## Editorial

## THE IMPLICATIONS OF FINANCIAL CRISES FOR UNIVERSITIES

The news of financial crises for universities world wide is alarming. Recent items in the **Engineering World News** from Canada and Australia show drastic reductions in university support from governments. In Africa, the news comes from Uganda that an increased proportion of funding will come from student fees. The United Kingdom is introducing fees to offset financial shortfalls. In Germany, slow change in thinking has not yet triggered fees, but the crisis in finance is revealed in the curtailed numbers of academic positions in engineering. Surely, the financial problems stem from government budgets, which are stretched to the limit by economic difficulties, and strain from large unemployment figures in continental Europe. Permanent academic staff is expensive and there is no direct measure of cost/benefit. Moreover, there are changes in philosophy that must have an impact on the attitude towards education. An engineering education facilitates the successful graduate to launch a career, which can be financially lucrative, while he may get a free education, and consequently a privileged passport to a comfortable life-style. Increasingly, it is being realised that as a greater proportion of school leavers take up higher education, universities are nearer to professional education institutions. Most graduates are going into the professions and therefore are likely to be earning more money than non-graduates. Therefore a direct taxation of the privileged students in the form of fees is not so far fetched.

Some countries are setting out to relieve financial difficulties with new, especially internationally oriented schemes. We have reported on the success Australian engineering universities have had in the emerging countries in South-east Asia, especially Malaysia and Vietnam. Considerable results were obtained by establishing dependencies of Australian universities, with eventual recruitment of graduate students to Australian universities. In Germany, it has been realised that with all the prestige of German degrees, engineers could not get recognition of their degrees to an equivalence of Bachelor or Master degrees. There are now serious endeavours to put on a par Bachelor degrees with the degrees awarded by the *Fachhochschulen*, and the Master's degrees with the *Dipomingenieur* awarded by the Technical Universities. Such measures, supported by the German Federation of Engineers (VDI) are gaining approval by the country's educational authorities. Some of the courses for these new degrees will in future be those recognised as a Bachelor and a Master. Moreover, such measures will contribute towards attracting international students to ease the financial misery of universities.

Michael S. Wald