

Exhibition Showcases CAS Efforts to Serve the National Goal of Building an Innovation-Driven Country

By SONG Jianlan (Staff Reporter)

Focusing on what CAS scientists kept pursuing over the past five years, an exhibition in Beijing offers a glance of their latest S&T innovational results.

A tunnel at the exhibition guides visitors to a journey of CAS research activities in extremely different fields, ranging from outer space to the depth of the earth, and from the extensive cosmos to the very microscopic structure of matter. (Photo by SONG JL)

宏观
微观
贯通

上天
入地
下海

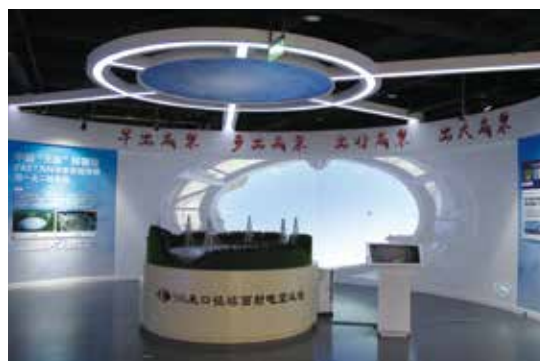
顶天
立地
结合

To promote advancement of science and technology and offer the public an opportunity to approach science, an exhibition is to be held in Beijing by CAS from middle August to the end of November of 2017. Powered with multi-media and interactive technology, it presents S&T progress made by the Academy over the past five years.

In particular, the exhibition shows visitors the innovational S&T results achieved by the Academy from its efforts gone to three aspects, namely the pursuit of key scientific issues on S&T frontiers of international significance, the attempts to meet the major demands of the state, and the endeavors to answer major challenges in national economic development.

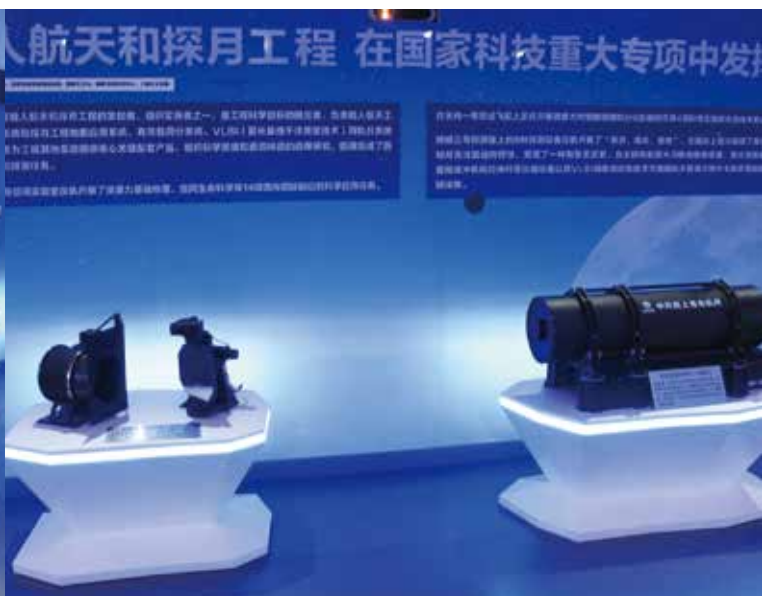
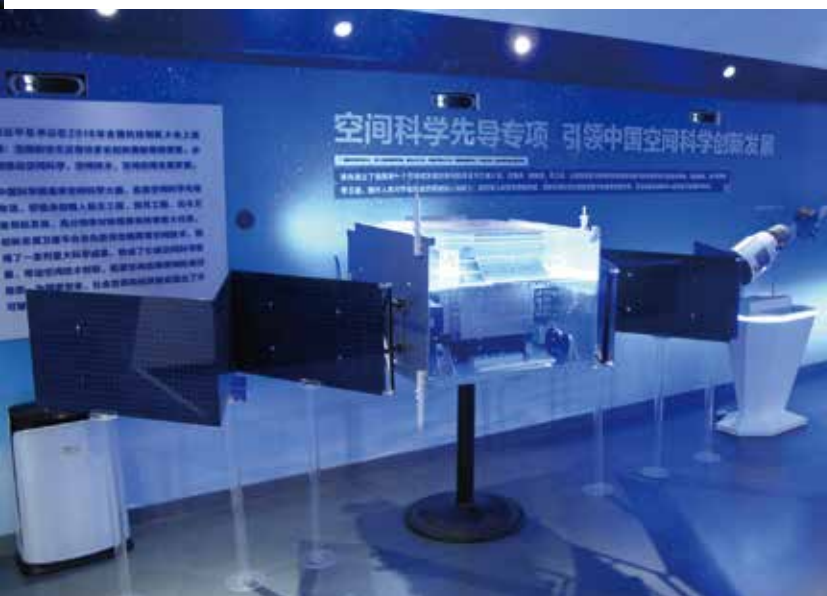
All the results, arranged as three themes in the first and the largest section, highlight the determination of the Academy to achieve leapfrog S&T development. Other three sections respectively showcase the Academy's talent constellations, its high-end S&T thoughts, and its prospects as a science organization of international excellence.

Results shown at the exhibition might provide a footnote for the drastic institutional reform implemented



Near to the entrance of the exhibition, displayed as a centerpiece is a model of the Five-hundred-meter Aperture Spherical Telescope (FAST), the largest ever single-dish radio telescope in the world. It is expected to maintain this position for around further two decades, according to experts. (Photo by SONG JL)

across the Academy years ago. To tune its science research and technological R&D onto the track of the above-mentioned three orientations and further build up its science and education capacity, the Academy implemented a top-down structural reform in 2013, determined to serving for the country's goal to build itself



On the left along the tunnel (left), displayed are models of the microsatellites developed by CAS under its Strategic Priority Research Program on Space Science, an initiative to explore fundamental scientific issues via space science measures. From left to right: DAMPE (also known as "Wukong"), the satellite for dark matter particle detection; the *Shijian-10*, the satellite for microgravity and space life science research; the "Micius", a satellite for quantum experiments at space scale; and the space-based hard X-ray modulation telescope (HXMT), also known as "Intellectual Eye". Lined on the right of the tunnel (right) models of payloads for the "Shenzhou" manned mission and the lunar program. (Photos by SONG JL)



into an innovation-driven economy by 2020, and a first-tier innovation-driven country by 2030.

To remove institutional barriers and better pool the research resources scattering among the 100 plus institutions within the Academy, efforts have been made to develop involved institutes into four major types of scientific institutions in line with their own disciplinary strengths, each oriented to a different strategic niche, ranging from innovation centers, centers of excellence, mega-science research centers, to research institutes of unique characteristics.

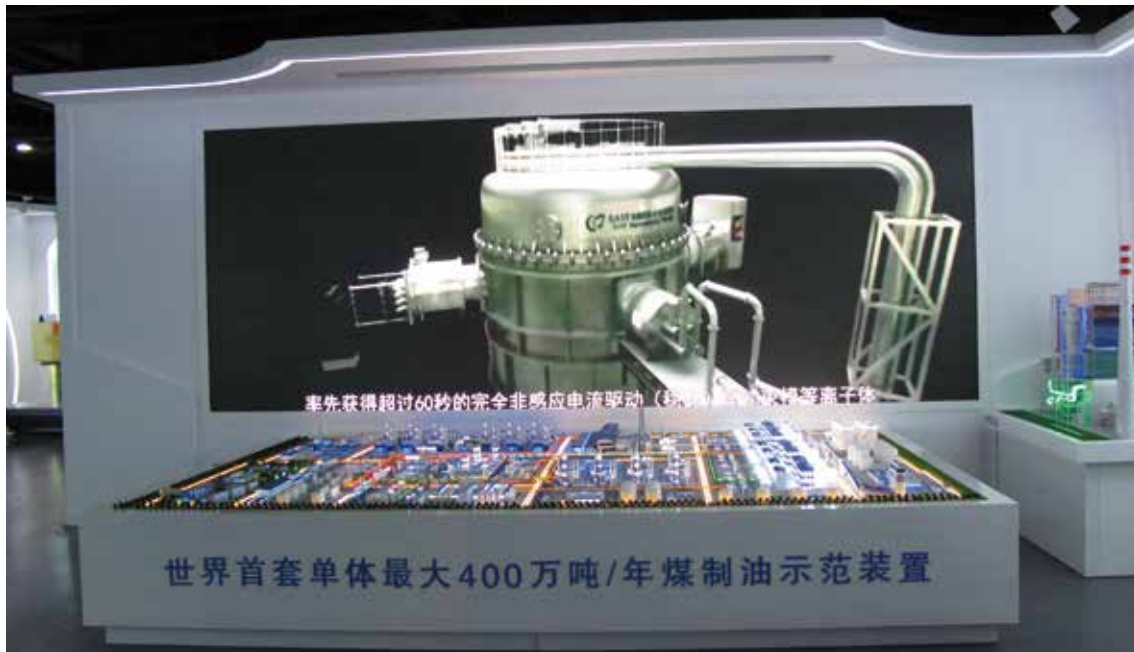
Committed to notching more S&T breakthroughs, fostering more excellent talents, and incubating more innovative scientific thoughts, this reform has paved way for the “spearhead initiative” of CAS, an action plan taken in accordance with the instructions and demands from the central authorities to become a pioneer in achieving leapfrog development in science and technology progress, in building a national talent incubator for innovation, in becoming a national high-end S&T think tank, and in maturing into an internationally first-tier organization for science research. Together with the three orientations



Mega-science facilities play an important role in the exploration into the microstructure of matter. Shown as the centerpiece is the China Spallation Neutron Source located at the Institute of High Energy Physics, CAS. (Photo by SONG JL)

described above, now these instructions and demands have constituted the guideline for the Academy’s development in a new period.

The country is determined to developing itself into a world-leading S&T power by 2049. Targeting this goal, the locomotive of CAS is now gaining momentum.



CAS has been striving to strengthen its buildup to help upgrading the country’s mode of industrial development. Representatives of its efforts include those to develop advanced nuclear energy, either fusion or fission, and those to whet clean technologies for transformation of coal to oil, aimed at an optimal composition of energy sources. (Photo by SONG JL)