

Academician SHI Guangyu, an atmospheric physicist, an Academician of Chinese Academy of Sciences (CAS), was born in Zibo, Shandong Province. He graduated from the Department of Physics at Shandong University in 1968, and received his Ph.D. in February 1982 at Tohoku University, Japan. He has worked as a visiting scientist or a visiting professor at Atmospheric and Environmental Research, Inc. (AER, USA), Atmospheric Sciences Research Center (ASRC, USA) of the State University of New York, Commonwealth Scientific and Industrial Research Organization (CSIRO, Australia), Center for Climate System Research at the University of Tokyo (Japan), Center for Environmental Remote Sensing (CEReS, Japan) of Chiba University, and Research Institute for Humanity and Nature (RIHN, Japan). He has been serving as a member of Scientific and Technical Advisory Panel (STAP) of Global Environment Facility (GEF/UNEP) since 1993, a member of international science team of Atmospheric Brown Cloud (ABC/UNEP) and the Head of Chinese Working Group for ABC since 2003, a member of Surface Ocean -Lower Atmosphere Study (SOLAS/IGBP) and the head of Working Group for SOLAS of China National Committee for IGBP (CNC-IGBP) since 2004, and the Chair of Asia-Pacific Radiation Committee (APRC) in International Radiation Committee (IRC/IAMAS) since 2007. As one of PIs, he has led an NSFC Major Program "A study for biogeochemical-physical coupling processes between surface ocean and lower atmosphere". By cooperating with colleagues from Japan, South Korea, and IGBP, this project has promoted the establishment of the Asian Dust and Ocean Ecosystem (ADOES) under the international framework of SOLAS. Dr. Shi has led numerous projects related to both theoretical and observational studies, mainly on atmospheric radiation and global climate change. His major contributions include: 1) He has established a comprehensive k-distribution model for calculating atmospheric radiation, which has been used by many research institutions worldwide, such as Tohoku University, CSIRO, Harvard University, and IAP; 2) He has systematically studied the radiative forcing and the climate effects of atmospheric greenhouse gases and aerosols, and such innovative results have been extensively cited by the IPCC (Intergovernmental Panel on Climate Change) scientific reports; 3) He has supervised the observational studies on optical properties of atmospheric aerosols (such as sand dust), investigated the vertical distribution of the aerosol and ozone with the aid of stratospheric balloon, set up several field sites in China to study aerosol and radiation, and made the first measurement on the vertical distribution of ozone and aerosol up to a height of 33 km in Northern China. Dr. Shi has authored more than 200 papers (63 of which were included in SCI/SCIE). He is the first author of two books, and the co-author of other 12 books. He has supervised more than 40 graduate students and 4 postdoctoral researchers. He has received the special award for national meteorological popular science book from the Chinese Meteorological Society in 1994, the 2nd Class of Natural Science Award from CAS in 1998, the Fujiwara Award from the Meteorological Society of Japan in 2007, and the 2nd Class of Teaching Achievement Prize from CAS in 2008. Now he is the PI of the NSFC Major Project "Study on Cloud Structure and Radiation Climate Effect in Typical Regions of China".