Dr A P J Abdul Kalam

The degree of Doctor of Engineering *(honoris causa)* was conferred upon Dr A P J Abdul Kalam at the Faculty of Engineering and Information Technologies graduation ceremony held in the Great Hall at 4.00pm on Friday 20 May 2011.

Dr Abdul Kalam, BSc *St Joseph's College, Tiruchirapalli* Diploma in Aeronautical Engineering *Madras Institute of Technology* Hon DSc *Carnegie Mellon University, Pittsburgh; Nanyang Technological University Singapore; Indian Institute of Technology Bombay; Queens University Belfast; University Sains Malaysia ...*, is the former President of India (2002-2007) and one of India's most distinguished engineers and technologists.

Dr Abdul Kalam also gave the occasional address.

The Chair of the Academic Board, Associate Professor Peter McCallum and honorary degree recipient Dr Abdul Kalam, *photo, copyright Memento Photography*.

Citation

Professor McCallum, I have the honour to present APJ Abdul Kalam for admission to the degree of Doctor of Engineering *(honoris causa)* in recognition of his outstanding contribution to society. He was President of India from 2002 to 2007 and one of its most distinguished engineers and technologists.

Dr Kalam graduated in Science from St. Joseph's College, Trichy in 1954 and specialised in Aeronautical Engineering from Madras Institute of Technology in 1957. He was a pioneer of fibre glass technology and led a design team to produce innovative composites for rocket motor casings. He made a significant contribution to developing India's first indigenous Satellite Launch Vehicle in 1980 that signalled India as an exclusive member of the world's Space Club.

Dr Kalam has also collaborated with medical specialists to develop the Kalam-Raju stent. After trials, this cardiac stent has been fitted to many needy patients. He also initiated the use of carbon-polymer materials in the production of light weight floor reaction orthosis calipers. Over 50,000 children have been fitted with these calipers.

He is also well known for his innovative campaigns to improve the quality of India's rural infrastructure. He initiated the 'Providing Urban amenities in Rural Areas' program that focused on physical connectivity through better roads, digital connectivity through improved internet access, knowledge connectivity through better education and emphasis on their integration to support India's rapid economic growth.

Dr Kalam has maintained academic pursuits as Professor of Technology & Societal Transformation at Anna University, Chennai and has been actively involved in its teaching and research programs. During the last decade, Dr Kalam has addressed over five million young people and inspired them to become active participants in developing the 'India Vision 2020'.

As Chairman of Technology Information, Forecasting and Assessment Council he led 500 experts to establish Technology Vision 2020 that produced a road map to assist transforming India into a developed nation. He served as the Principal Scientific Advisor with the rank of Cabinet Minister to the Government of India from 1999 to 2001.

In 1997 Dr Kalam was awarded India's highest civilian honour, Bharat Ratna, for his scientific and technological contributions to the nation and has received many other awards including Padma Vibhushan in 1990 and Padma Bhushan in 1981.

Dr Kalam has the distinction of receiving the 2008 Hoover Medal, an honour conferred upon an engineer whose endeavours have advanced the well-being of mankind, and the 2007 King Charles II Medal for Science and Technology awarded by the Royal Society of the United Kingdom. He is author of several books including 'Ignited Minds - Unleashing the Power within India', 'Envisioning an Empowered India', 'Children Ask Kalam', 'Wings of Fire', and 'India 2020 – A Vision for the New Millenium'. These have been translated into many Indian and other languages

Dr Kalam continues to play an influential role in encouraging the uptake of science and technology by young people, particularly the economically disadvantaged. He is also active in campaigns to improve India's rural infrastructure and to stimulate innovative approaches to accelerate renewable energy development. He has made a remarkable contribution to society and we are delighted to take this opportunity to recognise this contribution.

Professor McCallum, I present APJ Abdul Kalam for admission to the degree of Doctor of Engineering *(honoris causa)*, and I invite you to confer the degree upon him.