## **PROFESSORS and HEADS of ELECTRICAL ENGINEERING**

# **NEWSLETTER No. 8**

#### February 2001

#### Annual Conference – What Next?

After a successful Annual Conference your PHEE committee believes that our organisation has the potential to influence government policy via EPC and take a more proactive role in clarifying future directions for EE colleagues. Now that all EPC sectoral group chairmen are ex-officio members of the EPC committee it is both timely and important to ensure that we make the best use of this position. To that end your committee would like to redesign the format of future annual conferences so that discussion is focused on one or two key topics only. By focusing on a limited number of topics, and allowing full and detailed discussion, it is hoped that some clear and succinct outcomes can be identified. These outcomes could then be fed into the Easter EPC as a consensus of PHEE opinions.

To progress this proposal the committee wishes to discuss these points at our next sectoral group meeting which will take place within the EPC congress at Strathclyde. The sectoral group discussion is scheduled for the Tuesday afternoon of the congress. We hope that as many members as possible will attend so that early identification of appropriate and important themes can be made.

EPC itself wishes to take a more proactive role in dialogue with the various government and institutional bodies and is currently formulating its medium term strategy to achieve this goal. Its mission is to promote excellence in engineering higher education. Its aims should be fully articulated at the Strathclyde congress.

EPC Congress: University of Strathclyde, 10-11 April 2001 Contact: Prof W Banks [e-mail: wmb@mecheng.strath.ac.uk]

### PHEE Easter Conference focuses on Course Development.

This event will provide an excellent forum for all those involved in course development and delivery, and all members are requested to nominate appropriate colleagues to attend. This year's theme is assessment with speakers from QAA, IEE, PHEE, and REME. The programme includes presentations on benchmarking and the assessment of outcomes, computer-aided assessment, distance learning, plagiarism and assessing individual and group projects.

The conference venue is the Millennium Stadium and hotel accommodation is within walking distance in the centre of Cardiff.

PHEE Easter Conference: University of Glamorgan Contact: Prof R Williams [e-mail: rjwillia@glam.ac.uk]

## **Annual Conference Highlights**

Speakers in the opening session provided a view of EE education from outside the UK. The current president of SEFI, Prof. Torbjorn Hedburg supported the view that the existing European integrated 5-year curricula in engineering are compatible with the idea of a European education area with a distinct identity. In addition, schemes leading to a master's degree should be maintained, possible in parallel with a two-tier bachelor/master system. The specific qualities of the present application-oriented programmes should be recognised and safeguarded. Focusing on the academic industrial interface Dr Frands Voss showed how the Mads Clausen Institute has developed knowledge transfer between universities and private business in Denmark. An overview of ABET's new accreditation philosophy within the USA was provided by Prof. Charles Turner. The philosophy is based on the idea of continuous quality improvement and appears to be much simpler than the IEE accreditation system although ABET's relationship with the USA government is somewhat different to that of the IEE and our UK paymasters.

After lunch the spotlight turned on the IEE. Initially Dr Alf Roberts, Chief Executive, focused on the role that the IEE would play in a rapidly changing technological world where the volume of knowledge is increasing ever faster. He argued that the IEE must offer lifelong support to members in obtaining and maintaining core competencies which would be the key test both for employees and employers as we move into the millennium. Prof. John Midwinter, President, provided a thought provoking look into the future and raised many questions concerning life after SARTOR, the need for lifelong learning and its impact of current course design and curricula content, and the financial challenges that lie ahead for university EE departments.

The final Open Forum session provided ample opportunity for a frank exchange of opinions. The original panel of Profs. Kel Fidler, Peter Grant, Paddy Farrell and Ms Katy Turff (Head of Professional Development at the IIE) was augmented with Prof. John Midwinter. A wide range of topics were discussed, including the diminishing applications for university engineering courses, the position and inter-relationship of electronics and computer science, and the need to recognise and respond to market forces if we are to secure a future for engineering. Commenting on the downward trend in student applications to engineering, together with the implications of SARTOR, bench-marking and QAA subject review, speakers highlighted the need for a fundamental rethink on what we are doing in our undergraduate courses. The developing area of ICT was seen as crucial to the future of electronics and in some instances members thought it imperative to try and persuade University managers that mergers between electronics and computer science should be strongly advocated. As market forces were seen to be more important then ever, some members highlighted the need to consider further mergers of departments, indeed, with the current imbalance in supply and demand for engineering courses more drastic rationalisation may be needed!

Committee membership for the current session is:

Dr Donard de Cogan (East Anglia) Prof Emmanual Ifeacher (Plymouth) Prof D Lidgate (Napier) Prof Ed Powner (Sussex) Prof Carson Stewart (Queens Belfast) *(Chairman)* Dr Ray Thomas (Brighton) *(Secretary)* Prof Don Whitehead (Hull)

Prof Paddy Farrell (Lancaster) Rev Stuart Poole *(Treasurer)* Prof John Senior (Hertfordshire) Prof Garth Swanson (King's College London) Prof Bernard Weiss (Surrey) Prof Phil Witting (Glamorgan)