THE CHINESE UNIVERSITY OF HONG KONG

FORTY-EIGHTH CONGREGATION

Conferment of the Degree of Doctor of Science, *honoris causa*

A Citation

Sir Eric Albert Ash, CBE, FEng, FRS

In the heart of London is the group of colleges which form part of the University of London. The journey from University College to Imperial College is a very short one and can normally be completed in twenty minutes by car. Eric Albert Ash has, however, taken many years to cross over from Imperial to University College and waited another 22 years before moving back. His association with University College came early in life as he went to University College School as a boy. This was followed by seven very rewarding years at the Imperial College of Science and Technology where he graduated with first class honours in electrical engineering in 1948 and received his doctorate four years later in 1952.

Like many brilliant scientists of his generation, the lure of America's research opportunities, laboratories, libraries and other facilities proved to be irresistible and his first full time job was as a research fellow at Stanford University in California. Two years later, the spell that was North America having run its course, he returned to Britain and, after a brief stint as research fellow at Queen Mary College, started work as resident engineer for Standard Telecommunication Laboratories. This was where he remained for the next eight years until academia beckoned and he joined University College as a senior lecturer in 1963. His brilliance as a researcher and teacher soon brought the reward it deserves. He was made reader within two years and became a full professor another two years later at the early age of 39. He pioneered ground-breaking research in various aspects of physical electronics, acoustic imaging, signal processing and integrated optics. His discoveries led to many patents and numerous citations in international journals on physics and engineering.

Eric Ash spent a year at IBM as visiting research engineer in 1969. He became a fellow of the Royal Society in 1977 and was made a fellow of the Royal Academy of Engineering in the following year. But it was in the 1980's that his fame spread far and wide. He won the coveted Faraday Medal of the Institution of Electrical Engineers in 1980, was made a Commander of the British Empire three years later, and won the Royal Medal of the Royal Society in 1986. A year later, he was elected president of the Institution of Electrical Engineers. Between 1987 and this year, he received no less than nine honorary doctorates starting with one conferred by the University of Leicester and culminating with this latest by the Chinese University of Hong Kong. He was made a Knight Bachelor by Her Majesty the Queen in 1990. Unusual for a scientist, Sir Eric was also honoured by the Royal College of Art in 1992; the College made him a senior fellow. This was probably in recognition of the enormous contribution he had

made as an educationist and of his other public service appointments as chairman of the BBC Science Advisory Committee and as a trustee of the Science Museum.

During a period of active teaching and research lasting well over thirty years, one of Sir Eric's many duties also took him to Hong Kong where he was external examiner to this University. Later in his career, when the Hong Kong University of Science and Technology came into existence, he became a member of that University's School of Engineering Advisory Committee.

In 1985, Eric Ash's journey to the world outside Imperial College came full circle when he returned to his *alma mater* to take up the rectorship of Imperial College. A journey which should have taken no more than twenty minutes actually took half a life-time; and when he stood and surveyed the College where he had studied as a young man forty years before, it must have felt, in the words of T.S. Eliot, as though he were looking at it for the first time. This passage in *Little Gidding* comes to mind:

We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.

As rector of Imperial College, Sir Eric Ash became a member of the Committee of Vice-Chancellors and Principals and wrote many of the more illuminating treatises on higher education in the last decade. One of these, entitled Towards the 21st Century - A Prospectus for UK Universities, is full of penetrating insights and persuasive arguments. He said, for instance, that "a shortage of the most able graduates will be the key constraint on future growth." He also said "Anyone who believes that a university employment will lead to worldly riches is probably inadequately numerate, even for those disciplines for which such skills are not of central importance." Mr. Chancellor, after reading those two statements, I am sure you will agree with his third when he said "there is rather little evidence that intellectual ability decreases rapidly with advancing years." In Eric Ash's case, it most certainly does not.

Mr. Chancellor, there needs to be a special reason for conferring another signal honour on someone who had been honoured thus on eight previous occasions by universities across the world. Other citations would have exhausted the canon of valedictory eloquence. In our case, the honour we are doing Sir Eric today is for the inspirational example he has set for our teachers and students of what a dedicated scientist, engineer, researcher and teacher is able to achieve, it is for the quality of his mind, for the humility of his spirit, it is for the ceaseless search of excellence in teaching and research and it is, above all, for his belief that science and university are there to serve mankind.

With these words, Mr. Chancellor, I have the honour to present Sir Eric Ash, a knight of the realm, eminent scientist and educationist, Royal Medallist, Faraday Medallist, renowned researcher and teacher of man for the award of the degree of Doctor of Science, *honoris causa*.

December 1, 1994