ANSO
Alliance of International Science Organizations

ANSO Secretariat

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ANSO Visiting Fellowship on Mega-Science Facilities

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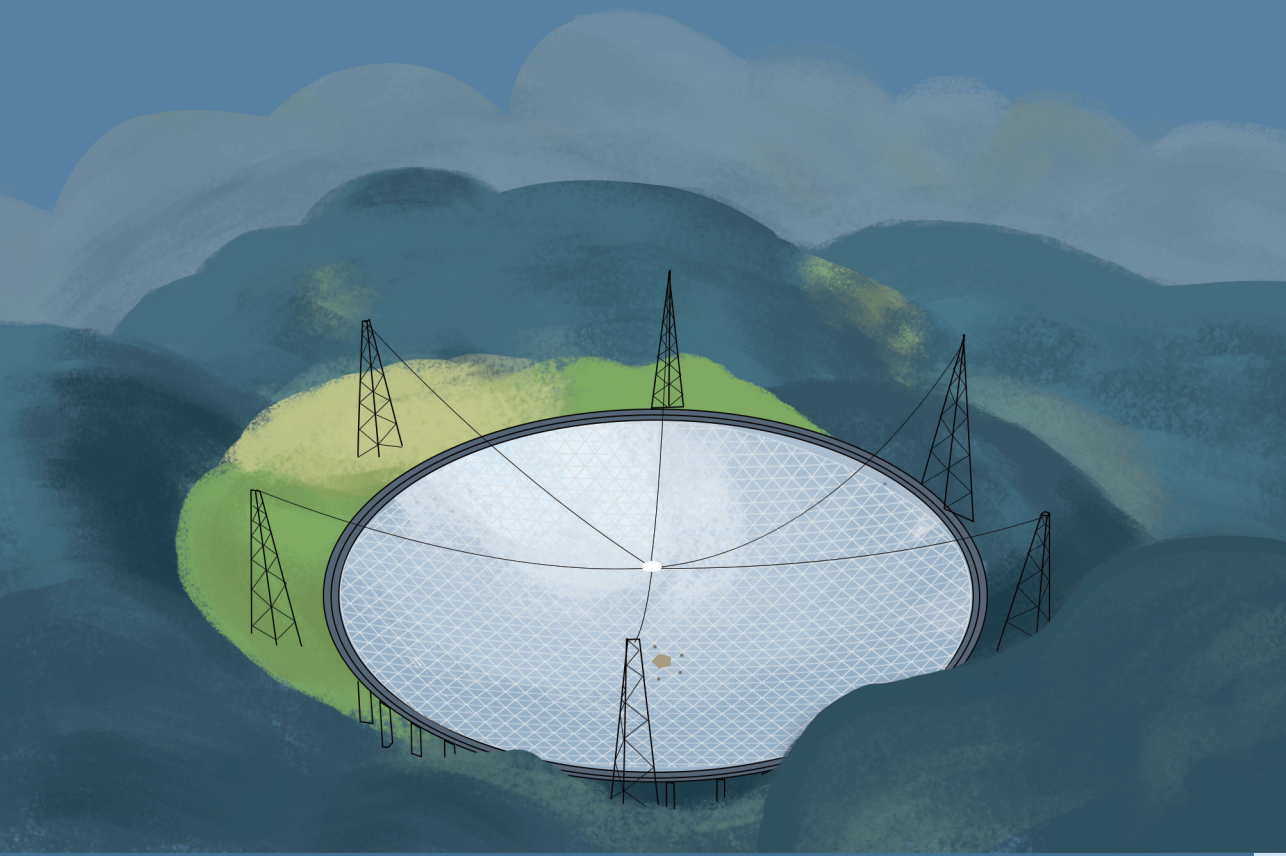


ANSO Visiting Fellowship on

Mega-Science Facilities

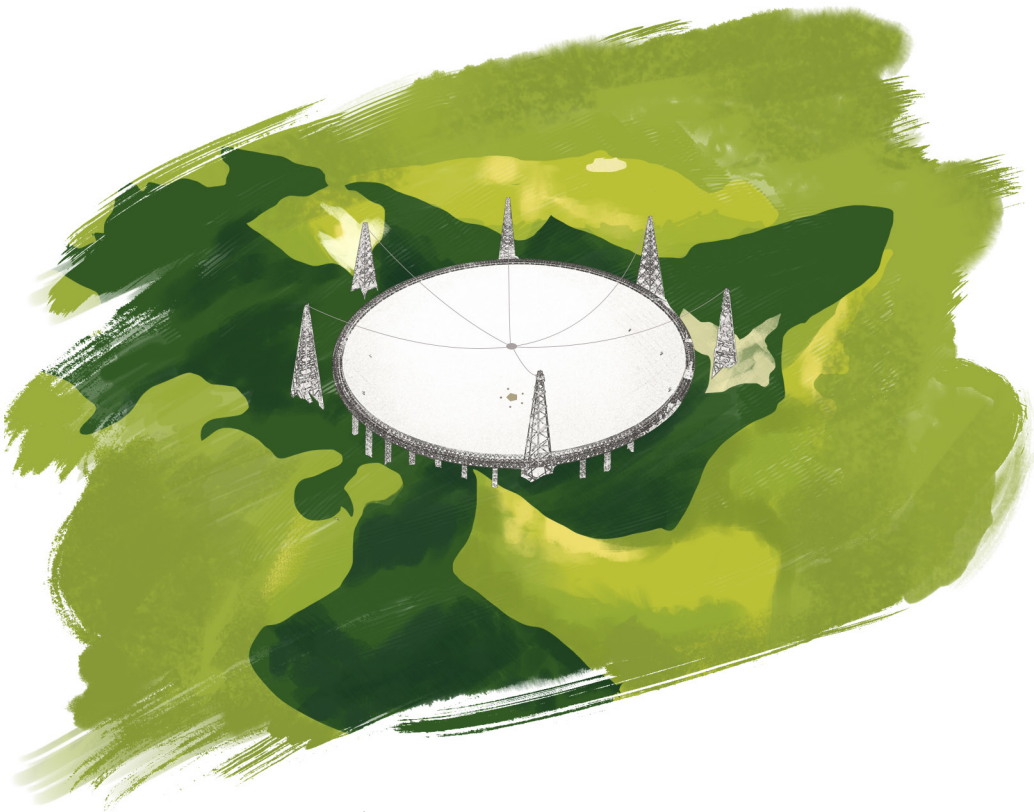
ANSO Visiting Fellowship on Mega-Science Facilities provides scholars worldwide an opportunity to access high-impact & high-quality mega-science facilities and to address scientific problems of common interests to both academia and society.

The Fellowship welcomes applications from both early-career scientists and senior scientists who are willing to spend months working on site of the mega-science facilities in collaboration with Chinese researchers.

ANSO welcomes mega-science facilities from all around the world to join and build more far-reaching projects together.

Category	Early-Career Scientists	Senior Scientists	
Eligibility	Post-doctoral fellows, lecturers, assistant professors and equivalent scholars	Associate professors, professors, or professionals at a comparable level in related fields	
Project Period	3-9 months	2-3 months	
Funding	RMB 20,000/month (pre-tax) + Round-trip travel allowance	associate professors and equivalent professionals	professors and equivalent professionals
		RMB 30,000/month (pre-tax) + Round-trip travel allowance	RMB 40,000/month (pre-tax) + Round-trip travel allowance

Five-hundred-meter Aperture Spherical radio Telescope (FAST) —China Sky Eye



The world's **LARGEST** single-dish radio telescope

The **MOST SENSITIVE** radio telescope

FAST, a 500-meter diameter active reflector radio telescope, aims to achieve wide sky-coverage and high sensitivity for astronomical observations with China's intellectual property.

The main scientific fields of FAST include large sky neutral hydrogen survey, pulsar searching, leading the VLBI network in low frequencies, detecting interstellar molecules, and Search for Extra Terrestrial Intelligence (SETI). Its unparalleled sensitivity and excellent survey speed will enable astronomers to greatly expand the observational parameter space of compact objects, gaseous galaxies and interstellar medium.

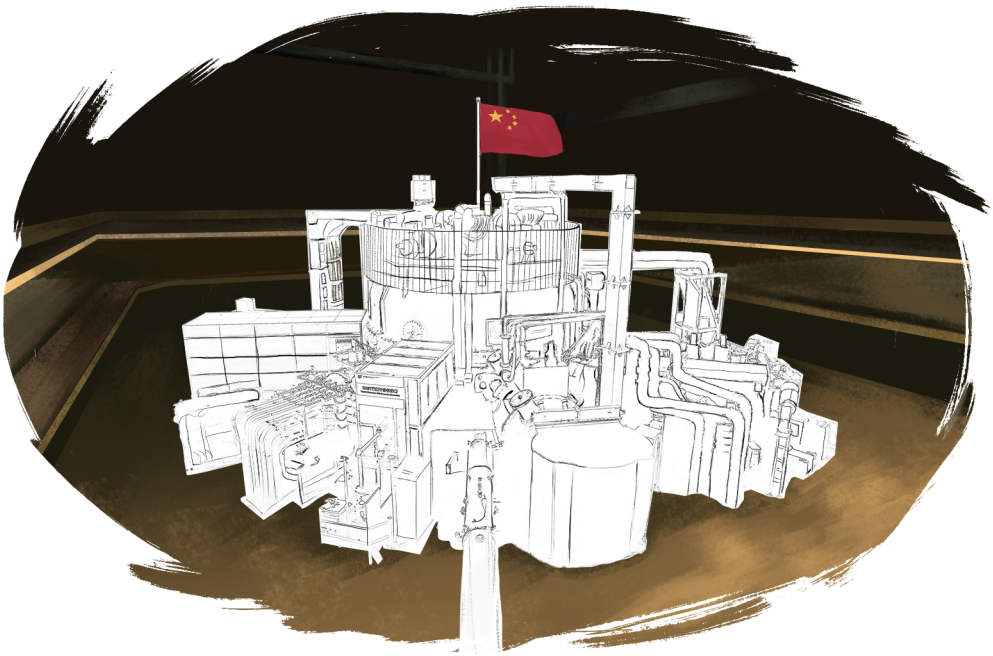
Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST)

The world's **FIRST** telescope that uses two large segmented mirrors in one optical system.

LAMOST has **4,000** fibers, making it the telescope with the **HIGHEST** spectral acquisition rate in the world.

LAMOST is a special active reflecting Schmidt telescope adopting an innovative active optics technique that changes the mirror surface continuously to achieve a series of different reflecting Schmidt systems at different times. It breaks through the bottleneck that has hampered large-scale spectroscopic survey observations in the past by combining a large aperture (an effective aperture up to 4.9 meters in diameter) with a wide field of view (5 degrees).

Experimental Advanced Superconducting Tokamak (EAST)



EAST is a fully superconducting tokamak with the mission to conduct both fundamental physics and engineering researches on tokamak-approach fusion energy with a steady and high performance. It will provide a scientific base for reactor design and construction, and to promote plasma physics study and develop its related technologies.

EAST is a **UNIQUE** Tokamak facility equipped with

- Non-circular cross-section
- Fully superconducting magnets
- Fully actively water-cooled plasma facing components

EAST is an **INDISPENSABLE** Tokamak facility offering direct experience for International Thermonuclear Experimental Reactor project (ITER) construction and operation.

EAST is **OPEN** worldwide, as it holds the core value of "Open to Share, Fusion for Future".

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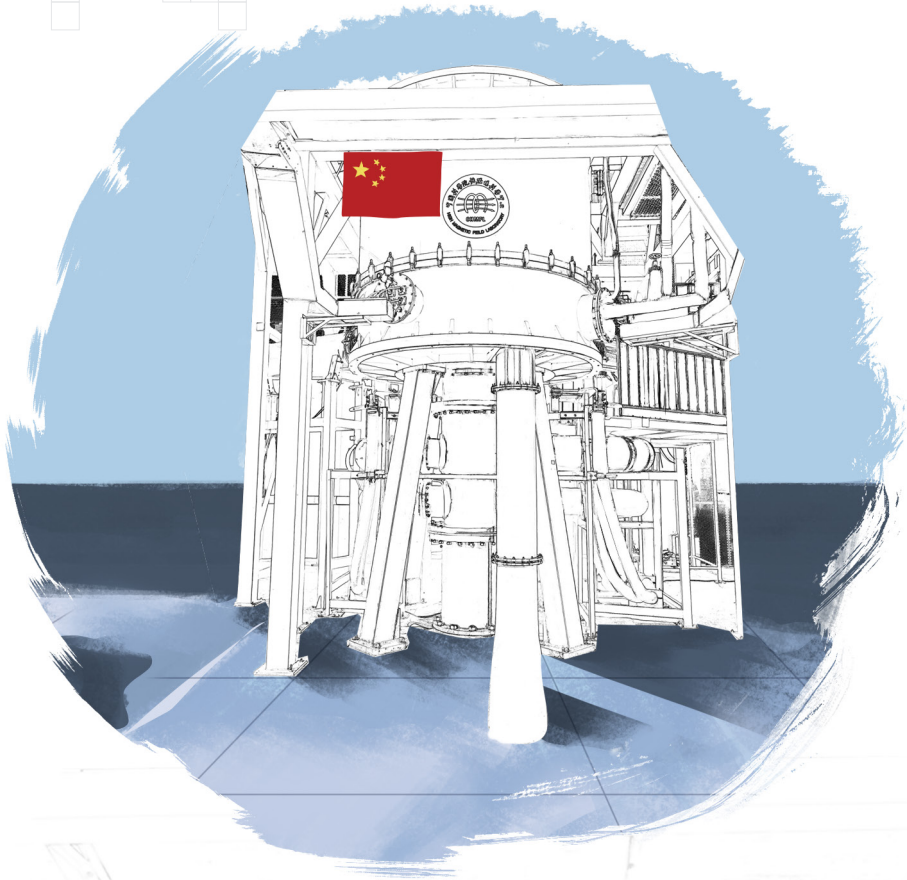
China's Steady High Magnetic Field Facility (SHMFF)



SHMFF is a user facility enabling cutting-edge research with a wide range from material to biology by providing the broad scientific community with a steady high magnet field.

SHMFF, equipped with **TEN** independent magnets and several experimental instruments, is home to

- a **45.2T hybrid magnet**
- **4 superconducting magnets**
- **5 water-cooled magnets**
- **6 experimental systems**

This comprehensive research platform offers extreme conditions for unlocking secrets of matter and **OPENs** its proposal submission to researchers from all over the world.

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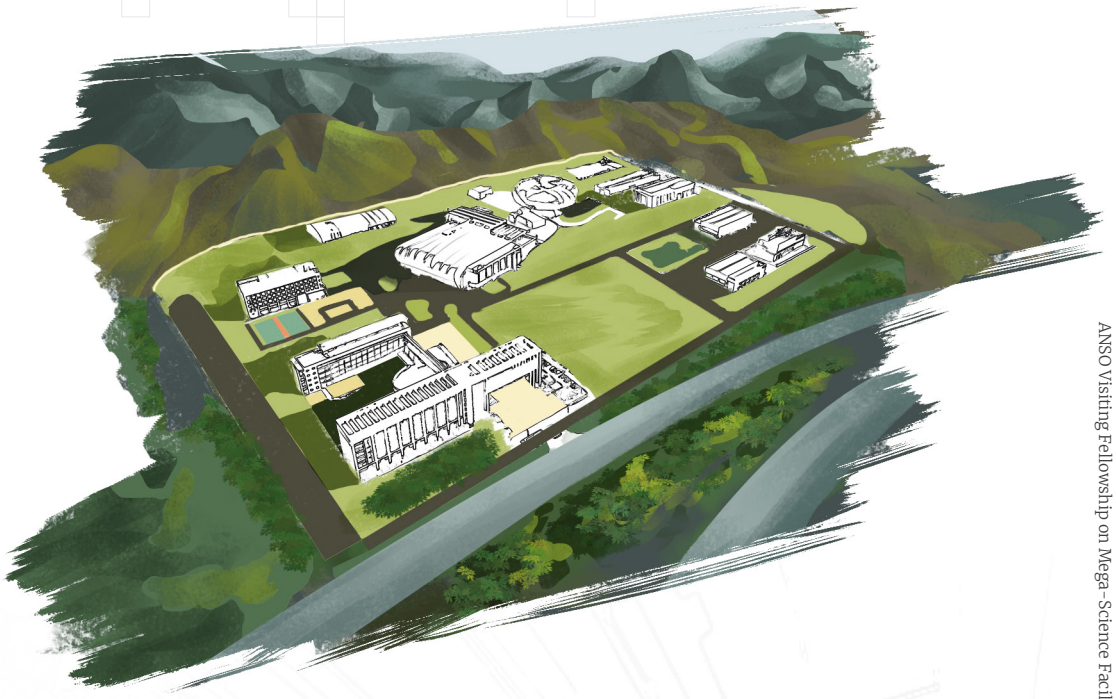
China Spallation Neutron Source (CSNS)



CSNS is the **FIRST** pulsed spallation neutron source in developing countries.
It includes

- **a H-linear accelerator**
- **a rapid circling proton synchrotron**
- **a target station**
- **3 Phase I neutron instruments**

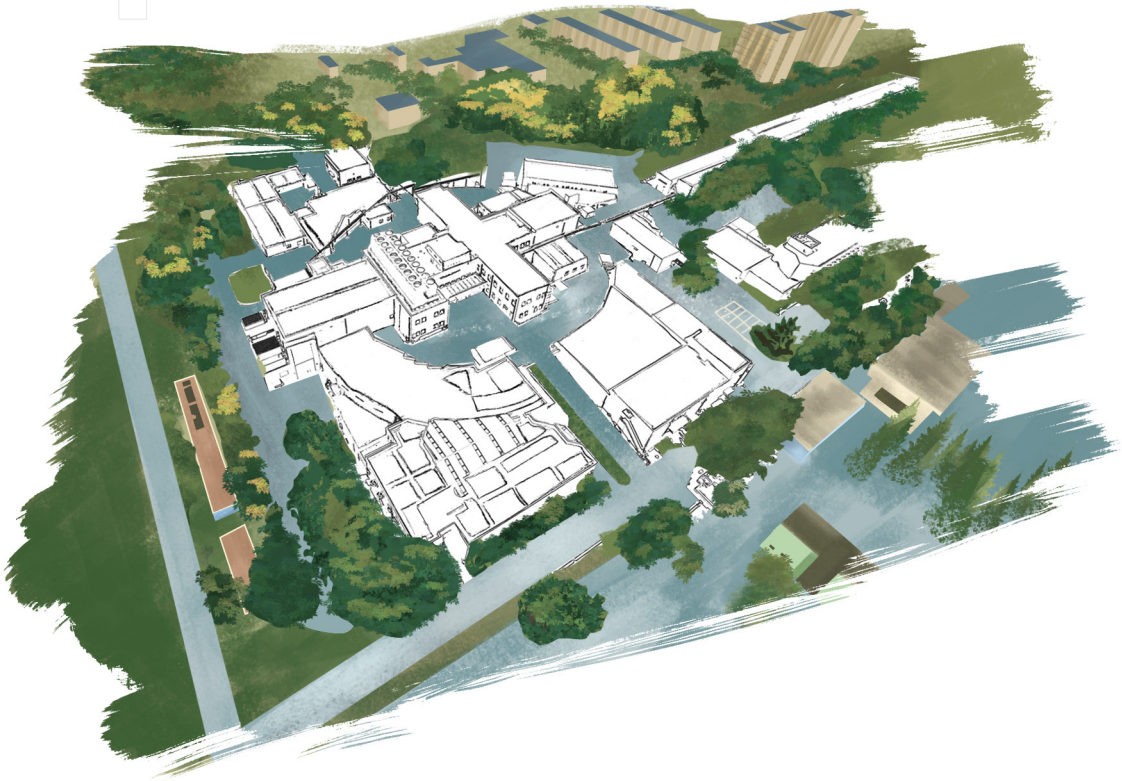
It aims to provide a powerful platform for both fundamental scientific research and high-tech development in many application fields, such as material science, life science, resource environment, and new energy.

Neutron scattering technology is widely used in physics, chemistry, life sciences, materials science and technology, resource environment, nanotechnology, etc. It is expected to achieve breakthroughs in important frontier research fields such as quantum regulation and high temperature superconductivity. Currently, there are 5 spectrometers in operation, and 6 spectrometers under construction.

The design principles for the CSNS are:

- **Leading role.**
- **High availability.**
- **Cost rationality.**
- **Upgrading potential.**

Beijing Synchrotron Radiation Facility (BSRF)



The synchrotron radiation light of BSRF covers the energy from vacuum ultraviolet to hard X-ray, and supports many kinds of experimental techniques.

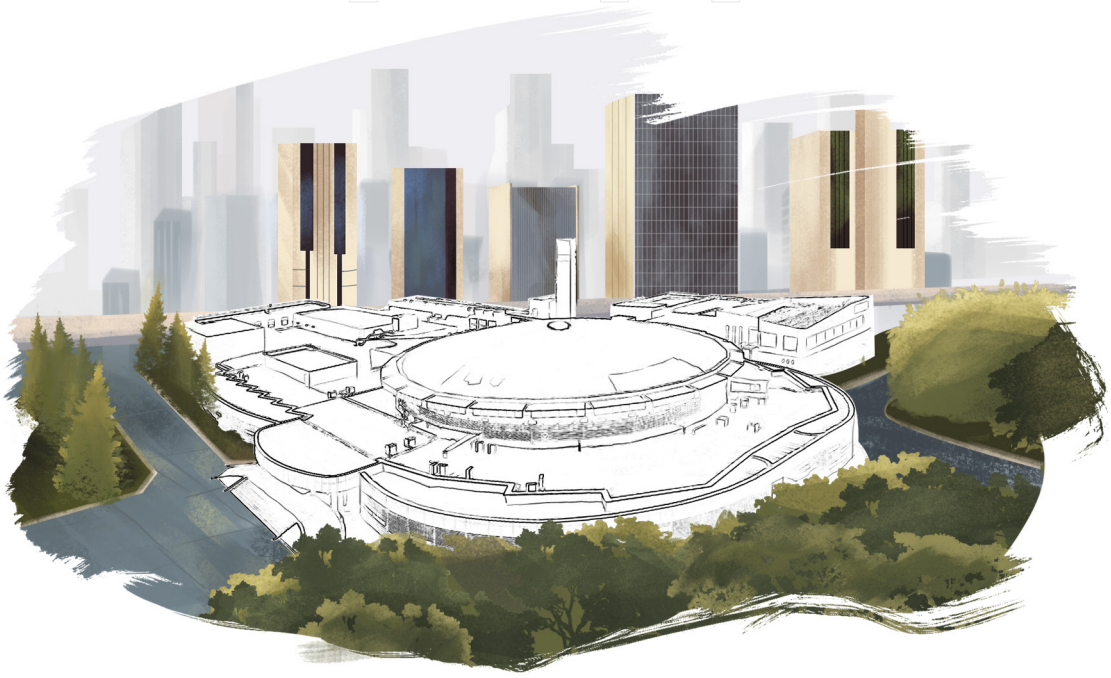
Currently, BSRF is equipped with

- **3** experimental halls (12#, 13#, 15#)
- **5** insertion devices
- **14** beamlines
- **14** experimental stations

After the upgrading project of BEPCII, BSRF runs in 2.5GeV full-energy injection and 250mA beam current in the dedicated mode of synchrotron radiation. The intensity of hard X-ray has increased one magnitude and the stability was also improved greatly.

BSRF could supply beamtime to upwards of 500 experiments for over 1000 users from more than 100 institutes and universities in total at home and abroad.

Hefei Light Source (HLS)



HLS, known as the **FIRST** dedicated synchrotron radiation facility in China, is now running **TEN** beamlines with **ELEVEN** experimental stations (ARPES, Atomic & Molecular Physics, Catalysis and Surface Science, Combustion and Flame, Infrared Spectroscopy and Microspectroscopy, Mass Spectrometry, Photoemission, Spectral Radiation Standard and Metrology, Soft X-ray Microscopy, XMCD-a and XMCD-b), benefited from three major upgrade projects.

The bright synchrotron radiation, along with the well-designed beamlines and experimental stations, provides worldwide researchers with a comprehensive and interdisciplinary platform to carry out cutting-edge experiments. The research with HLS covers physics, chemistry, life and medical sciences, material sciences, surface sciences, metrology, instrumentational development, etc. We enthusiastically welcome users from all of the world.

Shanghai Photon Science Center

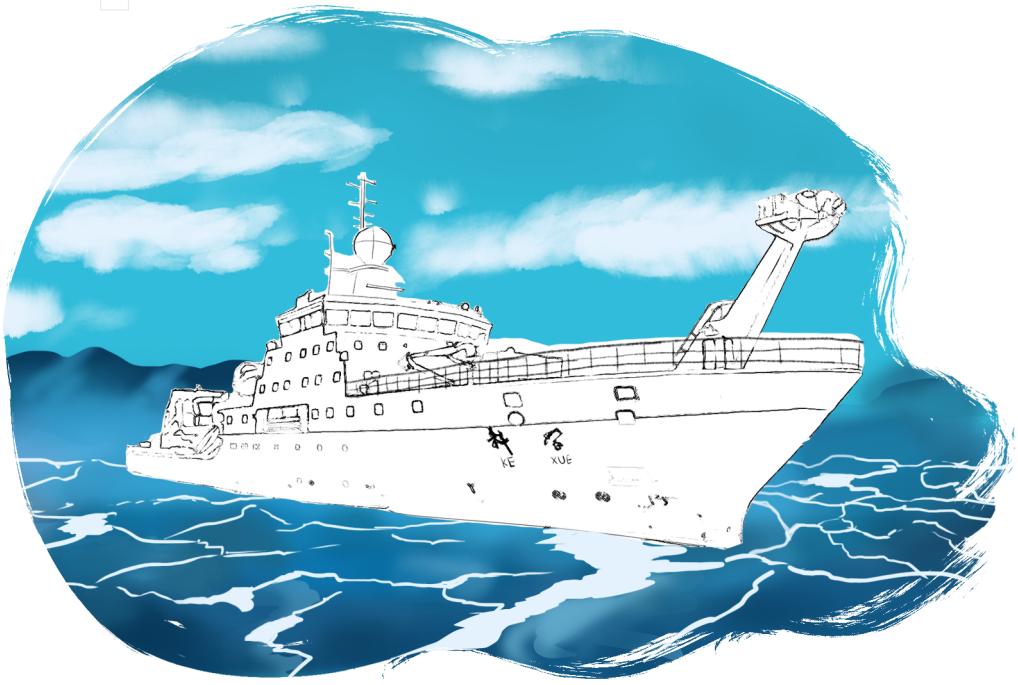
Shanghai Photon Science Center is home to 3 major facilities that aim to support cutting-edge scientific research and innovation in China.

The Shanghai Synchrotron Radiation Facility (SSRF) is a 3.5GeV third generation synchrotron light source. It has more than 30 beamlines and 40 experimental stations, allowing 5,000 researchers to conduct experiments each year.

The Shanghai Soft X-Ray Free-Electron Laser Facility (SXFEL) is based on a 1.5 GeV linear accelerator. It has 2 undulator lines and 5 experimental stations in the water window region.

The Shanghai HIgh repetitioN rate XFEL and Extreme light facility (SHINE) is based on an 8 GeV linear accelerator and its repetition-rate could be up to 1MHz. It has 3 undulator lines and 10 end-stations with energy 0.4-25keV.

Multi-purpose Oceanographic Research Vessel (MORV)



Multi-purpose Oceanographic Research Vessel (MORV) (also known as the Research Vessel ***KEXUE***) was completed in September 2012 and delivered at its home port in Qingdao. Scientific missions include: Ocean circulation and climate change, Marine dynamic process and natural hazards, Deep-sea biological resources and biodiversity, Ocean ecosystem and carbon cycle, Hydrothermal system in mid-ocean ridge and continental margins and deep earth processes, and Formation mechanism of deep-sea oil and gas resources.

Global and unlimited navigation, ice-strengthened;

Length: **99.8m**, breadth: **17.8m**, depth: **8.9m**; **80 berths** for accommodation abroad;

Gross tonnage: **4711**; Range: **15,000** nautical miles;

Driven by advanced podded electric propulsion system and two sets of bow thrusters;

One-man-bridge operation providing almost **360° view**;

Unmanned engine control room and dynamic positioning system;

Detection range: **99.2%** of the world's seas.