



NOVEMBER 1984

A CENTURY OF ELECTRICAL PROGRESS

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

THE FOURTH IN A SERIES OF FOUR SPECIAL CENTENNIAL ISSUES

Regional Director: Karsten E. Drangeid IBM Research Laboratory, Saeumerstrasse 4 CH-8803 Rueschlikon, Switzerland Editor: Mr. W. H. Devenish, ERA Technology Ltd., Cleeve Road, Leatherhead, Surrey, England KT22 7SA.
Tel. Leatherhead (0372) 374151
Telex 264045 ERALHD G

# 8th OCTOBER '85 - melecon' 85 - 10th OCTOBER '85

# mediterranean electrotechnical conference, madrid, spain

MELECON '85, the third Mediterranean Electrotechnical Conference will be held in Madrid on October 8, 9, 10, 1985 and will deal with four topics: (A) Bioengineering, (B) Digital Signal Processing, (C) Radiocommunications and (D) Solar Energy, Some topics, for instance, Solar Energy, are of the highest interest for developing populations throughout the World. The aim of the conference is to link Mediterranean Scientists and Engineers working on Electronics and Communications, thus providing an occasion to promote North-South co-operation.

The conference will take place at the Madrid's Palace of Exhibitions and Congresses where the European Security and Co-operation Conference was held in 1981–82 (see picture).

Madrid has four universities which are among the most important in Spain: Polytechnical, Complutense, Autonomous and Alcalá de Henares. Also many Institutes, including those of the Council for Scientific Research are located in the area, as well as industrial laboratories conducting research such as I.T.T., IBM and the Spanish Telephone Company. Visits to these centres can be arranged for people interested in them. Some of the above are sponsoring the conference as are some official centres, including the Ministry of Education and the Ministry of Industry and Energy. The Mayor of Madrid will provide his traditional hospitality to conference attendants.

Tours of neighbouring cities and towns like Segovia, Toledo, Avila and El Escorial will be planned and are recommended.

There will be poster and oral sessions and we intend to offer tutorials given by the best specialists in each field. Seminars are also planned for the day before and the day after the conference.

We hope that people attending the conference from the Northern and



Palace of Exhibitions and Congresses, Madrid, Spain.

Southern Mediterranean will find themselves at home and will contribute to a better knowledge of the technologies being developed around the Mediterranean basin.

For information write to: Melecon '85 – Prof. Antonio Luque, Instituto de Energia Solar, E.T.S.I. Telecomunicación, UPM, Ciudad Universitaria, 28040-Madrid, Spain.

### SPEAKER'S CORNER

Whenever IEEE members gather in large numbers – as they did during the many Centennial Celebrations – ideas are often put forward informally by members with no direct access to the Region 8 committee. Unfortunately these ideas often get forgotten and are never raised again. Starting with next February's issue there will be a regular column

in this newsletter especially for these ideas. Contributions are invited (not more than 600 words) on any topics of interest to IEEE members. The deadline for each issue is the first of the month preceding the month of issue – e.g. the deadline for next February is January 1st.

### STUDENT NEWS

The 1984 Student Paper Contest was held in conjunction with EUROCON '84 in Brighton, England. A total of five papers were selected for presentation all of which came from the mainland of Europe – Belgium, Finland, Spain, Switzerland and The Netherlands.

### First Prize

Etienne Denoil/Jean Philippe Solvay of the Université Catholique de Louvain, Belgium for a paper on 'Speech Linear Prediction Using a Least Absolute Value Criterion'.

### Second Prize:

Martin Frick/Conradin V. Gugleberg – presented by Werner Utinger of the Swiss Federal Institute of Technology for a paper on 'Computer Aided Design for the Manufacture of Printed Circuit Boards'.

# Third Prize:

Aarne Rantala of the Helsinki University of Technology, Finland for a paper on 'Digital Image Processing Applied to Traffic Surveillance'.

### 'POTENTIALS'

The policy of the IEEE Student Journal 'POTENTIALS' has recently been changed to become transnational with an Editorial Board including a representative of every Region outside the U.S. as a corresponding member.

During the next few weeks all Region 8 students will be sent a complimentary copy with an accompanying questionnaire asking whether they would like to receive it in future.

# REPORT FROM THE REGIONAL DIRECTOR



Karsten E. Drangeid
Director Region 8 1983-84

As I am now nearing the end of my twoyear period this is my last report as Region 8 Director.

Since the last newsletter a number of events have taken place: EUROCON '84 was held at Brighton, England followed by the Region 8 committee meeting in London. Three other events were also held in London: the joint EUREL and IEEE Executive Committee Meeting; the UKRI Section dinner for EUREL, IEEE Executive Committee and Region 8 Committee; and the IEEE Centennial lecture and dinner hosted by the IEE. The presence of President Gowan, the senior Officers, General Manager Eric Hertz and senior staff made all of these memorable occasions.

Unfortunately, EUROCON '84 attracted far fewer registrations than were expected – 215 compared with over 600 – and we are investigating the reasons for this low level of interest in order to ensure higher registrations for the next two conferences, MELECON '85 in Madrid and EUROCON '86 in Paris. The good news is that other conferences in our Region were more successful, INTERMAG in Hamburg had 1100 participants and ICC in Amsterdam 1200, which shows that there is both an interest and a need for conferences in our Region.

A continuing problem is the late delivery of IEEE publications to parts of

our Region due to unacceptable delays in surface mail. As an experiment it has been agreed to set up two information centres for which IEEE headquarters will contribute half the cost. These centres will have publications sent to them by airmail where they will be available for members. We have chosen the East Africa Section and the Greece Section for this experiment as they would seem to provide the best information to decide whether the experiment should be continued or indeed further developed.

During my service as Regional Director I have become increasingly interested in the future of our Region. I feel it is necessary to consider our past achievements, our present position and our plans for the near future and to relate these to our present and anticipated resources in order to use them to best advantage. This is a difficult task to combine with the duties of a Regional Director but as I will remain a member of the committee as past Director I suggested at the last meeting that I would like to undertake the task of forming a small long range planning group which would present its proposals to the full committee for consideration. I am pleased to say that this was unanimously agreed so that in giving up my duties as Director I look forward to continuing to serve the Region in this way.

Finally I would like to thank all of you for the support you have given me over the two past years, particularly the Section Chairmen, the appointed representatives, the Secretary and the Treasurer. I know you will all join me in giving similar support to my successor to whom I give my best wishes for a successful and enjoyable period as your new Director.

KARSTEN E. DRANGEID Rueschlikon, Switzerland

## **CONTINUING EDUCATION**



Dr. Carl Goser Continuing Education, Region 8

As announced in February I would like to bring to your attention a few recent developments in Continuing Education.

Videotape Courses (lasting six hours each)

There are the following videotapes available for you:

VC1: Introduction to Project

Management (Purchase \$715)
VC2: Robotics: Research and Business
Opportunities (Purchase \$1800)
VC3: Robot Sensing and Intelligence

(Purchase \$1740)

VC4: Technologies for the Information Age (Purchase \$1690)

VC5: Personal Computer Software

(Purchase \$1575)

(When ordering please state videotape type, TV Standard and power supply frequency).

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

### **Satellite Courses**

Starting in December 1984, it will be possible for Western European countries to receive the IEEE broadcast live via satellite. These broadcasts are now available throughout the United States, Canada and Mexico. We need to identify one organization or group willing to act as the host to receive the signal and arrange for distribution within the country. The cost of receiving the signal downlinked and converted for use in the country are about \$18,500. The IEEE needs at least six months lead time to book the satellite.

The interactive network (one-way video, two-way audio) will permit telephone interaction with the presenters during the live programme. The following one-day live videoconferences are running:

- Project Management: Team Building and Project Leadership

- VLSI - Its Impact on your Career

Integrated Manufacturing Systems
 For more information please contact:
 Continuing Education Office of IEEE Region 8
 Prof. Dr. K. Goser
 FernUniversitaet
 P1.O.B. 940
 D-5800 Hagen 1, West Germany.

# INTERNATIONAL SYMPOSIUM ON NEW DIRECTIONS IN COMPUTING

AUGUST 12-14 1985

# NORWEGIAN INSTITUTE OF TECHNOLOGY, TRONDHEIM, NORWAY

Sponsored by: IEEE Computer Society, Norwegian Institute of Technology and Kongsberg Våpenfabrikk.

## CALL FOR PAPERS

The symposium will cover all aspects of development in computers and subjects under discussion will include, but are not limited to:

Office Automation

Databases for Technical

Applications

Artificial Intelligence Tools and Methodologies for Applications

Systems Development Robotics Distributive Processes Software Development Methodologies

Performance Evaluation Information Storage and Retrieval

Man Machine Interface

The deadlines are as follows:

### March 1st, 1985

3 Copies of full paper to be submitted in English to either of the addresses given below;

May 1st, 1985

Notification of acceptance of papers;

June 1st, 1985

Camera-ready copy due from authors.

For further information and submission of papers contact:

Prof. Arnold Meltzer, Dept. of Electrical Engineering and Computer Sciences, George Washington University, Washington DC. 20052

U.S.A. Telephone: +1202 6766729 Dr. Jan Pederson, Kongsberg Våpenfabrikk, VET-Trondheim, P.O. Box 1515, N-7001, Trondheim, Norway.

Telephone: + 47 7 965355



The explosive growth of technology today has made programs such as the CONTINUING ENGINEERING EDUCATION PROGRAM of THE GEORGE WASHINGTON UNIVERSITY invaluable for practicing engineers who wish to remain current in their fields of expertise or who wish to learn about emerging technologies.

The CONTINUING ENGINEERING EDUCATION PROGRAM consists of over 500 intensive, short courses designed to enhance the competence of engineers, scientists and managers. The seminars are taught by instructors from industry, government and universities who are in the forefront of their respective fields.

The CONTINUING ENGINEERING EDUCATION PROGRAM is the largest program of its type in the United States. The first seminars were presented in Washington, D.C. in 1969, and in 1977 the Program expanded to include regular seminar presentations in major European cities throughout the year.

The CONTINUING ENGINEERING EDUCATION PROGRAM has also arranged for the presentation of many "on-site" courses for such companies as IBM, Cable and Wireless PLC, Olivetti, Philips, and Bull Systemes. Special arrangements can often be made for presentation of seminars for organizations requesting training for a group of their personnel.

Seminars in the areas of Computers, Communications, Electronics and Engineering Management are scheduled for presentation from November 1984 through May 1985.

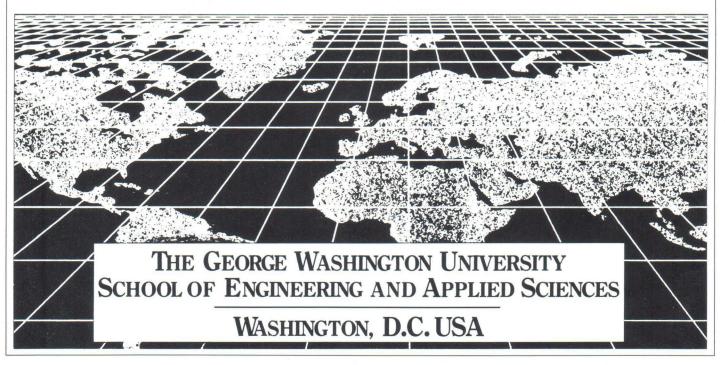
## Topics include:

- SOFTWARE QUALITY ASSURANCE
- MICROCOMPUTERS IN CONTROL SYSTEMS
- LOCAL AREA DATA COMMUNICATIONS NETWORKS
- INTRODUCTION TO RECEIVERS
- MODERN RECEIVER DESIGN
- GROUNDING, BONDING & SHIELDING
- INTERNET SYSTEMS & PROTOCOLS
- DESIGN OF DIGITAL CONTROL SYSTEMS

### FOR FURTHER INFORMATION CONTACT:

Mr. Michael Keenan, Manager THE GEORGE WASHINGTON UNIVERSITY Continuing Engineering Education Program 18 St. George's Street, Hanover Square, Mayfair London W1R 9DE ENGLAND

TELEPHONE (Devon) U.K. (0626) 83-3012



TECHNICAL EDUCATION IS AN INVESTMENT IN THE FUTURE





CENTENNIAL CELEBRATIONS
LONDON, ENGLAND
September 28 – October 1

PHOTOGRAPHS BY COURTESY OF THE INSTITUTION OF ELECTRICAL ENGINEERS AND BY GRETTA GOURIET.

# KEY TO PHOTOGRAPHS

### Formal:

1. Robert Winton (Secretary, Region 8) receiving his medal from President Gowen; 2. Dr. George Byford (Chairman, UKRI Section); 3. Sir Kenneth Baker (former UK Minister of Technology); 4. Reginald Russell (former Director, Region 8) receiving his medal from President Gowen; 5. D. E. N. Davies (President, IERE); 6. Robert Winton holding a 100-year-old copy of *The London Times* dated 13th May 1884 which was presented to the IEEE; 7. Sir Robert Clayton (President, Institute of Physics); 8. Dr. H. G. B. Casimir delivering the Centennial Lecture; 9. Maldyn M. John (President IEE–1983/4); 10. Andrew R. Cooper receiving his medal from President Gowen.

### Informal

11. Charles (Bud) Eldon (IEEE President-Elect), Mrs. Eldon and Jacob Baal-Schem (Region 8 Conference Co-Ordinator); 12. D. C. J. Poortvliet (Chairman, Region 8 Student Activities) and E. Folke Bolinder (Chairman Region 8 Awards and Fellows); 13. Merrill Buckley (Chairman-RAB), Karsten Drangeid (Director, Region 8, 1982/4) and Jose Furlan (Chairman, Yugoslavia Section); 14. Eric Herz (IEEE General Manager); 15. W. J. Seruga (Chairman, Poland Section), Prof. R. C. G. Williams (former Director, Region 8) and Prof. L. R. B. Elton (UKRI Section committee member); 16. Karsten Drangeid (Director-Region 8).

## MEETINGS IN REGION 8

### International Federation of Automatic Control (IFAC)

The International Workshop to be held at ETHZ in Zurich, Switzerland, from 12 to 14 March 1985 has IEEE as one of the nine sponsors. It is organized by the Swiss Association for Automatic Control.

The scope of the Workshop is research, applications of artificial intelligence and pattern recognition in the area of economic and management studies, as well as banking and finance. Original methods, case studies, new applications, specific Al tools (hardware and software) will be presented and discussed. The aim of the workshop is both to highlight the state of the art in the field and to explore the most promising areas for further research and applications of AI in economics, management and finance. Discussions will be promoted. The language of the workshop will be English.

Further information from: L. F. Pau, IFAC Workshop, Battelle Memorial Institute, 7, route de Drize, CH – 1227 Carouge/Geneva, Switzerland. Telephone: (41) (22) 43 98 31. Telex: 423 472 batel ch.

# IMA Conference on Mathematics in Signal Processing

The IMA Conference on Mathematics in Signal Processing will be held at the University of Bath, England, September 17 to 19 1985. The UKRI Section is associated with this conference which is co-sponsored by the Institute of Physics and the Institution of Electrical Engineers.

The objective of the conference is to identify some of the unifying mathematics used in signal processing and to address important unresolved mathematical problems in signal processing. The aim is to pull together the common strands arising in various applications of the subject and to provide a focal point for attracting researchers into this important field

There will be a number of distinguished invited speakers including Prof. T. Kailath (Information Systems Laboratory, Stanford University, USA), who will deliver the keynote address; and Dr. E. R. Pike, FRS, FIMA (RSRE, Malvern).

Contributed papers of up to thirty minutes presentation time are invited. These will be accepted on the basis of a 300-500 word abstract which should be sent by December 1 1984. Authors will be advised of acceptance by March 11985.

The proceedings of the conference will be published in the IMA Conference Proceedings Series and will be available shortly after the conference.

Abstracts and all other enquiries should be sent to:

The Deputy Secretary, The Institute of Mathematics and its Applications, Maitland House, Warrior Square, Southend-on-Sea, Essex SS1 2JY, England.

### **IEEE International Symposium on Information Theory CALL FOR PAPERS**

The 1985 IEEE Symposium on Information Theory (ISIT85) will be held at the Metropole Hotel, Brighton, England, from the evening of Sunday June 23rd until mid-day on Friday June 28th, 1985.

Papers presenting new results in information theory and related fields are solicited. Areas to be covered include:

- Complexity
- Cryptography
- . Data Networks
- . **Error-Control Coding** .
- Detection and Estimation Stochastic Processes
- Communication Systems Information Theory Applications
  - Multi-User Information Theory
  - Pattern Recognition
  - Shannon Theory

  - Source Coding & Data Compression

Both long (40 minutes) and short (20 minutes) papers will be accepted. Long papers will be reviewed on the basis of a complete manuscript and the deadline for these is November 1st, 1984. Short papers will be reviewed on the basis of a 500 word summary and the deadline for these is December 1st, 1984. Manuscripts and summaries should be submitted in triplicate together with a brief abstract suitable for the Symposium record. Authors should indicate the area of their paper, for ease of processing. Acceptance will be by March 1st, 1985. All manuscripts and summaries should be sent to the program chairman:

Professor Edward C. Posner,

Electrical Engineering Department,

Caltech 116-81,

Pasadena, CA 91125,

U.S.A.

General enquiries about the symposium may be directed to either cochairman:

Professor Patrick G. Farrell, Electrical Engineering Dept., The University, Manchester. M13 9PL U.K.

Professor Robert J. McEliece. Electrical Engineering Dept., Caltech 116-81, Pasadena, CA 91125,



### IEEE INTERNATIONAL COMPUTER CONFERENCE AND EXHIBITION

### COMPUTER AIDED TECHNOLOGIES

# Call for Papers

COMPINT '85 is dedicated to various aspects of COMPUTER AIDED TECHNOLOGIES from industrial through managerial, education and scientific applications. The purpose of the conference is to provide a medium for exchanging information in this rapidly developing field. COMPINT '85 will include tutorials (on the first day of the conference), as well as sessions embracing the theory, design and implementation of COMPUTER AIDED TECHNOLOGIES. A major international exhibition, centered around the conference theme, will be held. Key note speakers will be invited to address topics of current interest, and an award for Best Paper will be presented.

COMPINT '85 will be held at the PALAIS DES CONGRÈS in MONTRÉAL, from SEPTEMBER 9 TO 12, 1985. The location offers superb facilities, in the heart of the world's second largest French speaking city. North American in soul and European in spirit, Montréal enjoys a unique and exciting environment for this major international conference and exhibition.

### Areas of Interest

Areas of interest include, but are not limited to:

- ROBOTICS
- COMPUTER AIDED MANUFACTURING
- COMPUTER AIDED DESIGN
- COMPUTER AIDED INDUSTRIAL OPERATIONS
- ADVANCED SOFTWARE FOR INDUSTRIAL SYSTEMS
- MAN MACHINE INTERFACES
- COMPUTER ASSISTED EDUCATION
- COMPUTER COMMUNICATIONS
- COMPUTER GRAPHICS
- COMPUTER AIDED DECISION MAKING

### Information for Authors

Authors are requested to prepare a long paper, of no more than 6,000 words, or a short paper, of no more than 2,000 words. Long papers will be reviewed on the basis of a complete manuscript. For short papers, a 200 to 500 word summary is required. Submit three copies by JANUARY 15, 1985, as indicated below (see further information).

Prospective authors should indicate the subject area in which their paper is to be reviewed. All papers will be judged based on originality and contribution to subject area. Notification of Acceptance will be made by APRIL 9, 1985. Author kits will be provided.

# Further Information

For further information write to:

COMPINT '85, P.O. Box 577, Desjardins Postal Station, Montréal, Québec, Canada H5B1B7.



**INSTITUTE OF ELECTRICAL AND ELECTRONICS** ENGINEERS, INC. (MONTRÉAL SECTION)



IFFF COMPUTER SOCIETY



## **NEWS OF THE SECTIONS**

### NIGERIA SECTION (Chairman: Dr. T. I. Raji)

The Nigeria Section has been reactivated. At a meeting held in Lagos on May 15th 1984 the following officers were elected:

Chairman: Dr. T. I. Raji, Dept. of Electronic and Electrical Engineering, University of Ife, Ile-Ife, Nigeria.

Vice-Chairman: Dr. S. O. Ajose, Dept. of Electrical Engineering, University of Lagos, Lagos, Nigeria.

Secretary/Treasurer: Dr. A. J. Alos, Dept. of Electrical Engineering, University of Ibadan, Ibadan, Nigeria.

Dr. S. O. Ajose of the University of Lagos and Dr. A. A. Esan of the University of Ilorin were also appointed as Chairmen of Membership Development Committee and Student Activities Committee respectively.

Members present at the meeting discussed a number of issues of interest, particularly the difficulties being encountered in the remittance of membership dues and subscriptions to the IEEE Headquarters in New York. The new Executive was charged with the responsibility of finding solutions to this and other problems. The Executive has since then held four meetings discussing the future activities of the section and exploring possible solutions confronting the members.

The attendance and participation of the Section Chairman at the Region 8 Committee meeting held in London in September provided a good forum for explaining the problems of the Section to the Regional Committee members and other distinguished visitors including the IEEE President, the President-Elect and the General Manager who were also present at the meeting. A number of concrete suggestions were made which will help the section not only to solve the problems associated with the remittance of dues but also to increase its level of activity.

For further information on these and related matters, please contact the Section Chairman or any other member of the Executive Committee listed above.

# NORWAY SECTION (Chairman: Knut O. Tangen)

The 1984 President Richard J. Gowen, his wife Nancy and his daughter Kerry visited Trondheim, Norway on June 18 and 19. During the official part of the program which was focused on the IEEE Centennial, President Gowen gave a speech with the title "A presentation of IEEE". The presentation was



a very interesting combination of the 100 years development of IEEE and the corresponding development of electrical engineering.

In a second part of the programme President Gowen presented Centennial Medals to the three candidates selected by Norway Section:

Prof. Jens G. Balchen Prof. Inge Johansen

Man. dir. Lars Monrad-Krohn

The picture shows president Gowen, prof. Balchen and the chairman of Norway Section Knut O. Tangen.

The visit was concluded with informal discussions between the president and officers of Norway section.

# PORTUGAL SECTION (Chairman: Prof. M. de Medeiros Silva)

### Centennial Medals

These medals have been awarded in this Section to: Prof. José Tribolet, Mr. Barradas da Silva, and Prof. Corrêa de Barros.

### **Short Courses**

Two intensive courses have been organized:

- 1st Intensive Course on Signal Microprocessors and Their Applications (in collaboration with INESC and CEAUTL).
- 1st Course on Modern Protection Methods for Power Systems (in collaboration with the Energy Section of I.S.T.).

These courses have been very well received: the first one was run three times in succession, and the second one will be repeated soon.

### Symposium om Automation and Remote Control of Power Systems

This Symposium took place in Lisbon in October 1983, and was sponsored jointly by the Portugal Section and Instituto Superior Técnico. It attracted about 150 participants, and its success was due to the outstanding organization skills of IEEE Members Prof. Sucena Paiva and Mr. Luis Barruncho.

### 1st Symposium on Electronics for Telecommunications

This took place in Lisbon on 22-23 May 1984 and was organized in collaboration with Ordem dos Engenheiros (the Portuguese Engineers Society) and Centro de Electrónica Aplicada (a research centre of Lisbon Technical University). The Organizing Committee was formed by IEEE members Prof. Pedro Borges Teixeira (chairman), Prof. Medeiros Silva, Prof. Paulo Teixeira, Prof Isabel Teixeira, and Ms. Helena Soares, and by Mr. Abreu Freire. The success of this Symposium has exceeded

the most optimistic expectations: 73 contributed papers have been accepted for presentation(and published in the Symposium Proceedings), and the number of participants (from Portugal and Spain) has reached 400. The Symposium included a very successful panel discussion on the University–Industry Co-operation in Portugal and in Spain. In view of this success, a 2nd Symposium is being planned for 1986.

### SOUTH AFRICA SECTION (Interim Chairman: Prof. L. van Biljon)

The South Africa Section of IEEE Region 8 has not been active for some time.

Recently Bob Winton, Region 8 Secretary, sent South Africa members a letter requesting anyone interested in resurrecting the section to contact him. A number of replies were received and as a consequence a meeting was called at Pretoria University on the 17th September to discuss the feasibility of starting the section up again. It was agreed that this was desirable and an interim committee was elected. A committee member was able to attend the Region 8 meeting in London and discuss the establishing and running of a section. This is the first time South Africa has been represented at a Region 8 meeting for several years.

It was agreed that a Section meeting would be held in the last week of October to decide details of when and how an election may be held to provide the section with a properly constituted committee and officers. It is hoped that the election will be held before the end of the year.

It is hoped that a Computer Society Chapter will be started in the near future and that other members will come forward with suggestions for the formation of other chapters within the section.

Enquiries should be addressed to: Prof. L. van Biljon, Dept. of Electrical Engineering, University of Pretoria, Pretoria, South Africa.

### SWITZERLAND SECTION (Chairman: Prof. J. Neirynck)

Switzerland Section has now passed the 1000 membership mark. Until now only three sections in Region 8 have reached this milestone. At the end of March 1984 Switzerland joined that distinguished club which consisted of Benelux, Germany and the United Kingdom and Republic of Ireland sections. The difference in achievement however lies in the population of the sections. With only 6.5 million inhabitants Switzerland probably has the highest ratio of IEEE members/population of any section in Region 8.

This success is due to the efforts of Dr. Rudin of the Section Committee who managed an 11.77% increase in the membership last year.

# IEEE REGION 8 AND THE MIDDLE AND SOUTH ITALY SECTION

ANNOUNCE THE CO-SPONSORSHIP OF THE

### 32ND CONGRESS ON ELECTRONICS

TO BE HELD IN

ROME, PALAZZO DEI CONGRESSI, 26–27 MARCH 1985,

DURING THE

# INTERNATIONAL ELECTRONICS, ENERGY AND AEROSPACE EXHIBITION (RIENA)

Theme: SATELLITE BROADCASTING

- (A) Technical and Legal Regulations (Usable frequency bands and their propagation characteristics; International regulations concerning the satellite broadcasting service and its feeder links; Technical standards and provisions; Legal matters).
- (B) System Design Aspects and Economic Evaluations (Possible configurations of an operational broadcasting system based on individual and community reception; Subsystems and their technical and economic optimization; Italian experimental and operational programmes).
- (C) Technological and Industrial Problems (Earth-station transmitters; Satellite payloads; Ground equipment for individual and community reception).

Round Table:

What programmes is Satellite Broadcasting to be used for?

Seminar: Biomedical Computer-Aided Imaging and Graphics.

Those who intend to submit a written contribution must notify the Secretariat before 30/11/1984, enclosing a short summary. Accepted papers will be published in Proceedings of the Congress.

Registration fee is 150,000 lt. lire.

Congress Secretariat, Via Crescenzio 9, I 00193 Rome Tel: (06) 65.69.343, TLX 611407 Riena I.

## CONFERENCE REPORTS

### INTERMAG

At the 22nd International Magnetics Conference held in Hamburg in April 1984, the latest information on research and development in the extensive field of magnetism was offered in 527 lectures and poster

Twenty-one subject groups dealt with fields of work such as permanent magnets, soft magnetic materials and ferrites as well as with magnetic sensors, CAD of magnetic devices and magnetic separation processes. The main conference topics were i.a. amorphous metals, magnetic recording techniques and magnetic and magneto-optical memories. Other subjects like magnetic levitation and propulsion aroused particular interest. In these fields of work the conference presented novel developments and future trends. Out of the 1100 participants, 68% were from the USA, West Germany and Japan.

The Conference Report should be in print by the autumn of this year, and can then be obtained through the Conference Chairman, Prof. W. Proebster, IBM Boblingen, Federal Republic of Germany. For those who are interested, a limited number of the Conference Digest are still available.

### **EUROCON**

The 6th European Conference on Electrotechnics, Eurocon '84 -'Computers in Communication and Control' - was held at the Brighton Conference Centre in England on 26th-28th September 1984. It was preceded on the 25th by an Educational Workshop and the IEEE Student Paper Contest (see page 0). The conference included key-note addresses by J. Alvey, B. W. Oakley, M. Carpentier and 79 papers were presented.

Despite wide-spread publicity, attendance at Eurocon '84 of 215 participants was well below expectations. Consequently a financial loss is inevitable and will be met equally by EUREL and IEEE. Action is being taken to investigate the reasons for the low attendance and a full report will be given in the newsletter. Sales of the Conference Proceedings are being promoted and are available from IEE, Conference Dept., Savoy Place, London, England WC2R OBL.

Robert Winton, Region 8 Secretary, has written a special article (see below) for this issue of the newsletter asking readers to write to the editor saying why they attend conferences. The results of this survey will also be published.

ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE SWISS FEDERAL INSTITUTE OF TECHNOLOGY - LAUSANNE

JOURNEES D'ELECTRONIQUE 1985

October 15-17, 1985

LAUSANNE / SWITZERLAND

International conference on

# REAL TIME PROCESSING:

application in control and signal processing

CALL FOR PAPERS

The aim of this seminar is to review the state-of-the-art in algorithms, sofware implementations and hardware architectures applicable to the real time processing of signals and control data. Topics of interest include :

- Algorithms and software for real time processing
- Microprocessors in control applications
- Numerical control
- Programmable controllers
- Industrial networks
- Signal processing hardware and development tools
- Speech processing applications
- Real time image processing and pattern recognition

Authors of original tutorial or specialized papers on these subjects are invited to submit a proposal based on a full text (tutorial) or an extended summary (for specialized papers) before March 15, 1985 to :

> Scientific Committee Secrétariat des Journées d'électronique Département d'électricité - EPFL Chemin de Bellerive 16 CH - 1007 Lausanne / Switzerland

The papers should be prepared for oral presentation, in French or in English (simultaneous translation provided) of a duration of 40 minutes for a tutorial paper and 25 minutes for a specialized paper.

organized with the support of IEEE and EUREL

# ADVERTISING AND INSERTS IN THE IEEE REGION 8 NEWSLETTER

The Institute of Electrical and Electronics Engineers (IEEE) Region 8 NEWSLETTER provides an inexpensive medium for direct-mailing inserts and for placing advertisements about your conferences, courses, exhibitions, books and publications. A very real advantage of using the NEWSLETTER is that it has limited advertising space, in contrast to a journal with many pages of advertising, so that your advertisement or insert commands attention equivalent to a direct-mail shot.

You can reach a select mailing list of 15,000 English-speaking electronics, computer, and electrical engineers in 73 countries at a rate of US \$0.13 each for a full-page advertisement or insert - much less than the cost of a direct-mail shot.

Display – \$1,740 per full page, \$940 per half page, \$500 per quarter page, \$300 per one-eighth page. SIZE: 1/1 page 270mm × 190mm;  $1/2270 \times 92$  or  $135 \times 190$ ;  $1/4135 \times 92$ ;  $1/865 \times 92$ . These rates are for 'camera ready' copy – a charge at cost will be made for any setting required.

### **INSERT RATES**

For full Regional distribution to 15,000 members in 73 countries in Europe, Middle East and Africa, size A5 or folded to A5 (148mm x 210mm), weight 10gms \$1,740, 20gms \$2,030, 30gms \$2,330. Lower rates for distribution to one country only or to a group of countries. Additional charge if collation or folding required. Recommended method of delivery is by direct air mail parcel post (check local postal regulations for maximum weight per parcel) or by air freight addressed to County Secretarial Services with prior notification of airway bill number, flight number and date. Surface transport is liable to considerable delay at port of entry. Before shipment of inserts check that the deadline date will be met including allowance for customs clearance and delivery to Guildford.

N.B. Membership figures are subject to fluctuation. Please check with County Secretarial Services on the number of inserts required. All the above rates are net and include no allowance for discount. Cheques payable to County Secretarial Services.

**ENQUIRIES TO** County Secretarial Services,

P.O. Box 7, Guildford, Surrey, England, GU2 5HH

Guildford 577777 (STD Code 0483) Telephone International +44 483 577777

National

Telex 264045 ERALHD G

Registered telegraphic address COSEC GUILDFORD Deliveries 8 The Flower Walk, Guildford, Surrey GU2 5HH

DEADLINES	PUBLISHED QUARTERLY	FEB	MAY	AUG	NOV
	News to Editor	Jan 1	April 1	July 1	Oct 1
	Advertisements to County Secretarial Services	Jan 15	April 15	July 15	Oct 15
	Delivery inserts to County Secretarial Services	Jan 22	April 22	July 22	Oct 22