## **PHEE Committee**

## The IET – A Position Paper

The Professors & Heads of Electrical Engineering (PHEE) are grateful for the support received from the IET and its predecessor, the IEE, over the years. PHEE wishes to see a strong and effective Institution which can speak with authority for the profession, provide valuable services to professionals and nurture the next generation of professional engineers, whether they be in school, university or just starting on their career.

In furtherance of this, PHEE recognises that the IET must adapt to meet modern needs. New approaches may need to be used, both to ensure that the Institution continues to be seen to be relevant and also to ensure that the best advantage is taken of available technology.

In the view of PHEE, the greatest priority has to be given to nurturing the developing generation of engineers and potential engineers. This is essential both to the continuing well-being of the Institution and that of the country itself.

- The PHEE committee has reflected on various changes that have taken place over the past decade so that any lessons learned may be used to inform future policy. In this context two particular issues have been identified as meeting urgent consideration and action.
  - 1. There has been a substantial decline in colloquia and similar meetings. Formerly these events provided many young academics, researchers and some undergraduates with their first real experience of public presentations and the thrill seeing their efforts in print. Colloquia and the like were a very real encouragement and contribution to the formation of the next generation. The elimination of this "low risk" (and low cost) opportunity has removed a very necessary opportunity for confidence building and severely reduces the chances of younger engineers making the next step, to higher profile conferences. It has also removed an opportunity for younger staff to begin "networking" and means that the IET (formerly IEE) is perhaps seen as lacking value to junior engineers.

PHEE is aware that colloquia were seen as an expense to the IET (IEE) as they frequently failed to cover their full costs. PHEE believes that this perspective was misplaced; colloquia represented a contribution to the education of engineers and were a proper application of membership fees. Further, the cost to the Institution was greatly overstated because such events should, in the opinion of PHEE, have been costed on a marginal basis.

2. Professional groups have also been disbanded and replaced by different entities. These have a different focus and. because of the focus on "Virtual Meetings" do not form the same networks as previously. Neither do they serve the same client group. Indeed many suggest that the new entities do not work at all! In any event a series of opportunities which supported the concerns of young engineers and academics and which engaged them with the Institution has been lost. Both the engineers and the Institution are the poorer for it and the "value" of the Institution to younger engineers is perceived to have dropped.

PHEE urges the IET to find a mechanism whereby the opportunities mentioned above can be recreated, perhaps in a different format.

- PHEE believes that the IET needs to open a public debate on the purpose of engineering education. Currently it is often thought of as a narrow, highly vocational, exercise built upon a specialised school education. While people trained as engineers do take up engineering careers, a degree in engineering is a good basis for a very wide range of other occupations. Promotion as such brings many advantages:-
  - 1. A wider and more talented group of participants
  - 2. A cadre of the general public who have a scientific understanding who would be less influenced by "media hype" and more understanding of the issues surrounding future important policy decisions such as, for instance, nuclear power.

The adoption of such an agenda might well chime with the priorities of the current (and future) governments. To adapt such an approach may require a review of the engineering curriculum to widen the entry base. This would, incidentally, recognise some of the difficulties manifest in school science and mathematics teaching. It would probably require recognition that full competency is only developed at Masters level – but we are part way to that already!