

Editorial

Where is the academic utopia for engineering? It is resident in the Californian universities in Berkeley and Stanford, in Boston at the Massachusetts Institute of Technology and in Europe in Oxford and Cambridge. These institutions have a magical attraction for all engineering faculty. This statement can be proven in many ways—but the prime criterion is the number and quality of research publications. What is more striking is that the number of papers from these institutions—foremost from Stanford in our journal is also quite substantial. What is also remarkable is that these institutions—with their key role in engineering research—are also devoting much time to engineering education. It may be due to that engineering professors in these elite institutions are also interested and devoted to teaching their students, and are good at it, which may mean that a good researcher is also likely to be a good university teacher. But, another contribution to the devotion to teaching could be related to the fact that these universities provide a service to students for a price—i.e. Tuition. There is funding then, both for research and for teaching. The students are the customers who demand a quality product that is being paid for. This would justify converting the European state funded higher education into a partially funded system where student fees can contribute to improving the teaching quality. Thoughts in this direction are increasingly being voiced in Germany, where there is a traditional resistance to student fees, with a background argument that it may dent the idea of equal chances for higher education for everyone irrespective of their ability to pay.

However, once a fee system is established—differentiation can be made between students who are capable but cannot pay fees and those who can pay fees. Such criteria are already operating in the current student support system. In its basic form it could mean that those who do not get support need to pay graded fees from nothing to full payment. I am confident, that such a system will improve teaching and generate more motivation for academics to innovate.

This issue is another one in our special issue series. The contributions to Mechatronics prove once again the interdisciplinarity even of a special issue subject, similarly to our previous issue on Distance Controlled Laboratories. The contributors come from Mechanical, Electrical, Manufacturing and Industrial Engineering, in addition to a growing number from newer departments devoted to Mechatronics.

I am most grateful to Tom Kurfess of Georgia Institute of Technology who has selected and reviewed the papers. He has been most successful in obtaining contributions from many countries—in particular most welcome papers from Croatia and Slovenia.

Michael Wald