

2020 TTK Science Awards and Young Scientist Awards Announced

On August 28, the Chinese Academy of Sciences (CAS) held a press conference in Beijing and announced the recipients of the Tan Kah Kee Science Awards (TKK Science Awards) and the Tan Kah Kee Young Scientists Awards (TKK Young Science Awards). Five research projects, respectively in mathematics and physical sciences, chemical science, life sciences, earth sciences, and technological sciences, were awarded the TTK Science Awards; and six scientists working in different fields were granted the TTK Young Scientist Awards for their excellent contributions.

To celebrate science excellence and promote science awareness in the public, we present in this issue of *BCAS* brief introductions on the recipients of the TTK Science Awards and the TTK Young Scientist Awards in special reports.

The recipients of the 2020 TTK Awards are listed below.

Recipients of Tan Kah Kee Science Awards

Areas	Projects	Primary Contributors
Mathematics and Physics	Discoveries of the pentaquark states	GAO Yuanning
Chemical Science	Chiral <i>N,N'</i> -dioxide and their metal complexes in asymmetric catalysis	FENG Xiaoming
Life Sciences	Structural and mechanistic investigations of the spliceosome	SHI Yigong
Earth Sciences	Destruction of the North China Craton	ZHU Rixiang
Technological Sciences	Investigation on the origin of friction and superlubricity	LUO Jianbin

Awardees of Tan Kah Kee Young Scientist Awards

Areas	Awardees	Achievements
Mathematics and Physics	GUAN Qi'an	Solutions of strong openness conjecture and L^2 extension problem in several complex variables
Chemical Science	CHEN Xing	Chemical labeling and analysis of sialoglycans
Life Sciences	WANG Kejian	Research advances on plant synthetic apomixis
Earth Sciences	TANG Chaosheng	Extreme climate engineering geology: Soil engineering properties response to drought climate and measures for disaster mitigation
Information Technological Sciences	XIAO Yunfeng	Research advances of ultrahigh-Q on-chip microcavity photonics
Technological Sciences	SUN Mingyue	Research advances on homogenization manufacturing of heavy components by metal additive forging

Background

Tan Kah Kee Science Awards

The Tan Kah Kee Science Awards (TKK Science Awards) have grown out of the former Tan Kah Kee Awards, which was established in 1988 and named after Mr. Tan Kah Kee (1874–1961), an influential entrepreneur, educator and social activist who had made great contributions to the development of science and education of China. The Tan Kah Kee Awards were first set up by Mr. Tan's family, and the Chinese Academy of Sciences (CAS) was entrusted for its organization, management and the evaluation of candidate recipients.

With the backing of leaders from the State Council and the support from the Chinese Ministry of Finance, CAS and the Bank of China, the Tan Kah Kee Science Award Foundation was duly registered as a national nonprofit entity and formally established in February 2003 upon the approval of the State Council and the ratification of the Chinese Ministry of Civil Affairs, and the TKK Science Awards were accordingly set up.

The objective of the Foundation is to honor prominent Chinese scientists who have made outstanding achievements, so as to promote China's scientific and technological development.

In 2010, the Foundation set up the Tan Kah Kee Young Scientist Awards (TKK Young Scientists Awards), to honor excellent junior scientists under 40 years old who have made outstanding S&T achievements in

recent years. The TKK Science Awards and the TKK Young Scientist Awards are conferred every other year, to honor excellent S&T achievements in six fields, namely mathematics and physics, chemistry, life sciences, earth sciences, information sciences, and technological sciences. Generally, only one prize is offered for one awardee for each field. Awardees of the TKK Science Awards will each receive a certificate, a gold medal, and a prize of RMB 1000,000 yuan, and awardees of the TKK Young Scientist Awards will each receive a certificate and a prize of RMB 200,000 yuan.

An academic panel is established for each field to carry out primary screening of the nominees, choose preliminary candidates and arrange international peer reviews. Based on the reviewers' comments, the panels are to thoroughly discuss and carefully evaluate the preliminary candidates, choose valid candidates by ballot and submit the voting results of the assessment to the Foundation's Council Board. The Foundation's Council Board shall vote to determine the final winners.

Candidate awardees should be first nominated by specialists of professor rank or equivalent in the relevant field, and self-applications are not accepted. Living Chinese scientists who have achieved important original S&T results in the fields and passed through the procedures of formal recommendation and peer evaluation are eligible for prizes from the Awards.

(Based on material from TKK Foundation)