

# Hinc lucem et pocula sacra



"In 1209, scholars taking refuge from hostile townsmen in Oxford migrated to Cambridge and settled there." The year 1209 earmarked the establishment of the University of Cambridge, an institution that would later become one of the most famous academic institutions in the world. To date, the names of 89 Nobel Prize winners are affiliated with the University, including famous names such as Rutherford, Thomson, Watson and Crick, Lord Rayleigh and many others.

Year after year, the University of Cambridge is ranked as one of the top-performing universities in the world. The interesting question is, of course, how it succeeded in maintaining this excellent performance for decades, and even centuries. The answer probably lies in the successful establishment of a culture of academic excellence, which is carried over from generation to generation by both academics and students. A combination of top human intellect, globally relevant curricula based on leading research, cutting-edge facilities, a highly efficient global industry network and other contributing factors make this possible.

For other universities in the world, the challenge seems to be to compete with academic institutions such as the University of Cambridge. Is this really possible? I often see competition as a relative concept. Universities should define their own specific academic context in which they need to compete and develop appropriate strategies and strategic roadmaps to reach their academic goals. Universities such as Cambridge should rather be used as role models. The goal should not necessarily be to assimilate the leading universities, but rather to learn from them. Building strong collaborative research networks with these leading universities is of great importance in developing one's own research capabilities.

At the University of Pretoria, the Faculty of Engineering, the Built Environment and Information Technology has a clear vision of the future and how it wants to improve its competitive position. The Faculty's strategic roadmap is built on a combination of its academic excellence, education and research facilities, collaboration with leading international universities, and strong industry networks and support. The high number of research chairs in the various departments in the Faculty

that are sponsored by industry and government is evidence of these role-players' involvement and interest in the research activities of the Faculty. Technological innovation that is relevant to industry and government is a high priority and is strongly supported by the many research initiatives in the various departments and research groups.

In this edition of *Innovate*, you can once again read about some of the leading and interesting research projects that are undertaken in the Faculty. Several hundred academic researchers and postgraduate students, local and foreign, contribute to research. Research findings are diffused in high-ranked international journals and conferences, and attract attention from many other researchers. Industry and government also benefit from this research through the consulting work of academics.

I hope you will again find the contributions in this issue valuable and interesting.

And by the way, in case you were wondering about the meaning of *Hinc lucem et pocula sacra*, it means: From this place, we gain enlightenment and precious knowledge. It is the official motto of the University of Cambridge. And that is what the Faculty of Engineering, the Built Environment and Information Technology at the University of Pretoria strives towards as well! 🍷

Editor  
Tinus Pretorius