



# United Kingdom & Republic of Ireland

October 2001

News

Issue Number 32

## *IEEE Holds Key Meeting in Edinburgh:*

Nearly 140 distinguished representatives of IEEE Region 8 (the Geographical area covering Europe, the Middle East and Africa); including IEEE President Joel Snyder, a Past President, two candidates for President Elect and seven Vice Presidents, attended a series of Meetings held in Edinburgh from August 30th to September 3rd.

A principal aim of the meetings was to focus on the future direction of growth and development of IEEE; particularly as it affects Region 8. There was a well attended General Meeting of all IEEE Members in the Edinburgh Area on the Thursday evening before the main agenda and a workshop on IEEE Xplore was held on the Friday afternoon.

One highlight of the weekend was the visit on Saturday evening to Holyrood Palace (140 attended) followed by a Civic Reception and buffet in the City Chambers where the Deputy Lord Provost welcomed the IEEE visitors.

The main social event was a Dinner in Edinburgh castle on Sunday evening at which attendees were welcomed by a piper. Sponsors of this event were Scottish Enterprise and Electronics Scotland—the voice of the Scottish electronics industry.

**UKRI AGM and LECTURE**  
**13th March 2002**  
**Professor John Roulston OBE**  
**BAE Systems**

Electronics Scotland expressed the wish to continue to develop a close liaison with the IEEE; particularly to raise awareness internationally of the career paths available to individuals in Scotland and to share information on the development of the electronics sector in Scotland.

Electronics Scotland Ltd. represents over 100 companies in 15 different business groups including those involved in hardware and software, research and development, and distribution of data.

Bruce Eisenstein, the Millennium President of the IEEE, who was visiting Edinburgh from Philadelphia said: "I am impressed with the history of innovations that have come from Scotland, and in particular, at the seat of one of the

founding thinkers of our profession, James Clark Maxwell. It is an honour to be at the site of these developments. My visit to the ALBA Campus in Livingstone has impressed upon me the energy and the entrepreneurial spirit of modern Scotland".

Director of Region 8, Dr. Levent Onural who is based in Turkey, stated that: "Besides being an international event, this meeting will provide a functional forum which will link electrical and electronic engineers from all over the world with their counterparts in Scotland".



*Professor Duncan Baker (right: Editor R8 News) receives an honorary membership of the Popov Society from Dr. Henrich S. Lantsberg (Russian Academy of Sciences) in Edinburgh.*

There were well attended technical visits on the Monday to: British Aerospace Systems and Edinburgh University, AGILENT and Heriot Watt University, and Cruachan Pumped Storage Power Plant and Dam on Loch Awe.

Special thanks are due to the UKRI Section's Tom Hammons, Peter Grant, Tariq Durrani, and Bob Pooley, and colleagues of the local organising committee for their devoted efforts in making this meeting such a success.

## *Congratulations!*

To Ms. Cornelia Connolly, an IEEE Student Member of the University of Limerick Ireland, who represented IEEE Region 8 in the student paper competition at the 2001 IEEE Conference on the History of Telecommunication, held in St. John's, Newfoundland, Canada, 25th-27th July. Besides representing Region 8, Cornelia won third place in the graduate division for her paper, "The History of Telecommunications in Ireland." Therefore, under a grant from the IEEE Foundation, Cornelia's Student Branch will receive an honorarium of US\$150.

Besides submitting an excellent written entry, Cornelia's poster session presentation, where she focussed on the social conditions in Kerry during the operation of the cable stations, was extremely well received.

**Dr. Michael Geselowitz**  
**Director: IEEE History Centre**  
**Rutgers University, New Brunswick, USA**

By now, all of us are aware of the tragic events that have taken place in the United States of America. The UKRI Section of the Institute extends its deepest sympathy and condolences to the families, friends, loved ones and colleagues of all those who lost their lives or were injured on that terrible day.

## *From the Section Chair:*

The UKRI Section was presented with the IEEE Regional Activities Board year 2000 Section Sustained Membership Growth Award at the Region 8 Meeting in Edinburgh on September 2nd, 2001. Tom Hammons received the Award on behalf of the Section. The citation reads: 'Presented to IEEE United Kingdom & Republic of Ireland Section for Outstanding Leadership and Results in IEEE Membership Development Activities for Region 8.'

Total Section Membership at the end of September 2001 (excluding approximately 1500 Affiliates) was 8469 (compared with 6898 on September 30th 2000). Of these Members, 1005 were Students (compared with 804 on the same date in 2000).

Our increase is partly a result of discussions with a large UK Company who have agreed to pay Membership dues on behalf of their Engineers direct to the Institute. This alone is expected to increase Section Membership by about 800. More arrangements like this would be most welcome.

One of the main activities of the Section since March 2001 was putting together arrangements (with its satellite meetings) for the Region 8 Meeting in Edinburgh August 30th -- September 3rd 2001. The meeting was a great success and its organisation was a credit to the Section.

Special thanks are expressed to the many Members who travelled to Edinburgh for the Region 8 Meeting and so ensuring the success of the meeting, and to the Local Organising Committee. Thanks are also expressed to the Sponsors of various events at the meeting in Edinburgh for which the UKRI Section was responsible.

Formation of Student Branches in the Section has high priority. A number of student branches at larger Universities have been or are being formed. Branches at UKRI Geographical Regions such as Bath/Bristol, Manchester/Liverpool, Ireland, Glasgow/Edinburgh, Newcastle, and London, etc. are being considered. Student Branch Officer Mischa Dohler with Student Advisors Loi Lei Lai and Jorge-Luis Sánchez-Ponz continue to give the formation of new Student Branches in the Section their highest priority.

A Student Newsletter that is to be distributed with the Section Newsletter twice a year is proposed. This will encourage student participation in UKRI Student Branch activities and encourage recruitment and lead students to feel there is a place for them in the Institute and in their Student Branch.

With GOLD, efforts are continuing to be made to contact members and provide a service to them. This task is considered to have high priority by the Institute. Professor Y H Song of Brunel University is working with Jorge-Luis Sánchez-Ponz, Region 8 GOLD coordinator on these issues.

WWW information for Section Members is being maintained, constantly updated, and expanded. It is providing a useful service to the UKRI Section Membership. Most Chapters now have or are setting up their own Web-page.

**For WWW details of Section activities by date and activity type:** <http://www.ieee.org.uk>

The number of Chapters has stayed more or less constant (20) but there has been a marked increase in the number of meetings each Chapter in good standing has held.

Of particular note, several Chapters are holding more than 10 Meetings in year 2001. Many Chapters sponsor several Conferences each year. IEEE is encouraging Chapters to hold more meetings, and high performing Chapters of some Societies have and are being given additional funds for High Performance. The formation of new Chapters is encouraged. Several enquiries on forming New Chapters have been received recently.

Prizes for Student Papers etc. have or are being established for some Societies. This is encouraged. One example is the Annual Student Prize of the Power Engineering Chapter that was established recently. Consideration is still being given to sponsoring the Region 8 Student Congress in the UKRI Section in 2004. The Region 8 Student Committee is encouraging the UKRI Student Branches to sponsor the Congress.

*Tom Hammons*  
*UKRI Section Chair*  
[t.hammons@ieee.org](mailto:t.hammons@ieee.org)

## *Nomination of Candidates for IEEE Fellows and Awards:*

The deadline for nominations for elevation to Fellow grade is March 15th each year. Although that might appear to be a long way off, in fact it is only just enough time to complete the paperwork and obtain the references required in the nomination process.

The burden of the work involved falls mainly on the nominator. Past experience shows that it is essential to obtain the backing of the candidate's principal IEEE Society, and to get supporting letters from several IEEE Fellows who are familiar with the candidate's work.

The nomination kit can be downloaded from the IEEE Website. If you need further help please contact me via e-mail.

There are also many IEEE awards given every year, details of which can be found on the website. These range from technical field awards to those given for outstanding service to IEEE, at Institute, Regional and Section / Chapter level.

If you know of a member / volunteer who you think deserves an award, first check which would be most suitable and then find out what the requirements and eligibility rules for the award are. Make sure that you can find some experienced IEEE members who know the work of the candidate and are prepared to support the nomination.

*Charles Turner*  
*UKRI Section Fellows and Awards Officer*  
[c.turner@ieee.org](mailto:c.turner@ieee.org)

# United Kingdom & Republic of Ireland

## Student News

### *Student Branch Formation:*

This is a brief summary of the IEEE UKRI student activities, as presented to members of the Region 8 Executive Committee during its fall meeting in Edinburgh.

Before October 2000, the United Kingdom and Republic of Ireland students did not have an organised focal point that would encourage IEEE student member activities. The presence of 800 IEEE student members, however, indicated that there was a practical need for this; and that advantage could be taken of IEEE's networking capability rather than to use the Institute as a pure information and technical publication resource. To accomplish this, the UKRI Committee appointed **Student Activities Officers**. Also, to ease the transition from University to Industry, it was decided to establish GOLD (Graduates Of the Last Decade) activities.

With the assistance of Dr. L. L. Lai, Mischa Dohler and Jorge-Luis Sánchez-Ponz, UKRI Student Activities Officers, the problem of initiating these activities was tackled. First, a top-down approach guaranteed that most UKRI Heads of Department of Engineering and Computing were asked to encourage IEEE membership and to **initiate the formation of student branches**. Second, a bottom-up approach targeted each single current IEEE student member to increase awareness of IEEE and thus **promote its activities and benefits**. The result was quite impressive as can be read below. But what happened behind the scenes to set the stone finally rolling within the IEEE UKRI Section?

Initially, strategies were formed on how to approach such a vast network of uncorrelated student members. Within this stage it was found that the main reason for IEEE student membership within UKRI was its mere financial and publication benefits. A student member of a Society is granted significant conference discount and unlimited access to online journal resources. However, the actual advantageous network of IEEE activities was not being made use of since it was basically non-existent at the student level for UKRI. Therefore, already at this stage it was decided that special measures were needed to revive IEEE awareness.

A major problem was to gain a sufficient number of students to be able to form student branches and commence student activities in various forms. It was decided that for a fast growth in membership the solution lay in the online application, which was normally only granted to universities with already formed student branches. With the generous help of Laura Durrett in the IEEE headquarters, the vicious circle was broken by introducing a **UKRI pilot project for online application**. This permits students at several UKRI universities to apply online and, once critical numbers are reached, to form student branches and organise activities.

To increase the visibility of IEEE and the potential of direct online applications, the Head of Department of the majority of UKRI departments related to IEEE were contacted to en-

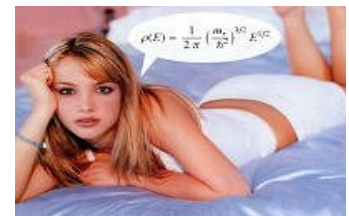
courage their staff to support the formation and application process. At the same time a **mailing list for all IEEE student members** was created to enable us to directly contact current members and coordinate further student activities. The approach was partially successful as volunteers in key areas, like Ireland and Wales, stepped forward to support the formation of student branches. However, other areas within UKRI still need some attention.

Finally, the entire effort of six months led to the formation of nine preliminary student branches (350 % increase!). The **current IEEE student branches** are at *City University, Dublin City University, Imperial College, King's College London, University of Nottingham, University of Leeds, University of Portsmouth, and University of Southampton*. More IEEE student branches are to come: *Cambridge University, Oxford University (EMB Student Chapter), and University of Glamorgan*. At the same time, the number of IEEE student members has increased to above 1,000.

Since the student branch formation process is now at a critical phase, the UKRI Section Committee approved an initial budget of £3,000 per year to support the student activities. That is a considerable contribution because the amount is higher than the student member rebate, which the Section receives from the IEEE. At this stage, the money is intended to be used primarily in **organising student branch meetings**. This will help to promote activities at both university and student level.

This article is one output of current student activities, which will start a new **Student Section in the UKRI News**. This is intended to be the voice of the students and the student branches. It will announce technical and social activities, seminars, industrial trips, problems, opinions, etc. And one of the first things we wish to announce is that Cornelia Connolly from Ireland won the 3<sup>rd</sup> place in the Student Paper Contest at the *2001 IEEE Conference on the History of Telecommunication*, 25th-27th July, Newfoundland, Canada. Congratulations!

### **Britneyspears.ac**



Last but not least, the IEEE presence will increase in our Section. For example, the King's College student branch may serve as a good example, where student activities are organised approximately every fortnight.

Newcomers at King's College London will enjoy an IEEE promotion in their first lectures. Other universities are

It is a little known fact that Ms Spears is an expert on semiconductor physics and has a fundamental grasp of vital laser components. This spoof site created by a University of Essex postgraduate shares his physics research on Photonic Crystals, the Finite Barrier Quantum Well, and Vertical Cavity Surface Emitting Lasers, etc. The site has now had close on two million hits since its launch.

[www.britneyspears.ac](http://www.britneyspears.ac)

[a new approach to formal lab reports?]

encouraged to follow.

Nevertheless, there is much to be done. In Region 8, 66 % of IEEE student members belong to a student branch whereas in the UKRI Section only some 17 % of the IEEE student members belong to a student branch. Therefore, great effort will need to be put into the formation of further student branches and active student involvement.

Concerning GOLD (Graduates Of the Last Decade) activities, the engineering education in the United Kingdom and Republic of Ireland is mainly industrial oriented. Thus, a strong link between the IEEE and industry has to be established; concentrating on **IEEE events**, such as PREP'2001 (April 2001), **recruitment fairs** and **GOLD presentations**. The success of the IEEE relies on membership retention, and the GOLD programme is a good solution. Currently, there is a GOLD affinity group in progress in Ireland.

We would like to thank everybody who voluntarily supported and initiated IEEE activities within UKRI. We hope that we managed to enable the formation of a network which eventually will be beneficial for all UKRI students of Electrical Engineering and Computer Science.

**Mischa Dohler** [mischa@ieee.org](mailto:mischa@ieee.org)  
**Dr. L. L. Lai** [l.l.lai@city.ac.uk](mailto:l.l.lai@city.ac.uk)  
**Jorge-Luis Sánchez-Ponz** [j.s.ponz@ieee.org](mailto:j.s.ponz@ieee.org)

### Why is an IEEE Student Branch Beneficial?

A Student Branch gives students the opportunity to meet and learn from fellow students, as well as faculty members and professional engineers in the field. A good Student Branch can be one of the most positive elements in an Electrical Engineering or Engineering Technology department. IEEE Student Branches are established at over 900 universities and colleges throughout the world. Student Branch activities can offer numerous educational, technical, and professional advantages of IEEE membership through special projects, activities, meetings, tours and field trips.

## PREP'2002:

The next in the PREP series of postgraduate-research student-oriented conferences will take place at Nottingham, 17th-19th April 2002. Details can be obtained via the web site: [www.epsrc.ac.uk/prep](http://www.epsrc.ac.uk/prep) The conference covers Photonics, Electronics, Communications and Software, and free places are generally available to full time research students in UK Universities who have a paper or poster accepted at the conference.

Other research students, including those from outside the UK, are also encouraged to attend, but may not qualify for free or subsidised places.



*Professor Davies at work on the IEEE Stand during PREP 2001*

IEEE provided travel support for four stu-

dents from Eastern Europe to attend PREP'2001, and IEEE was also involved in the selection of the Poster Prize winner. Additionally, the IEEE UKRI Section had a membership stand at the associated exhibition (see UKRI Section web page), and it is anticipated that the PREP'2002 conference will also have an IEEE UKRI membership stand.

The conference provides an excellent opportunity for research students to present their work in a less-demanding environment than a large international conference, and enables them to interact with research students from many other universities, and to compare experiences.

*Professor A.C. (Tony) Davies, 10th Oct 2001*  
[tonydavies@ieee.org](mailto:tonydavies@ieee.org)  
[www.tonydavies.org.uk](http://www.tonydavies.org.uk)

## Student Activities:

### Student Branch King's College London:

Seminars on research topics in Telecommunication. Seminars are run approximately every fortnight. For more details see: [www.ctr.kcl.ac.uk](http://www.ctr.kcl.ac.uk) -> *Seminars*.

## Conferences:

### IEEE UKRI Section:

Events are advertised on [www.ieee.org.uk](http://www.ieee.org.uk) -> Events and Conferences.

### IEEE Region 8:

Events are advertised on [www.ewh.ieee.org/reg/8/conferences/](http://www.ewh.ieee.org/reg/8/conferences/).

## Awards and Prizes:

### UKRI Communication Chapter:

Prize of £100 for the best final year undergraduate telecommunications project: (<http://crg.eee.kcl.ac.uk/comchap/proprize.html>)

### UKRI Power Engineering Chapter:

Prize of £100 for the best final year undergraduate power engineering project / paper in power engineering and related topics: University of Bath.

### IEEE Region 8 Student Activities:

Awards for activities and much more are given by Region 8 IEEE Committee: (<http://elfo.die.upm.es/~macias/r8sac/awards/>)

## *Do You Want a Chapter Meeting Near You?*

Are you interested in supporting local Chapter meetings in the United Kingdom; especially in Scotland and in the Republic of Ireland?

The UKRI Chapter Chairs' Committee believes that many members in our IEEE Section *are* interested in Chapter meetings but find that there are no meetings near enough for them to attend. At the present time the following twenty UKRI Chapters are active:

Robotics and Automation (RA)	Computer (C)
Electromagnetic Compatibility (EMC)	Signal Processing (SP)
Lasers and Electro-optics (LEO) [Scotland]	Circuits and Systems (CAS)
Solid State Circuits (SSC) [Scotland]	Control Systems (CS)
Solid State Circuits (SSC) [Ireland]	Communications (COM)
Aerospace and Electronic Systems (AES)	Magnetics (MAG)
Industry Applications (IA)	Power Engineering (PE)
Information Theory (IT)	Power Electronics (PEL)
Engineering in Medicine and Biology (EMB)	
Joint Components Packaging and Manufacturing Technology (CPMT) and Reliability	
Joint Engineering Management and Professional Communications (EM/PC)	
Joint Antennas and propagation, Electron Devices, Microwave Theory and Techniques,	
Lasers and Electro-optics (AP/ED/MTT/LEO)	

If you are interested in Chapter meetings in your own area then please advise:

*Dr. Gordon Dodds*  
**IEEE UKRI Section Secretary**  
*Department of Electrical Engineering*  
*Ashby Building*  
*Queen's University*      *Tel: 0289 027 4512*  
*Belfast*      *BT9 5AH*      *g.dodds@qub.ac.uk*

**IEEE Region 8 Vice Chair for  
 Technical Activities:**  
**Professor A. C. Davies**  
**King's College, London**  
**e-mail: [tonydavies@ieee.org](mailto:tonydavies@ieee.org)**

### *Magnetics:*

The Magnetics Chapter has continued to serve its membership through its policy of organising meetings supporting the IEEE Distinguished Lecture Programme, jointly sponsoring selected national meetings and events, and organising meetings specifically for its own membership.

This year we were pleased to contribute to the organisation of a sequence of outstanding lectures given in various parts of the country by Distinguished Lecturer Tom Silva of NIST. We also joined with the UK Magnetics Society to co-sponsor the Joint Magnetics Workshop, held over three days at the University of Wales, Cardiff. This was a major national event providing opportunity for the whole UK Magnetics community to come together and to present its work.

A one day technical meeting is planned for later this year for which details are yet to be finalised, but the distinguished 'Wohlfarth Lecture' traditionally arranged for December to take place at the Institute of Physics Condensed Matter and Materials Physics Conference will now take place at a later date in April 2002.

An award of the 'IEEE Certificate of Appreciation' was made to B K Middleton 'In Recognition of Outstanding

Leadership as Chapter Chair During the Year 2000'.

*Professor B K Middleton (University of Manchester)*  
*[b.middleton@man.ac.uk](mailto:b.middleton@man.ac.uk)*

### *CPMT and Reliability:*

The IEEE UKRI Joint Chapter of CPMT and Reliability was formed in January from the established CPMT Chapter by an inaugural meeting attended by members of both Chapters. In June 2001, at the request of IEEE HQ and with the endorsement of the UKRI Section Chair, we sought formal agreement to the formation of the joint Chapter. We now await such confirmation.

Meanwhile, the joint Chapter is working closely with the International Microelectronics and Packaging Society (IMAPS-UK). In September we undertook a promotional event at the ECIF show at the EXCEL centre near London City Airport. For the 29th—30th January, 2002 we are planning a joint event on Micro technologies with two parallel conferences on Manufacturing Technologies and Passive Components at the Crowne Plaza in Manchester. The secretariat for this event is IMAPS at [office@imaps.org.uk](mailto:office@imaps.org.uk).

*Professor Nihal Sinnadurai*  
*[sinnadurai@aol.com](mailto:sinnadurai@aol.com)*

## Engineering in Medicine and Biology:

The UKRI Chapter wishes to invite all EMBS members to submit nominations for Chapter Officers.

We have some 200 members throughout the UK and Republic of Ireland. The purpose of the Chapter is to provide member benefits which are organised by a committee of enthusiastic volunteers. Technical and Social Meetings, Student Activities, and Paper Contests are among the activities that enable members to meet others, to exchange ideas, and to promote their knowledge of our professional speciality.

At present Professor Guang-Zhong Yang of Imperial College serves as Chairman and Roland Saam, Micros for Managers Ltd, as Secretary. Now, we would like to find others who will lead the Chapter in the future.

The duties of the Committee members are set out in formal terms at [www.ieee.org/rab/...](http://www.ieee.org/rab/) The Chapter committee organise at least two technical meetings each year and observe the IEEE guidelines for the conduct of a Chapter. All IEEE members (and non-members interested in EMBS topics) are invited to attend our meetings. The Chapter Chairman attends the UKRI Section Executive meetings—usually March and October each year—to report on the Chapter's activities, and to participate in the Regional activities.

Apart from technical meetings, some Chapters organise major conferences, student paper contests, field trips / industrial visits and newsletters. In the United Kingdom and Republic of Ireland (UKRI) our Chapter keeps the Section Web page up to date with timely information.

The EMBS Chapter has so far operated informally from London, with student activities in Birmingham, Cambridge, and Bristol. If you would like to join our Committee, please e-mail Professor Guang-Zhong Yang [gzy@doc.ic.ac.uk](mailto:gzy@doc.ic.ac.uk) or Roland Saam [r.saam@ieee.org](mailto:r.saam@ieee.org).

## Industry Applications Society (IAS):

This has been a most active year for the UKRI IAS Chapter with two lectures organised and delivered during May 2001. A Distinguished Lecturer event was jointly held with the IEE on 15th May at Austin Court / Birmingham when a lecture was given by Professor Lorenz, the IAS Chairman and IEEE Distinguished Lecturer. The event was mainly organised by Dr. Mark Sumner, an IAS member at the School of Electrical and Electronic Engineering, the University of Nottingham.

A second smaller event was a talk given by the visiting IAS Communications Chair, Erling Hesla on the 9th May at Imperial College, London. This informative talk covered a number of the IEEE colour books and introduced the concept behind the range of colour books.

The IAS Chapter Committee has pursued a number of ini-

(Continued on page 7)

UKRI AGM and LECTURE  
13th March 2002

Professor John Roulston OBE  
BAE Systems

Joint Meeting with IEE at Savoy Place, London  
Lecture at 18:30 in the Faraday Room

## Climbing the Complexity Spiral in Electronic Design

A century ago the science of electronics began as an adjunct to the emerging understanding of the structure of matter. Accelerated by cycles of entertainment, communication, commerce and war, the modern science has become a prop of civilisation.

In this lecture I will examine how this has happened, illustrate the key developments that have driven the science forward, reflect on the qualities of the practitioners involved and outline the path of the future. In this illustrated odyssey we will note a trend of exponential growth in complexity, matched by ingenious adaptation of the science to keep implementation within practical bounds.

As we climb the complexity spiral we begin to note similarities between electronic systems and biological counterparts as if common laws of organisation prevail. Each specialist conference opens new vistas of processes, materials, automation and product ambition and the end is not in sight.

However, a few steps on the future path are recognisable and we use these to project the science of electronics into the second decade of the new century, asking where the limits may lie and seeking to paint a vision of tomorrow's electronic world.

### About the author:

**John Roulston** was a schoolboy hobbyist in the age of vacuum tube electronics and started a career as an electronics circuit designer with Ferranti Ltd., Edinburgh, as the vacuum age gave way to transistors and integrated circuits. With a strong interest in mathematical modelling and a thirst for novelty he helped the company to define and realise some of the most complex radar projects undertaken in Britain. In the past twelve years as successive industrial rationalisations have changed the personality and emphases of the electronics industry in Britain, John Roulston has become responsible for all the avionic technology within the BAE SYSTEMS company, now incorporating the electronics legacy of Ferranti, Plessey and Marconi Electronic Systems.

John has a Bachelors degree in Electronics from Queens University, Belfast, a Masters degree in Communications and Control from Heriot Watt in Edinburgh and an Honorary Doctorate in Engineering also from Heriot Watt. He was awarded the O.B.E. in 1998 and holds the British Gold Medal of the Royal Aeronautical Society and the James Alfred Ewing Gold Medal of the Institute of Civil Engineers and the Royal Academy of Engineering. John Roulston is a Fellow of the Royal Society of Edinburgh and Industrial Professor of Electronics at Edinburgh University. He is married with two teenage daughters and lives in Edinburgh.

tiatives to stimulate interest and activity within the Chapter. An electronic Newsletter has been developed and e-mailed to all members aiming to encourage our members to share experience, news, articles, achievements and any other material of professional interest to other Chapter members.

I would like to encourage you to consider applying for Senior Membership of IAS if you have not taken this opportunity yet.

There are two basic ways for a Member to be elevated to Senior Member status:

1. Obtain a Senior Member nomination letter by sending an e-mail to [senior-member@ieee.org](mailto:senior-member@ieee.org) and follow the instructions
2. Obtain an application form from the Web at <http://www.ieee.org/organizations/rab/md/smelev.htm>

All information on the Senior Member programme, including reference forms for present Senior Members and Fellows to endorse a candidate can be found on the Web at:

<http://www.ieee.org/organizations/rab/md/sminitiative.html>

In recognition of this status the news will be posted on the UKRI IAS Web pages. I would also like to encourage and invite members to apply for the Chairman or Vice Chairman's post for the UKRI Chapter.

Finally, **the Committee and myself are considering organising a one day conference on the broad subject of EMC.** Please let me know if this is of relevance to you and your technical interests. If sufficient interest is shown, we will aim to organise a one or half day workshop / seminar before the year end. I also will welcome support or suggestions from IAS members in London based Universities for the organisation of such an event.

**Dr. A G Hessami (IAS UKRI Chapter Chairman)**  
[A.G.Hessami@ieee.org](mailto:A.G.Hessami@ieee.org)

## Power Engineering:

### The California Electricity Crisis

The IEEE UKRI PES Power Engineering Chapter Lecture, delivered at City University, London on 10th September, was entitled '*The California Electricity Crisis: Causes and Solutions*'.

The lecture was delivered by Dr. Rambabu Adapa, IEEE PES Distinguished Lecturer of the Electric Power Research Institute (EPRI) USA. The lecture was hosted by the Energy Systems Group, City University London, for the UKRI Section Power Engineering Chapter. Due to the interest of the delegates, the lecture and discussion lasted for some two hours.

Rambabu Adapa went on to give another Lecture on

### Information for All Chapter Members

**Over the coming months, many of our Chapters will be holding their AGM's, their elections of Chapter Officers, and other important activities.**

**Please check the UKRI Section Web-site of your Chapter for announcements, invitations to propose candidates for election, and other communications.**

**[You may also receive this information by e-mail, but e-mail lists are not yet perfect]**

**IEEE UKRI Section Web-site: <http://www.ieee.org.uk>**

FACTS and the California Crisis at the National Grid Headquarters in Coventry which, with discussion, went on for almost three hours. This meeting was attended by 45 Power Engineers.

It was followed by a special lecture at the 36th Universities Power Engineering Conference (UPEC 2001) in Swansea on the 12th September.

Here, the Lecture at UPEC summarised EPRI's FACTS System Studies.

**Tom Hammons**  
**UKRI Power Engineering Chapter Chair**  
[t.hammons@ieee.org](mailto:t.hammons@ieee.org)

## Control Chapter:

**Control Chapter Seminar Event**  
**28th November 2001 ~ University of Leicester**

Dr. Yuri B. Shtessel is currently on leave from the Department of Electrical and Computer Engineering at the University of Alabama in Huntsville visiting Professor Alan Zinober at the University of Sheffield. At 2:00 pm on the 28th November, he will be presenting a Seminar entitled 'Advances in Sliding Mode Control'. This will address non-minimum phase output tracking as well as second order sliding mode control and exact differentiators based on non-linear dynamic sliding manifolds. The seminar venue is the MacLellan Room of the Engineering Building at the University of Leicester.

**Dr. Sarah Spurgeon** [eon@le.ac.uk](mailto:eon@le.ac.uk)  
**IEEE (UKRI) Control Chapter Chair**



*This group at the IEEE Region 8 meeting in Edinburgh includes Georgia German (Centre), Jorge-Luis Sánchez-Ponz (centre right), Christian Borgert (far right) and Charles Rubenstein (far left).*

*After the civic reception in Edinburgh on the Saturday evening the IEEE visitors joined a gathering of about 200,000 people who witnessed the fire-work display to celebrate the end of the Edinburgh Festival.*

## Improvements to Service - Database Cleanup Project:

Some members will have experienced erratic service from IEEE, especially mailing problems with publications such as the UKRI Newsletter. The UKRI Section has been awarded a small grant from IEEE to investigate errors and inconsistencies in the master database, known as SAMIEEE, used by IEEE for mailing to and maintaining contact with members.

The main objective of the project is to weed out corrupted or invalid data on UKRI members, particularly in mailing addresses or e-mail addresses, and to provide feedback to IEEE HQ in Piscataway, New Jersey. The US-based staff who compile the databases are sometimes confused by the alphanumeric postcode used in the UK and Republic of Ireland, which is the root cause of some of the errors.

A random sample of the listed e-mail addresses for UKRI members typically shows a 25% rejection rate. Although this reflects the high mobility of our members, it is also clear that many e-mail addresses in the SAMIEEE database are erroneous. This has important implications for the inevitable move to the all-electronic newsletter within the next few years.

It would be helpful if any members whom have had recent problems with delivery of IEEE publications would contact me before the project ends in December.

**Charles Turner**  
[c.turner@ieee.org](mailto:c.turner@ieee.org)

## Circuits and Systems:

This is a request for volunteers from the CAS Society to join the Chapter Committee and a request for proposals for CAS Chapter Officers.

The elections for Chair and Vice Chair for serving from January 2002 will take place at a Committee Meeting in December 2001 (Date TBA). All IEEE CAS members are welcome to attend the meeting. Those wishing to do so, or to make nominations, please contact:

**Professor Vedat Tavsanoglu** (Chapter Chair)  
[tavsanav@sbu.ac.uk](mailto:tavsanav@sbu.ac.uk) (0207 815 75 26)

## Aerospace and Electronic Systems:

An important success of 'Aerospace and Electronic Systems' has been the nomination of Marconi's transatlantic radio transmission under the IEEE 'Milestone' scheme. The plaque will be inaugurated as part of the celebrations on 12th December. IEEE President Joel Snyder has been invited to attend.

On 26th November, Bob Hill (former AESS BoG member) will present a lecture at the IEE, Savoy Place, entitled 'Faraday, Savoy Place and Such'. He will also present a plaque from the IEEE AESS to mark the formation of the IEE Professional Network in Radar, Sonar, and Navigation, and to mark the strong collaboration between IEEE and IEE

in radar over the past decades.

A proposed visit to the Chilbolton Meteorological Radar facility will take place, probably in early 2002 and the AES AGM will be scheduled for March 2002 and will be combined with a technical event.

The organisation of the RADAR 2002 conference is proceeding smoothly; this is an IEE event, co-sponsored by IEEE AES.

**Professor Hugh Griffiths**  
[hgriffiths@eleceng.ucl.ac.uk](mailto:hgriffiths@eleceng.ucl.ac.uk)

## Communications Chapter:

**Please Note the New Web Site of the UKRI Communications Chapter**

<http://ewh.ieee.org/r8/ukri/comsoc/>

**We are highlighting the elections for Communications Chapter Officers on this site—and would like to draw the attention of all our members to the upcoming posts.**

The Communications Chapter membership is now over 1800 strong but we would like to encourage more members to attend our meetings. Discussions have started in order to form a second Communications Chapter based in Scotland.

This new initiative is welcome and will be supported by the Chapter so that an independent new Chapter can be formed by the end of 2001. Dr. Iain Thayne of the University of Glasgow has joined the Chapter committee to assist in the formation of this new Chapter. We also welcome Dr. David J Parish (Loughborough) and Professor Yichuang Sun (Hertfordshire) to our committee.

**Professor Trevor Clarkson** (King's College, London)  
[t.g.clarkson@ieee.org](mailto:t.g.clarkson@ieee.org)

## 2002 IEEE INTERNATIONAL CONFERENCE ON ENGINEERING MANAGEMENT



St John's College  
Cambridge

**CAMBRIDGE, UK**

**18th—20th August 2002**

**MANAGING  
TECHNOLOGY FOR THE  
NEW ECONOMY**

Papers are invited on start-up experiences, and from aerospace, automotive, communications, consumer electronics, computers, finance and healthcare industries, amongst others.

The Board of Governors of the **IEEE Engineering Management Society** will hold its prestigious International Conference on Engineering Management in Cambridge, England, in August 2002.

Please e-mail, fax or write a letter of intent to participate to:

**Professor Tariq S Durrani**  
**E-mail:** [t.durrani@ieee.org](mailto:t.durrani@ieee.org)  
**Fax:** +44(0) 141 552 2487