

# **Strengthen Exchange and Cooperation Reach New Milestones of Science**

Remarks by H.E. Li Yuanchao  
Vice President of the People's Republic of China  
at the Opening Ceremony of the  
Eighth International Congress on Industrial and Applied Mathematics  
August 10, 2015

Respected ICIAM President Barbara Lee Keyfitz

Distinguished Guests

Ladies and Gentlemen,

Today, the Eighth International Congress on Industrial and Applied Mathematics is held in Beijing. On behalf of the Chinese government, I have the pleasure to warmly welcome scientists, industrial experts, and delegates from all over the world, and to congratulate the ICIAM Prize recipients.

Since the First International Congress on Industrial and Applied Mathematics held in 1987, it has become a grand gathering of the highest level, at the largest scale, and with the most extensive influence in the field of industrial and applied mathematics. It is the first time for China to host the Congress, which will be a great opportunity for all delegates, including Chinese delegates, to exchange recent developments and look into the future in the field of industrial and applied mathematics.

Mathematics is the most universal scientific language, the most widely

used scientific tool, and one of the most basic principles applied in natural and social sciences, which is of fundamental significance to the development of science and technology (S&T). Mathematics has been applied in almost all fields of human knowledge and activity, so as to promote innovative development of S&T and economy fundamentally, and shape the way of human life profoundly. Specifically, the internet technology, big data processing, space exploration, modern medical diagnosis, and financial derivative products have been developed on the basis of new theories and methods of mathematics. The extensive application of mathematics has become a vital driving force behind the development of our world.

China has a long history of mathematics with a tradition of emphasizing applications. Since the founding of the People's Republic of China, the development of mathematical research in China has been accelerated towards the international frontiers, with recognized achievements in both theoretical research and industrial applications. Since the reform and opening-up in the late 1970s, China launched an unprecedented modernization course in the human history, and carried out the largest and the fastest industrialization in the world. China became the world's second largest economy in 2010, and the value-added of China's manufacturing industry accounted for 20.7% of the world total in 2011. It has since become the largest manufacturing country in the world.

The application of mathematics is an important driving force behind the modernization of China, and has played a significantly fundamental role in the economic development and S&T progress. China has developed a series of cutting edge technologies, such as the fastest supercomputer Tianhe-2, the stream and silt control of the Three Gorges Reservoir, the

optimization of high-speed railway, and the high-precision space remote sensing. Network S&T and its applications, represented by the internet and cloud computing, have been developing into a new engine for China's economic growth. China's online retail turnover was 2.8 trillion RMB in 2014, the largest in the world.

It is a recognition and encouragement to the development of applied mathematics in China that the Congress on Industrial and Applied Mathematics is hosted in Beijing and an ICIAM prize named after the Chinese Mathematician Su Buqing was established in 2003. I would like to take the opportunity to express my appreciation to the International Council for Industrial and Applied Mathematics.

Now, the Chinese people are working hard to achieve the nation's "two century" development goals, and to realize the Chinese dream of great national rejuvenation. President Xi Jinping has pointed out that powerful strength originated from S&T innovation is much more demanded than ever before. Faced with the emerging world-wide S&T and industrial revolution, China will implement strategies on innovation-driven development, keep on promoting new-type industrialization, and build an innovative nation. This certainly provides exceptional opportunities for the development of S&T, including mathematics.

The Chinese government has established special funds to support mathematical research through the Ministry of Education, the Ministry of S&T, the Chinese Academy of Sciences, and the National Natural Science Foundation of China. Such national strategic development plans as "Made in China 2025" and "Internet+", will provide abundant chances for the application of S&T, including mathematics. National talents plans such as the "Thousand Talents Plan" for overseas high-level talents and

the "Ten Thousand Talents Plan" for domestic high-level talents, provide a strong support to talents growth in all disciplines of sciences, including mathematics. Respecting labor, knowledge, talents, and creation in our society will build a favorable environment for innovation and entrepreneurship. It is our hope that new historical progress on S&T will be achieved in China, along with the wave of S&T development in the world, and that China's mathematics and its applications could enter into the forefront of global scientific development.

Science is without borders. To ensure the development of China's S&T, we need to learn from and establish close ties with international scientific colleagues. Under the banner of peace, development, cooperation, and win-win strategy, China will actively support and take part in the international communication and cooperation. This Congress provides a much-needed platform for domestic and overseas delegates to carry out exchange and cooperation. We expect that the Congress will have a significant and far-reaching influence on the development of industrial and applied mathematics, promote exchange and cooperation among international communities, push forward the close connection and interaction between mathematics and S&T, and that the Congress will become a landmark in the history of industrial and applied mathematics.

Jointly together with our international counterparts, China will push forward the development of industrial and applied mathematics, enhance crossover, fusion, and innovation between mathematics and numerous other disciplines and fields, and promote the sustainable development of the economy and society. We encourage Chinese scientists to engage in widespread academic exchange and cooperation

with scientists from all over the world, to reach new milestones of science together, so as to make greater contributions to the development of science, technology, and human civilization.