



## CAS Eyes Multiple S&T Breakthroughs in the Next Five Years

CAS released its 13<sup>th</sup> Five-year Plan (2016–2020) in Beijing on August 31, 2016, aiming at further breakthroughs in areas from particle physics and astronomy to brain science, artificial intelligence, oceanology, ecology and the environment.

The plan, announced by CAS President BAI Chunli, sets the Academy's goals and development priorities in the next five years.

“We will strive to achieve international prominence in strategically significant fields, blaze the trail in cutting-edge and cross-disciplinary areas, and yield a number of major, original research results, technologies and products,” said BAI.

The plan calls for CAS to lead the country's S&T advancement in fields like aviation, space and deep-sea exploration, quantum communication, computing technology, brain science and artificial intelligence, cyber security, clean energy, big data, intelligent manufacturing and robotics, new-generation materials, environmental protection and public health studies.

The plan sets forth 60 major science and technology breakthroughs the Academy aims to achieve as well as 80 key projects it will undertake. Ongoing projects will also be a major focus of the Academy over the five-year period, including: manned space exploration and lunar probe, high-resolution earth observation, nanotechnology, precision control of protein machinery and life processes, restoration

and protection of fragile ecological areas, strategic advanced electronic materials, quantum control and information, and deep sea research. As part of the effort, CAS will heavily focus on fostering innovation.

According to the plan, CAS is going to spend 40% of its research budget on basic research, 50% on applied research, and 10% on experimental development, with the goal of making the Academy a top-ranked, globally influential and competitive research institution. CAS also hopes to get to the world-class level in physics, chemistry, material science, mathematics, environment and ecology, and geosciences by the end of 2020.

During the five-year plan period, the Academy will bring together resources from across the country to build three to five large-scale international cooperative science projects and more national laboratories in support of China's development.

Furthermore, CAS aims to further develop independent intellectual property rights and industrial technology standards, as well as practical applications for its S&T output in order to enhance social development.

During this period, CAS plans to establish about 10 overseas research institutions. In addition, it aims to set up five to ten CAS-TWAS Centers of Excellence, as part of China's Belt and Road Initiative. *(Based on a release from CAS English website)*

