



Professor Freddy Boey

Public Orator, Professor Chris Backhouse presented the Honorary Graduan at the Degree Ceremony held on Monday 19 December 2011

Chancellor, Vice-Chancellor, Distinguished Guests, Ladies and Gentlemen, Professor Freddy Boey was appointed in July 2011 to the position of Deputy President and Provost of the Nanyang Technological University, Singapore.

Prof Boey graduated from the Monash University, Australia in 1980 as top graduate and with a 1st Class degree in Materials Engineering. He obtained his PhD in Chemistry & Engineering in 1987 from the National University of Singapore. He is Fellow of the Institute of Materials (UK) and Fellow of the Institute of Engineers Singapore. He is also Deputy President of the Materials Research Society.

Professor Boey's research areas are in functional biomaterials for medical devices, nanomaterials and nanostructures for cell regeneration, sensing and energy storage. A keen inventor, Professor Boey has founded several companies to patent and license his many creations, such as a surgical tissue retractor which was licensed and is now sold in the US, India, Japan and Europe. His other inventions include a fully biodegradable peripheral cardiovascular stent which overcomes the problems of metallic stents to leave behind only the healed natural heart vessel; micropumps for managing the heat generated in consumer electronic gadgets; a coronary stent with drug release capability that slowly releases a drug to block cell proliferation which could lead to blockages in the stented artery. He has published almost 300 journal papers and created 5 spin-out companies.

As the Chair of the School of Materials Science and Engineering in NTU from 2005 to 2010, he turned the school into one of the world's largest materials engineering institutions with over 1,000 undergraduates and close to 250 research students. The school has developed a reputation for solid science that also generates technologies that can be commercialised. But Prof Boey insists it is research and education that remain his abiding passions. "I'm a scientist first," he says, "and scientists are excited about ideas".

As Provost, Professor Boey has been quick to implement changes which match one of his major priorities - student welfare. Before being hired, all new academic staff now have to do a live audition in front of both graduate students and undergraduates, on top of their regular technical interviews. He explains "they must be able to articulate to the students at their level, rather than expect students to adapt to the teacher". Indeed a radical concept!

Multidisciplinary research, leading to significant improvement to the well being of society and the individual, is of crucial importance to Professor Boey. As part of this strategy the collaboration between Loughborough University and NTU has been forged. The new Sports Research Institute created by Loughborough and NTU, and located in Singapore, combines the best of both Universities in Sports Science, Sports Technology, Medicine and Engineering. It is an incredibly exciting opportunity for both institutions and Professor Boey has been central to its successful establishment.

It is a great privilege for Loughborough University to be able to make this presentation to an engineer and academic leader of such distinction in recognition of his outstanding inspiration and achievement.

Therefore Chancellor, I have the honour to present to you, and the whole University Professor Freddy Boey, for the Degree of Doctor of Technology, Honoris Causa