



香港大學
THE UNIVERSITY OF HONG KONG

Press Release

HKU earth scientists receive 2018 Natural Science Award (First Class) by the Ministry of Education

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Scientists at the University of Hong Kong receive 2018 Higher Education Outstanding Scientific Research Output Awards. (From left) Dr Huang Kaibin; Mr Liu Zhiming, Deputy Inspector (Education and Science), Liaison Office of the Central People's Government; Professor Andy Hor, Vice-President (Research) and Professor Zhao Guochun

Three scientists at the University of Hong Kong (HKU) received a first-class and a second-class award respectively in the 2018 Higher Education Outstanding Scientific Research Output Awards by the Ministry of Education (MOE).

One first-class and 11 second-class awards in natural sciences, and one second-class award in technological innovation were presented to outstanding research projects involving universities in Hong Kong by the state ministry this year in recognition of their significant contributions in scientific discoveries, technological innovations, scientific technology advancements and patented technologies' applications.

Professors Zhao Guochun and Sun Min from the Department of Earth Sciences of HKU received the 2018 Natural Science Award (First Class) by the Ministry of Education for their project entitled "Paleoproterozoic

Tectono-thermal Evolution of the Jiao-Liao-Ji Belt and Early Precambrian Transition of Tectonic Regimes", together with Professor Li Sanzhong from Ocean University of China and Professor Zhou Xiwen from the Institute of Geology of Chinese Academy of Geological Science, who are the first and fourth receivers of this award.

This project has led to the reinterpretation of the formation and evolution of the Paleoproterozoic Jiao-Liao-Ji Belt developing from an early stage continental rifting basin, through an ocean in the intermediate stage, to a later stage closure of the ocean, leading to continent-continent collision. The research results of the project have been highlighted by more than 16 refereed papers published in leading international journals and two books published by Springer and Elsevier, which have been cited by others for more than 1,100 times.

Professors Zhao Guochun (HKU), Sun Min (HKU) and Li Sanzhong (Ocean University of China) were also receivers of a 2014 State Natural Science Award (Second Class) for their project entitled "Paleoproterozoic amalgamation of the North China Craton and the assembly of the Columbia supercontinent".

Meanwhile, Dr Huang Kaibin from the Department of Electrical and Electronic Engineering, HKU received a Natural Science Award (Second Class) for the project entitled "Stochastic Optimization for Next Generation 5G+ Wireless Networks", led by Professor Vincent Lau of the Hong Kong University of Science and Technology in collaboration with researchers from Zhejiang University.

The team has made various breakthroughs in wireless technologies to overcome performance bottlenecks in 5G network development including scarcity of radio spectrum, hostility of wireless channels, and strong interference between dense mobile devices. Their efforts have led to inventions ranging from low-rate channel feedback to multi-antenna precoding to wireless power transfer, which have an impact on both the communication theory and 5G standardisation. Apart from the MOE award, their discoveries have also received recognitions from the world's largest association of technical professionals - the Institute of Electrical and Electronics Engineers (IEEE).

Biography of Professor Zhao Guochun

Professor Zhao Guochun is a professor at the Department of Earth Sciences of the University of Hong Kong. His major fields of research are metamorphic petrology, Precambrian geology and supercontinents. According to the Web of Knowledge, Professor Zhao's record in the field of GEOSCIENCES includes ~350 papers that have been cited for more than 35,000 times (h-index = 102), ranking number 21 among 3,828 top 1% geoscientists. He has received many awards, prizes and honours for his research, including the State Natural Science Award (2nd Class; First Awardee) (2014), Fellow of Geological Society of America (2014), Highly Cited Researcher Award of Clarivate/Thomson-Reuters (2014-2018), Outstanding Researcher Award of the University of Hong Kong (2016), 29th Khwarizmi International Award (First Class; 2016), Chair Professorship of Cheung Kong (Changjiang) Scholars Program (2017) and World Academy of Science (TWAS) Award (2018). Professor Zhao is the Editor-in-Chief of Precambrian Research, a leading international journal in earth science.

Biography of Professor Sun Min

Professor Sun Min is a professor at the Department of Earth Sciences of the University of Hong Kong. His major fields of research are igneous petrology, geochemistry and Precambrian geology. According to the Web of Knowledge, Professor Sun's record in the field of GEOSCIENCES includes ~320 papers that have been cited for more than 35,300 times (h-index = 100), ranking number 41 among 3,828 top 1% geoscientists. He has received many awards, prizes and honours for his research, including the State Natural Science Award (2nd Class; Second Awardee) (2014), Highly Cited Researcher Award of Clarivate/Thomson-Reuters (2014-2018), and Outstanding Young Researcher Award of the University of Hong Kong (2001).

Biography of Dr Huang Kaibin

Dr Huang Kaibin is an assistant professor at the Department of Electrical and Electronic Engineering (EEE) of the University of Hong Kong. His research interests are in various areas related to wireless communications. He has served on the editorial boards of key IEEE journals including IEEE Transactions on Wireless Communications, IEEE Journal on Selected Areas in Communications, IEEE Transactions on Green Communications and Networking, and IEEE Wireless Communications Letters. He has received many professional awards including the IEEE Communication Society's 2019 Best Tutorial Paper Award and 2015 Asia Pacific Outstanding Paper Award, as well as Best Paper Awards from IEEE GLOBECOM in 2006 and IEEE/CIC ICC in 2018.

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