitpierre - Dr T. Cattel - G. Eckert - C. Sprenger, EPFL, Switzerland Prof. Dr. D. Hogrefe, Berne University, Switzerland Dr C. West, IBM Research Center, Switzerland
28 Feb. - 01 March 1996 - Module M8 Network Security: <ul style="list-style-type: none"> • How secure is my network? • Security services, protocols and methods. 	05 - 08 March 1996 - Module M9 Mobility, Wireless Access and Satellite <ul style="list-style-type: none"> • Ubiquitous access to corporate network; • Cellular networks, wireless LANs; • Satellite links for fixed and mobile services.

Registration fees in Swiss Francs:

M4, M6 : Sfr. 1'000.-- for one module
M3, M5, M8 : Sfr. 1'300.-- for one module
M2, M7, M9 : Sfr. 1'500.-- for one module

Deadline for registration:

Modules 2 to 5: 31 July 1995
Modules 6 and 7: 15 Sept. 1995
Module 8 to 10: 15 January 1996

Secretariat: EPFL - Secrétariat, CPIT- IN Ecublens, CH- 1015 Lausanne
Tel.: +41 (0)21 693 42 39 - Fax: +41 (0)21 693 39 09 - Email:cpit@di.epfl.ch

Web: <http://diwww.epfl.ch/>
go to "Autre formation, postformation".

Discount for registration to several modules:

2 modules : 20% - 3 modules : 30%
4 modules : 40% - 5 modules or more : 50%

Organization Committee:

Prof. J.-Y. Le Boudec (director of the course)
Prof. C. Petitpierre, Prof. J.-P. Hubaux (EPFL)
Dr. G. Conti (SGS)

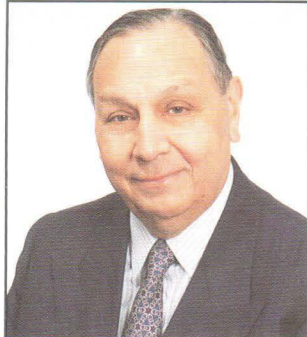
DIRECTOR ELECT 1996

Candidates' Policy Statements

Mr. Maurice Papo

During the past ten years, Region 8 has more than doubled its membership, while the U.S. has grown by only 14%; the Region's student membership, which represents the future on which the IEEE must build, increased by more than 120% in Region 8 while the U.S. student membership decreased by over 26%. This means that the first letter of IEEE will more and more imply "International"; the Region will therefore play an increasingly significant part in the Institute's world wide role.

I have been fortunate in my 35 years of a professional career, to gain International experience in Research, Development and Standards; in addition I have served on University Scientific Boards and taken part in cooperative programmes between Industry and academia. This experience matches almost exactly the areas of excellence in which I believe the IEEE should further develop its international reputation.



If elected, I shall put this experience at the service of Region 8:

1) to encourage an increasingly active participation in both the affairs of the Region and in the enhancement of the scientific and engineering image of the Institute and its Sections.

2) to help the sections improve their relationship with industry

3) to help the sections by promoting an active cooperation and partnership with national organisations.

Dr. Jacob Baal-Schem

I have served Region 8 for eighteen years, as Chapter Chair, Section Chair, Regional Conference Coordinator and Communications Society Chapters Coordinator. Working with nine excellent Regional Directors, I have gathered experience and a fair knowledge of the needs of members.



As a native of Belgium, and having lived in France and Switzerland, I have good contacts with members in the Region. During Eurocons, Melecons, Africons, and other Conferences, from Oslo to Moscow and from Lisbon to Mbabane, I have met many of you and learned of your problems.

I intend specifically to address the needs of members in Region 8, such as the timely delivery of Periodicals and responsive membership services. IEEE Members in Region 8 should be able to join financial programmes available to US members, IEEE should put more effort into making its technical activities truly international, in good harmony with national societies. Being active in the IEEE Technical Meetings Committee and Regional Conferences Committee I am confident that I shall be able to initiate changes. During my term as Regional Director my aim will be to put at your service, my managerial and technical experience, and my intimate knowledge of the IEEE and Region 8.

Call for Authors

Artech House is a leading publisher of books, software, and video training courses in telecommunications, optoelectronics, microwave, radar, digital networking, mobile communications, intelligent transport systems, and solid state technologies.

We are currently expanding our publishing programmes in these areas and are seeking potential book authors among engineers who feel they can make a valuable contribution to the literature in their areas of expertise. Our objective is to publish high-quality works that help engineers to solve real-world problems.

We invite you to submit your manuscript proposal and outline for review. We are especially keen to hear from engineers who are developing innovative software programs.

If you would like to discuss your publishing ideas, or for an Author's Questionnaire and complete publications catalogue, please contact:

Dr. Julie Lancashire
Commissioning Editor

Artech House Books
Portland House, Stag Place
London SW1E 5XA
Tel: +44 (0)71 973 8077
Fax: +44 (0)71 630 0166
email: julie@artech.demon.co.uk

AH Artech House Books BOSTON • LONDON

FINLAND

By Tero Ojanperä

Two new chapters have been established:

Communications

For details contact Prof. Savo Glisic Tel: +358-81-5532852

E-mail: savo.glisic@ee-oulu-fi

Electron Devices

For details contact Dr. Ari-Sihvola. Tel. +358-0 451 2261

E-mail: ari.sihvola@hut.fi

New bylaws for the Finland Section have been approved; they will be valid from 1st Jan 1996 onwards.

Forthcoming Events in August 1995

OTANIEMI: 8th at 10 am, Lecture room S1
"Signal flow tools for design-oriented analysis"

OTANIEMI: 10th at 10 am. Lecture room S1
"Broadband analogue integrated circuits".

OTANIEMI: 11th at 11 am, Lecture Room S1
"An attempt to motivate Electrical Engineering Underclassmen"

TAMPERE: 14th at 10-12 am, Lecture room HB116
"Broadband analog integrated circuits"

OULU, 15th at 13-14 pm, Lecture Room YB210
"Broadband analogue integrated circuits"

Section Chairman: Mr. Jorma O. Lilleberg, Mustaherukkati 1A
Oulu 90100, Finland. Tel: +358 10 505 6139.
Fax: +358 10 505 6667. E-mail: jorma.lilleberg@nmp.nokia.fi

An IEEE International Conference on
PERSONAL WIRELESS COMMUNICATIONS

February 19-21, 1996 - Delhi, India

IEEE Region 10, IEEE India Council, IEEE AES/Com/Leo, India Council Chapter and IETE (India)

- Rural Radio Systems
- Private Land Mobile Radio
- Mobile Data
- Standards affecting new services
- Emergency Location Technology

- Wireless LANs
- Wireless Solutions for Developing Countries
- Marine Communications
- Third Generation Wireless Systems
- Industrial Wireless Applications

*Please submit a 400-500 word summary by October 31st 1995 to the Technical Program
Chairman (E-mail submissions are preferred).*

Dr. Vijay Bhargava, University of Victoria, PO Box 3055, MS8610, Victoria, BC, Canada V8W 3P6
Tel: +1 604 721 8617. Fax: +1 604 721 6048. E-mail: bhargava@sirius.uvic.ca

Information about the Conference, including a Provisional Programme, may be obtained from:
Mr. Harbans L Bajaj, 145 Madan Lal Block, Asian Games Village, New Delhi 110 049 INDIA.
Tel: +91 11 89 36137. Fax: +91 11 89 36172.
Dr. V. Prasad Kodali, CII/78 Bapa Nagar, Zakir Hussain Marg, New Delhi, 110 003 INDIA.
Tel: +91 11 436 3079. Fax: +91 11 436 3079. E-mail: p.kodali@ieee.org

Germany

By Prof Dr. E. Handschin

The executive committee of the German Section held its 8th meeting on May 31, in Frankfurt; the meeting was chaired by Prof. Dr.A.Schwab. In addition to organisational problems the executive committee discussed forthcoming IEEE conferences. Of particular interest is the IEEE Power Engineering Summer Meeting which takes place in Berlin in July 1997; the preparation of this important conference is very much supported by a local organising committee in Berlin. Since the PES summer meeting will take place in cooperation with VDE (German Electrical Engineering Association) the preparation also is supported by VDE. The power engineering society within VDE (ETG) will organize a power engineering meeting; a common panel session IEEE-PES and VDE-ETG is planned. The joint meeting will be the first of its kind. All members are invited to support the organising committee so as to attract a sufficiently large number of participants.

The prestigious Heinrich Hertz Award and Medal has been sponsored for many years by ABB Germany, but since ABB has now terminated its activities in the area of antennas a new sponsor had to be found. The German Chapter is pleased to announce that the German Telecom has agreed to support the medal in the future. This year the medal will be awarded to Prof. Njean van Bladel, professor of electromagnetism and acoustics at the University of Gent. The German Chapter congratulates Professor van Bladel.

There are now eight chapters in the German Section: interested members should contact the Section Chairman Prof Schwab. No final decision has been taken in connection with the application for the two new Chapters.

Computer:

Mr. Kuehler 06106-638 222 - Rodgau - Juegesheim

Information Theory:

Prof. Vinck 0201-320 6450 - Essen

Electromagnetic Compatibility:

Dr. Sturm 05191-5959 Soltau

Microwave Theory & Techniques - Antennas & Propagation:

Prof. Arndt 0421-218 2495 Bremen

Circuits & Systems:

Prof. Nossek 089-2105-8502 Munchen

Electron Devices:

Prof. Heime 0241-80 7746 Aachen

Power Engineering:

Prof. Denzel 02234-85 2340 Pulheim

Engineering in Medicine

Vacant

Two new chapters are under consideration.

**Components Packing Manufacturing Society
Communication Society.**

The student branches within the German Section are successfully managed by Prof. Hahn, University of Passau. Special attention should be given to student members after they have finished their studies; additional information is then required in order to show them the importance of IEEE membership after their graduation.

In view of the next German Section election, members are kindly invited to nominate possible candidates for chairman and treasurer. Nominations should be sent to the secretary Dr.-Ing. V. Schanz, c/o VDE Stresemannallee 15, 60596 Frankfurt.

*Section Chairman: Prof.Dr.Ing. Adolf J. Schwab, Kaiserstrasse 12,
76128 Karlsruhe, Germany. Tel:+49 721 608 25 20.*

Fax: +49 721 69 52 24. E-mail a.schwab@ieee.Org

London, England

November 1996

Globecom '96

INTERNATIONAL COMMUNICATIONS

Dr. Geoff Richman, BT Laboratories, MLB4/55c, Martlesham Heath,
Ipswich Suffolk, England IP5 7RE. Tel: +44 1473 642 162
Fax: +44 1473 637 696. E-mail: richman.g.d@bt-web.bt.co.uk

Intensive IEE Approved Courses

presented by
Professor A H Aghvami

Digital Satellite Communication Systems

6 - 8 September 1995

A course enabling professionals involved in the planning, implementation, procurement and operation of satellite communication to acquire a comprehensive knowledge of all technical aspects of satellite systems

Global System for Mobile Communications

12 September 1995

This course provides participants with a comprehensive knowledge of all technical aspects, operations and applications of the GSM and DCS-1800 systems

Digital Radio Communication Systems

9 - 11 October 1995

An advanced digital radio communication systems course for those already familiar with basic analogue transmission techniques

Details from: Continuing Education Unit, King's College London,
Cornwall House, Waterloo Road, London SE1 8WA
Tel: 0171-872 3056/5 Fax: 0171-872 3070

U.K.R.I

Communications Chapter

By Dr. Trevor Clarkson

Globecom '96

This major international communications conference, sponsored by the Communications Society, is being held for the first time in London, at the Queen Elizabeth II Conference Centre, Westminster - November 1996. London has many tourist attractions such as theatres, museums, parks and historic buildings. Opposite the QEIIICC is Westminster Abbey with the Houses of Parliament, Whitehall, Trafalgar Square, Buckingham Palace and St James Park all within close walking distance. London also offers excellent shopping facilities in areas such as Oxford Street and Regent Street. The Call for Papers is available and the submission deadline is 1st March 1996. Specially discounted fares for Globecom 96 delegates are available from British Airways. Please see the WWW page <http://crg.eee.kcl.ac.uk/gc96.html> for more details, or contact Geoff Richman (Globecom '96 Conference Secretary), BT Laboratories, MLB4/55c, Martlesham Heath, Ipswich, Suffolk, England, IP5 7RE. Tel: +44 1473 642162, Fax: +44 1473 637696, e-mail: richman_g_d@bt-web.bt.co.uk.

NeuroFuzzy '96

From 16-18 April 1996, in Prague, Czech Republic This workshop is sponsored by the UKRI Neural Networks Regional Interest Group and other IEEE societies. It addresses the theory, practice and application of neural networks and fuzzy logic techniques to the building of intelligent systems. Prague, lying almost exactly in the centre of Europe has very good international connections, the international airport of Prague being only 15 km from the centre of the city; which has some 1,200,000 inhabitants and a great deal of history and culture. There are good railway and road connections to Prague (the

distance from Munich, Vienna, Berlin and Nuerenberg is about 300 km). A call for papers is available and submissions are due before 6th November 1995. For further details see WWW URL <http://crg.eee.kcl.ac.uk/rig/neurofuz.html>, or contact the Communication Chairman.

Communications Chapter chairman: Dr. Trevor Clarkson (tgc@kcl.ac.uk) at King's College London, Department of Electronic and Electrical Engineering, Strand, London WC2R 2LS. Tel: +44 171 873 2367, Fax: +44 171 836 4781.

Saudi Arabia - Western Region

By Dr. Hafidh Al-Samarrai

The Section has several projects in its programme, a major component of which is the effort to form a Subsection in Jordan to link all the members of Jordan to the Western Region Section. The Section's vice-chairman, Dr. Hafidh Al-Samarrai has visited Jordan in order to exchange views with Jordanian members. Both sides are exchanging views on possible routes on the way to cooperation, in order to serve best the interests of the members. If this link can be consolidated it is expected that there will be annual visits between the two sides. The activities of the Section include several seminars and a programme to attract new members.

The Section plans to organise an international multi-topic symposium in mid 1997 for which a request was made to provide assistance and guidance during the Regional committee meeting held in Dublin on 19-21st May 1995.

Section Chairman: Dr. Mohamed A.J. Turki, PO Box 9897, Jeddah 214232, Saudi Arabia. Tel: +966 2665 1686. Fax: +966 2669 0256



Université Catholique de Louvain Louvain-la-Neuve, Belgium

The Department of Electrical Engineering at UCL invites applications for a full-time tenure-track faculty position in the general field of digital signal processing with particular interests in **telecommunications and information processing**.

The candidate shall demonstrate skills to undertake and manage high level research programs and teams and be able to integrate his research activities in the framework of existing collaborations inside as well as outside the Department. He shall participate in teaching and educational duties of it, hence fluency in French is required. Applicants should possess a doctorate in engineering and prove significant theoretical and practical experience in the field of signal processing.

Anticipated starting date of employment is October 1, 1996. Applications should include complete resume, certified copies of earned diplomas, a bibliographic list, copies of the five most significant publications and the names, addresses and phone number of at least four references, among which two outside Belgium. A scientific stay abroad or a significant experience outside UCL is strongly recommended.

To receive full consideration, application materials must be received by the Vice-Chancellor, Place de l'Université, 1, at B-1348 Louvain-la-Neuve, Belgium not later than March 1, 1996.

More information about the position can be obtained from the Dean of the Faculty of Engineering (Rue Archimède, 1, B-1348 Louvain-la-Neuve, Belgium).

U. K. R. I.

MTT/ED/AP/LEO Joint Chapter

By Mr. Terry H. Oxley

Seventeen Chapter activities have been planned for 1995. The evening lecture series is an important feature of Chapter activities and overseas speakers are particularly welcome. This year, the Chapter is very pleased to welcome to its 1995 lecture programme, Daniel Swanson from Watkins-Johnson USA, who will give a lecture on "Microstrip Filter Division using Electromagnetics".

As a direct descendant of the well known Military Microwaves Conference and Exhibition, last year's 1994 Microwaves Conference has been broadened in order to embrace the RF spectrum and will be held annually from October 10-12 1995 as: "Microwaves and RF (MRf'95) Conference and Exhibition". Last year (1994), the technical programme of the successful associated Joint European MTT Chapter workshop on "CAE, Modelling & Measurement Verification" was organised by the MTT/ED/AP Chapter. This year (1995) the IEEE UKRI MTT/ED/AP/LEO Chapter and the national IEE PGE12 are cooperating on the technical programme for the MRf'95 associated workshop on "RF & Microwave ICs: the technology battlefield".

By courtesy of the exhibition organisers, the MTT/ED/AP/LEO Chapter is planning to have a membership booth at the exhibition.

Attention is also drawn to IEEE and national IEE cooperation in presenting three consecutive Microwave/Optoelectronic one-day events in London.

On Monday 27th November 1995, the workshop "Electron Devices for microwave & optoelectronic Applications" (EDMO'95), follows the success of the previous events in 1993/94 and discusses advances in semiconductor microwave & optoelectronic devices. The event also welcomes the technical co-sponsorship from the ED-Society and the cooperative support of the MTT & LEO Societies.

On the following day Tuesday 28th November, a tutorial colloquium on "MMIC design" follows last year's success but focuses this year on actual circuit design and layout.

Finally, on Wednesday 29th November, a new workshop on Microwave & Millimeter Wave Communications (M3COM), examines the "wireless revolution", often cited as the major new civil growth area for microwave/optoelectronic engineers as the military needs reduce.

For further information please contact the Chapter Chairman: Mr Terry H Oxley, "Tremont", Back Lane, Halam, Southwell, Newark, Notts NG22 8AG England. Tel: +44 1636-815510.
Fax: +44 1636-815865

Officers of the Region 8 Committee

Chairman: Prof. Peer Martin Larsen
Power Engineering Dept
Tech University Denmark, Bygn 325,r130
DK-1200 Lyngby, Denmark

Tel: +45 45 88 61 11
Fax: +45 45 25 35 24
E-mail: p.larsen@ieee.org

Past Director: Prof. Charles W. Turner
Electrical & Electronic Engineering Dept
King's College, Strand
London, England WC2R 2LS

Tel: +44 171 873 2438
Fax: +44 171 836 4781
E-mail: c.turner@ieee.org

Secretary: Mr. Basil W. Osborne
2, Wilnot Cottages
Park Road, Banstead
England SM7 3DH

Tel: +44 1737 356 213
Fax: +44 1737 356 213
E-mail: b.osborne@ieee.org

Treasurer: Dr. Rolf A. Remshardt
Bussardstrasse 28
D-71032 Boeblingen
Germany

Tel: +49 7031 28 05 04
Fax: +49 7031 28 05 04
E-mail: r.remshardt@ieee.org

For Students

By Roman Mittendorfer and Andrej Zemva,

Roman Mittendorfer:

Some months ago my two-year term as Regional Student Representative of Region 8 ended. I should now like to thank all those who helped and supported me with ideas and activities, especially Mr. Dick Poortvliet, the retiring Student Activities Chairman. The position as Student Representative will be taken over by Mr. Andrej Zemva, University Ljubljana, Slovenia. I have very much enjoyed my term of office and I hope that he too will enjoy an equally pleasant period as Student Representative.

Andrej Zemva



I should like to start with my best wishes for my two-year term. Greetings to all our student members and welcome to student members who have recently joined. My predecessor, Roman Mittendorfer, encouraged student branches to set-up an e-mail alias. Due to the further development of information technology, we shall now encourage each student branch to create its own WWW home page. Please contact R8 Student Activities Committee Chairman, Prof. Levent Onural, or me.

Prof. Levent Onural
Electrical and Electronic Eng.
Bilkent University, P.O. Box 2
065772 Maltepe, Ankara, Turkey
Tel: +90 312 2664307
Fax: +90 312 2664126
E-mail: onural@ee.bilkent.edu.tr

Mr. Andrej Zemva
Faculty of Elect & Computer Eng.
University of Ljubljana, Trzaska 25
Ljubljana, Slovenia
Tel: +386 61 1768 351
Fax: +386 61 264 990
E-mail: andrej.zemva@fer.uni-lj.si

University of Rome "La Sapienza"
AEI Associazione Elettrotecnica ed Elettronica Italiana

EMC '96 ROMA

International Symposium on Electromagnetic Compatibility

September 17-20, 1996
Rome, Italy

The deadline for Submission of Papers on all EMC Topics
(Four page summaries) is December 1st 1995.

Best Paper Awards
Workshops, Special Sessions, Tutorials
Technical Exhibition related to EMC
Technical Visits
Social Activities

For details please contact: EMC ROMA Secretariat
Department of Electrical Engineering
University of Rome "La Sapienza"
Via Eudossiana 18, I-00184 Rome, Italy
Tel: +39 6 4458 5809 Fax: +39 6 488 3235
E-mail: emc96rom@elettrica.ing.uniroma1.it

Electronic Engineering

new books from Artech House

Artech House Publishers
Portland House
Stag Place
London SW1E 5XA

Tel. +44 (0) 171 973 8077
Fax +44 (0) 171 630 0166

E-mail.
bookco@artech.
demon.co.uk

RF Design Guide: Systems, Circuits, and Equations

by P. Vizmuller

A comprehensive book which contains measurement methods, system calculations, statistical design procedures, and actual circuit and measurement examples. Electronic Workbook also included!

Hardcover. Approx. 170 pages. May 1995.
Order Book RN754 £75.00

ATM Switching Systems

by T. Chen and S. Liu

A practical new book which encompasses all aspects of switching and network control in the development of an ATM switching model.

Hardcover. 226 pages. 1995
Order Book RN682 £52.00

Passive Optical Components for Optical Fiber Transmission

by N. Kashima

An authoritative book on connection technologies used for both single-mode and multimode fibers. Up-to-date information on fluoride glass fibers, doped fibers (EDFA), and components is provided.

Hardcover. 342 pages. 1995
Order Book RN775 £68.00

Broadband Patch Antennas

by J.F. Zürcher and F. Gardiol

A most comprehensive text providing fingertip access to recent developments in the field of printed antennas, particularly for mobile and indoor communications.

Hardcover. 210 pages. 1995.
Order Book RN777 £49.00



Artech House
Publishers

For a complete Artech
House catalogue, please
call +44(0)171 973 8077

U.K.R.I

Computer Chapter

By Dr. Narayana Jayaram

Close cooperation between the IEE Computing and Control Division, the IEEE Computer Society in general, and the UKRI Computer Chapter in particular, was agreed at a meeting at Savoy Place, London when Ms Laurel Kaleda the 1994 president of the IEEE Computer Society visited the IEE headquarters.

It was also agreed that Dr Mario Barbacci, the 1995 president-elect of the Computer Society, should be invited to deliver the Distinguished Visitor's Lecture at Savoy Place on 13th September 1995, to mark the beginning of the cooperation between these two professional societies.

Dr Mario Barbacci, who has had close research links with the Computing Department of Imperial College, is one of the founder members of the Software Engineering Institute at the Carnegie Mellon University. He is a senior member of staff of the SEI, and a professor in the School of Computer Science at Carnegie Mellon University. He currently chairs the joint IEEE Computer Society and ACM Steering Committee for the establishment of Software Engineering as a Profession. His primary research interests are in the areas of software architecture, distributed systems, programming languages and

environments. He has published extensively in these areas. A fellow of the IEEE and a member of the Computer Society, he is the recipient of several Computer Society Outstanding Contribution Certificates, the ACM Recognition of Service Award and the IFIP Silver Core Award. On 13th September, Dr Barbacci will deliver a lecture on "Software Quality Attributes and Software Architectures". The lecture starts at 5:30 pm. The tea will be served at 5:00pm. All IEE and IEEE Computer Society members are cordially invited to the lecture.

U.K.R.I

By Professor Robert Spence

Chairman ISCAS '94

London's successful ISCAS '94 saw many innovations: one of which emphasised fact that posters are not second class papers; many authors expressed a preference for this method of in-depth discussion. Not surprisingly, their 'customers' also found such presentations an efficient and interesting use of their time.

To encourage good design, ISCAS '94 offered a prize for the best presented poster, thereby creating a difficult judging task for a committee chaired by Dr. Mark Sandler. Congratulations are therefore due to Peter Bowron and Ahmad Muhieddine who were the authors of the winning poster entitled "Analogue Active Filters with Two-tone Large-signal Excitation"



NEW FROM WILEY

■ Practical Data Communications

ROGER FREEMAN, Consultant, Scottsdale, Arizona, USA

Data Communications is the fastest growing segment in telecommunications – particularly due to the ever increasing use of electronic data processing (EDP). *Practical Data Communications* provides telecommunications professionals with a comprehensive tutorial reference to the data communications field. Emphasis is placed on practical applications and detailed drawings illustrate the material discussed. Coverage is given to local and wide-area networks and their protocols and implementations, including IEEE 802, HDLC derivatives, TCP/IP, X.25, frame relay, DQDB and SMDS.

Wiley Series in Telecommunications and Signal Processing

0471 31021 2 due September 1995 656pp approx £49.95

■ Electronic Component Reliability

Fundamentals, Modelling, Evaluation and Assurance

FINN JENSEN, Finn Jensen Reliability Consultancy ApS, Holte, Denmark

Bringing together the latest research and industry experience, this authoritative text details the current approaches to component reliability, evaluation and assurance, and highlights developing techniques. Uniquely, the text looks at both the physics-of-failure of components and the statistical modelling and evaluation of component lifetimes. The book bridges the gap between the current existing approaches to evaluation and the developments and working methods of the next decade.

Wiley Series in Quality and Reliability Engineering

0471 95296 6 due August 1995 approx 344pp approx £39.95

Now in Paperback

■ Reliability of Gallium Arsenide MMICs

EDITED BY ARIS CHRISTOU, CALCE Electronic Packaging Research Centre, University of Maryland, USA

Covering both the electrical and mechanical reliability of MMICs, this comprehensive book, now available in paperback, focuses upon the physical, chemical and electrical mechanisms which cause circuit drift, inaccuracies and degradation of circuit function.

Wiley Series in Design and Measurement in Electronic Engineering

0471 93490 9 (cl) October 1992 £80.00

0471 96161 2 (pb) due July 1995 £29.95

■ ESD In Silicon Integrated Circuits

A. AMERASEKERA and C. DUVVURY, both of Texas Instruments Inc., Dallas, Texas, USA

This comprehensive reference book explains the practical aspects of electrostatic discharge (ESD) and its implications in the design and development of new technologies and integrated circuits. Various case studies are employed to illustrate the effects of different design approaches and the full effectiveness of a protection circuit is realised through stress analysis.

Wiley Series in Design and Measurement in Electronic Engineering

0471 95481 0 due August 1995 approx 216pp approx £45.00

Wiley books are available through major booksellers.

Alternatively, order direct from Wiley (Payment to John Wiley & Sons Ltd). Credit card orders can be accepted by telephone: +44 1243 829121

Prices quoted here apply to UK and Europe only.

JOHN WILEY & SONS LTD
BAFFINS LANE, CHICHESTER,
WEST SUSSEX, PO19 1UD, ENGLAND

Region 8 Conference Record

Trieste, Italy

10-13 September 1996

EUSIPCO '96 - European Association for Signal Processing

VIII European Signal Processing Conference

Prof. G.L. Sicuranza, E-mail: sicuranza@univ.trieste.it
Secretariat: the office Tel: +39 40 368 343. Fax: +39 40 368 808

Braunschweig, Germany

17-20 June 1996

CPEM '96

Precision Electromagnetic Measurements

Contact: Mrs. S. Rost, PTB, 38116 Braunschweig, Germany.
Tel: +49 531 592 2105. Telex: 95 28 22 ptb d
E-mail: erich braun@ptb.de

Arcachon, France

18-22 September 1995

3rd European Symposium - RADECS '95

RADIations and their Effects on Components & Systems

CNES, French Space Agency
Tel: +33 61 27 40 18. Fax: +33 61 28 13 27

Brussels, Belgium.

4-6 June 1996

IMTC/96 - IMEKO TC-7

IEEE Instrumentation & Measurement Technology Conference

Prof. Dr. ir. Leo Van Biesen, Vrije Universiteit Brussel,
Department ELEC, Pleinlaan 2, B-1050 BRUSSELS, BELGIUM.
Tel: +322929 2943. Fax: +322629 2850. E-mail: lvbiesen@vnet.vb.ac.be

Brighton, England

5-7 March 1996

Tenth European

Frequency and Time Forum

Mrs. Louise Hudson, EFTF '96 Secretariat, Savoy Place,
London WC2R 0BL. Tel: +44 171 344 5467. Fax: +44 171 240 8830

Berlin

25-30 March 1996

ICSE 18 - 18th International Conference

SOFTWARE ENGINEERING

Prof. Dr. H. Dieter Rombach, AG Software Engineering
Fachbereich Informatik, Universitat Kaiserslautern
D-67653 Kaiserslautern, Germany.
Tel: +49 631 205 3341 Fax: +49 631 205 3331

University of Bath, England

26-28 Sept. 1995

Sixth International Conference on

Radio Receivers & Associated Systems

Provisional Programme from: RRAS '95 Secretariat,
IEE Conference Services, Savoy Place, London WC2R 0BL
Tel: +44 171 344 5473/5467 Fax: +44 171 240 8830

Milan, Italy

21-23 May 1996

IWMIC '96 International Workshop

Medical Image Compression

Ms. Rosa Lancini, CEFRIEL, Politecnico di Milano, Italy.
Tel: +39 266 100083 Fax: +39 266 100448
E-mail: rosa@mailier.cefriel.it