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First HKUST Scholar Wins Top Prize of State Natural Science Award for Outstanding Achievements in Aggregation-induced Emission (AIE)

08-01-2018

Prof Tang Benzhong – Stephen Kam-chuen Cheong Professor of Science and Chair Professor of [Chemistry](#) at Hong Kong University of Science and Technology (HKUST), received the State Natural Science Award (First Class) 2017 from Premier Li Keqiang in the Great Hall of the People in Beijing this morning, in recognition of his outstanding achievements in research on aggregation-induced emission (AIE), and such discovery's significant contribution to life science, medicine and applied science.

State Natural Science Award (SNSA) is the highest honor in China's natural science community, in particular the first class award. Since its establishment in 1956, only 33 scientists or research groups received the top honor, amounting to about 3% of all award categories. Prof Tang is the first recipient of the first-class award at HKUST and the second Hong Kong scientist who earned the honor since Hong Kong's participation in SNSA in 1989.

HKUST Vice-President for Research and Graduate Studies (VPRG) Prof Nancy Ip expressed her heartfelt congratulations on Prof Tang's success. "Prof Tang has made outstanding achievements in the research and development of AIE, and contributed significantly to science and technology," she said. "I am very pleased to learn that Prof Tang's achievements have gained the highest honor in the field of state natural science. The process of basic research is painstaking, and it takes a long time to translate the findings into new product or application. For every little step we take today, a foundation for improving the life of mankind in the future is laid."

Prof Tang Benzhong first discovered high-performance AIE in 2001, when applied to different materials, this phenomenon can serve purposes including long-term tracking and visualizing of tumor tissues or cancer cells, as well as high-sensitivity detection, forecast and control of even the tiniest amount of chemicals. AIE was ranked by Thompson Reuters the world's top 100 research theme in 2013. In 2015, with the support of The Ministry of Science and Technology, HKUST set up a Hong Kong branch of the Chinese National Engineering Research Centers (CNERC) on Tissue Restoration and Reconstruction. The center – led by Prof Tang, was aimed to further explore the application of AIE, it has since developed more than 100 AIE materials and gained 67 patents.

AIE is gradually breaking the monopoly holds by international corporations on fluoroscopic technology and related products. This new emerging material is being widely used in areas such as life science, medicine and applied science, examples include different medicine and treatments, fluorescent probes for the prevention and diagnosis of diseases, materials and technologies for inspection of food, medicine and environmental safety, minimal invasive techniques for rebuilding tissue functions, and integrated diagnostic and treatment techniques.

Prof Tang graduated from the Department of Polymer Science & Engineering at South China University of Technology and obtained his PhD from Kyoto University. He received the State Natural Science Award (Second Class) in 2007 and the Khwarizmi International Award (Second Class) by the Iranian Organization for Science and Technology in 2014. Prof Tang was elected to membership of the Chinese Academy of Sciences in 2009. His AIE research project was incorporated into the National Basic Research Program (973 Program) in 2012.

About The Hong Kong University of Science and Technology

The Hong Kong University of Science and Technology (HKUST) (www.ust.hk) is a world-class research university focuses on science, technology and business as well as humanities and social science. HKUST offers an international campus, and a holistic and interdisciplinary pedagogy to nurture well-rounded graduates with global vision, a strong entrepreneurial spirit and innovative thinking. HKUST attained the highest proportion of internationally excellent research work in the Research Assessment Exercise 2014 of Hong Kong's University Grants Committee, and is the world's second in the latest QS' Top 50 under 50 ranking. Its graduates were ranked 12th worldwide and top in Greater China in Global Employability University Survey 2017.

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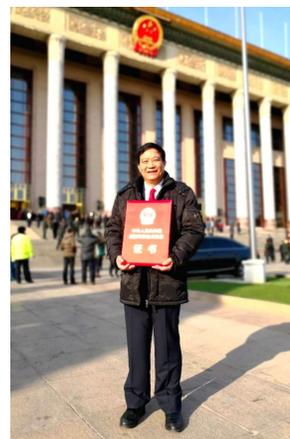
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