

## **Honorary Doctor of Science**

### **Professor ZHANG Jie**

Citation written and delivered by Professor Michael YANG Mengsu

Pro-Chancellor:

I am very honoured to read the citation for Professor Zhang Jie for the degree of Honorary Doctor of Science. Professor Zhang is a world renowned scholar for his outstanding research achievements in physics. He spares no effort in promoting higher education in China, making remarkable contributions to its development.

Professor Zhang obtained his PhD degree in optical and atomic & molecular physics from the Institute of Physics of the Chinese Academy of Sciences (CAS) in 1988. Soon after that, he joined the Max-Planck-Institute für Quantenoptik in Germany as an Alexander-von-Humboldt fellow to carry out research on X-ray lasers and laser plasma interaction. In the period of 1990-1998, he worked on X-ray lasers and laser plasma physics at the Rutherford Appleton Laboratory and the University of Oxford in the UK. He returned to China in 1999 and then assumed the Directorship of the Laboratory of Optical Physics of the CAS, and the Deputy Directorship of its Institute of Physics. He became the Director General of the Bureau of Basic Sciences of the CAS in 2003. On 27 November 2006, Professor Zhang took office as the President of Shanghai Jiao Tong University. He was elected an Alternate Member of the Central Committee of Chinese Communist Party in 2007.

Professor Zhang Jie is highly respected in the fields of X-ray lasers and high field physics. The former is at the forefront of today's advanced technology and has broad applications in areas such as physics, chemistry, material science, life science and medical science. Professor Zhang and his team have made many important contributions in that area, including generating coherent X-rays of the highest efficiency at the shortest wavelength with the smallest amount of energy input. His research in high field physics has advanced our understanding of the physical process of high energy density under extreme conditions similar to those in the core of the sun or at the edge of a black hole. His research will also help pave the way in search for alternative energy sources.

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Because of his academic achievements and professional services, Professor Zhang was elected the Fellow of Third World Academy of Sciences (TWAS) in 2008, the member of the German Academy of Sciences Neopoldina and the President of the Association of Asia Pacific Physical Societies (AAPPS) in 2007, Academician of the Chinese Academy of Sciences in 2003. His research has been recognised by TWAS with the 2007 TWAS Prize in Physics; by CAS with the 2007 Outstanding Science and Technology achievement Prize; by the Chinese State Council with the State Natural Science Award in 2006; by the Hong Kong Ho-Leung-Ho-Lee Foundation with the award of the Science and Technology Progress Award in 2006; by the Overseas Chinese Physical Society (USA) with the 2004 Achievement in Asia Award; by the Chinese Physical Society with the 2003 CPS Rao Yutai Award in Physics; by the Chinese Optical Society with the 2002 COS Wang Daheng Award in Optics; by the Chinese Academy of Sciences with the Best Performance Award for Hundred Talents in 2001; by the Chinese Academy of Sciences with the Award for the Science and Technology Progress in 2000; by the Hong Kong Qiushi Foundation with the Qiushi Award for Outstanding Young Scientists in 1999; by the National Natural Science Foundation of China with the Award for Outstanding Young Scientists in 1999; by the Government of China with the National Award for Outstanding Young Scientists in 1998.

In 2006, Professor Zhang assumed the Presidency of Shanghai Jiao Tong University and is the youngest President of that institution since 1949. The Shanghai Jiao Tong University was originally established as the Nan Yang Public School in 1896. With a shining history of more than 113 years, Shanghai Jiao Tong University is one of the premier Chinese institutions of higher education with a strategic goal to become a world-class university. Professor Zhang believes that the surging Chinese economy and the national strategy of reviving China by means of science and education have created a demanding social and political environment for establishing first-rate universities by world standards in China. He emphasises that the fundamental principle of a university lies in its mission and responsibilities. For Shanghai Jiao Tong University, the mission is “to become a core builder of the national innovation system of technology, a significant participant in the international system of knowledge innovations, and a powerful promoter of social advancement and human civilisation”. A university is not just a place for knowledge transfer, but a sacred ground on which student abilities are cultivated and their characters nurtured. Thus, Professor Zhang advocates an ethos that “pursues knowledge and respects scholars”. He also advocates a model of nurturing creative

talent that “is student-oriented, integrates the curricular with social activities, the sciences with the humanities, and teaching with research”. He is dedicated to establishing a university culture that is imbued with “gratitude and responsibilities” as well as “dreams and passion”.

Professor Zhang strongly promotes problem-driven research that advances the global frontier of science and technology and addresses China’s major strategic needs. He led the designing and implementation of the road maps of institutional and academic development of Shanghai Jiao Tong University towards 2020, and in a systematic way, advanced the international and comprehensive evaluation of the disciplinary development of the university, which provided important reference for the strategic planning of various disciplines and established a more thorough evaluation system widely recognised by society. In the mean time, he promoted an institutionalised, standardised and humanised administrative system, which has enhanced efficiency and quality of university management. Professor Zhang has placed particular emphasis on attracting and cultivating talents, especially on the establishment of high-caliber teams of academic leaders in the university. He believes that these high-caliber talents are the most valuable strategic resources in propelling the university towards a first-rate institution and developing China into an innovation-based country. His reform efforts have resulted in significant progress in attracting and nurturing talent. Under his leadership, Shanghai Jiao Tong University is full of vigor and vitality and have made remarkable progress on its way to becoming a world-class university. Professor Zhang’s education philosophy and new practices have provided invaluable experience as we strive for achieving China’s goal of building world-class universities.

Mr Pro-Chancellor, to commend his outstanding research achievements in the field of physics, and his remarkable contributions to pushing forward the development of higher education in China, may I now ask you to bestow upon Professor Zhang Jie, the President of Shanghai Jiao Tong University, the degree of Doctor of Science, *honoris causa*.