## **FDS** Introduction

FDS, the consortium for nuclear technology innovation in China, focuses on R&D of advanced nuclear systems and applications of nuclear technology. Its history can be traced back to the 1980s. In addition to fundamental research on neutron science and technology, FDS conducts applied research in the fields of Nuclear Informatics and Software Applications, Neutron Detection and Applications, Advanced Nuclear Energy and Safety, and Radiation Medicine and Applications. Through years of unwavering explorations, FDS has successfully established an innovative developing model which integrates the resources of scientific research organizations, universities, high-tech enterprises, and financial institutions. FDS has set up the International Academy of Neutron Science (IANS) as an example research organization with branches in Qingdao, Chongqing, and Hefei. Up to now, FDS Consortium has registered more than 20 subsidiary independent legal entities and established five R&D bases located in Chongqing, Qingdao, Nanjing, Hefei and Anqing.

FDS Consortium has over 800 employees with 80% of its R&D members holding doctoral degrees. Its growth and development strategies are steered by academicians of Chinese Academy of Sciences and academies of other countries. Many chief scientists and directors of many international and national mega research and industrialization programs serve as leading talents key advisors of FDS.

FDS Consortium has undertaken more than 200 domestic and international projects. These include the International Thermo-nuclear Experimental Reactor (ITER) related projects at home and abroad, collaborations with International Atomic Energy Agency (IAEA) and International Energy Agency (IEA), as well as participation in prominent national programs such as the National Basic Research Program of China, the National High-tech R&D Program of China, the National Key R&D Program of China, the Mega Program of Natural Science Foundation of China, the Strategic Priority Research Program of Chinese Academy of Sciences, and the Major Industrialization projects.

FDS Consortium has won more than 20 prestigious national and international science and technology awards, including the National Natural Science Award, the National Science and Technological Progress Award, the European Prize for Innovation in Fusion Research, and the American Nuclear Society Fusion Energy Division Outstanding Achievements Award. These accolades serve as testament to FDS's remarkable contributions and groundbreaking advancements in the field of nuclear technology.

FDS Consortium has developed a suite of cutting-edge products including Advanced Nuclear Software, Neutron Detection Equipment, China Lead-Based Reactors (CLEAR), and Accurate Radiotherapy Systems (KylinRay).

The mission of FDS Consortium is "Better Technology, Better Life". FDS actively seeks collaborators sharing common ideals and beliefs around the world, forging ahead together in the pursuit of better life for humankind.