

Honorary Doctor of Engineering

Professor Henry T YANG

Citation written and delivered by Professor LEE Chin-chuan

Pro-Chancellor:

It is my privilege to present Professor Henry Tzu-yow Yang for conferment of the degree of Doctor of Engineering, *honoris causa*, in recognition of his outstanding contributions to the field of engineering as well as his excellent achievements in educational leadership.

Professor Yang has been Chancellor of the University of California, Santa Barbara, since 1994. Under his magnificent leadership, this relatively young institution (established in 1944) has taken giant strides toward national prominence: among its faculty are 26 Fellows of the National Academy of Engineering and 23 Fellows of the National Academy of Science, not to mention five professors who have won Nobel Prizes since 1998. Prior to UCSB, Professor Yang served as Dean of Engineering at Purdue University for 10 years. At the end of his term of office, in 1994, *U.S. News and World Report* ranked Purdue's graduate programmes in engineering first among public universities and third among all universities in the United States. Professor Yang is one of the few eminent Chinese American scholars who have risen to the top administrative positions in major U.S. universities. He has built educational excellence at Purdue and UCSB by recruiting distinguished faculty and students, creating interdisciplinary research centres, and establishing innovative teaching and learning programmes.

Professor Yang received a BS from National Taiwan University in 1962, an MS from West Virginia University in 1965, and a PhD in structural engineering from Cornell University in 1968. He joined Purdue in 1969 as Assistant Professor, was promoted to Associate Professor in 1972, Professor in 1976, and Head of Astronautics in 1980. Four years later he began a decade-long tenure as Dean of Engineering. He was named Neil A Armstrong Distinguished Professor of Aeronautics and Astronautics in 1988.

Professor Yang has made lasting contributions to a range of engineering fields: aerospace structures, structural dynamics, composite materials, finite elements, transonic aeroelasticity, wind and earthquake structural engineering, and manufacturing. Having published more than 160 articles, he is admired for his seminal work, described as bringing “revolutionary” and “pioneering” significance to scientific discovery. His textbook on finite element structural analysis has been adopted by more than 40 universities.

As a world-renowned scholar, he has been awarded numerous honours for his research, teaching, and services, including honorary doctorates from Purdue University, The Hong Kong University of Science and Technology, and National Taiwan University. A recipient of the Centennial Medal in 1993, Professor Yang was awarded the Benjamin Garver Lamme gold medal in 1998, the highest honour that the American Society of Engineering Education can bestow. Furthermore, he has been elected Fellow of the American Institute of Aeronautics and Astronautics (1988), a Member of the US National Academy of Engineering (1991), a Member of Academia Sinica (1992), and Fellow of the American Society of Engineering Education (1993).

Alongside his productive research life, Professor Yang is an engaging and committed teacher. At Purdue, he received 12 awards for outstanding undergraduate teaching. Throughout his career, he has supervised 49 PhD and 18 MS students, and many of his former advisees are pursuing successful academic careers at the world’s leading universities. As Chancellor, he continues to teach one or two undergraduate courses at UCSB each year, and he was quoted as saying that undergraduates help to generate some of the University’s best ideas. He is presently advising four PhD students with the support of research grants from the National Science Foundation and NASA.

In addition to teaching, research, and administration, Professor Yang has also played a prominent role in public service. The many committees he has served include the Defense Science Board, the U.S. Navy, NASA, the National Science Foundation, and the National Academy of Engineering. He has devoted himself generously to promoting the advancement of science, engineering and technology in the United States and Asia. In awarding Professor Yang an honorary doctorate, for example, National Taiwan University cites his vital influence on Taiwan’s aerospace industry through his former graduate students who have become leading scientists, in addition to his own tireless efforts to help enhance Taiwan’s higher

education in various advisory capacities to the Executive Yuan and the Ministry of Education. Since 1996, he has served as a member of the Selection Board of the Ho Leung Ho Lee Foundation for the HLHL Prize.

Mr Pro-Chancellor, I have the honour to present to you, on behalf of City University of Hong Kong, Professor Henry Tzu-yow Yang, Chancellor of the University of California, Santa Barbara, for the degree of Doctor of Engineering, *honoris causa*.