

Dr. Weijian Zhou

Dr. Weijian Zhou was graduated from Guizhou University, (1976) and a PhD in Geology from North-West University, China (1992-1995). Her PhD thesis was awarded “The First National Prize for the One Hundred Most Outstanding PhD Theses in China” in 1999.

Currently, she is the director and professor of the Xi’an Accelerator Mass Spectrometry (AMS) Center, the director of the academic board of State Key Laboratory of Loess and Quaternary Geology, CAS (Chinese Academy of Sciences). She was the vice-director (2004-2006), the director (2006-2008, 2014-2017) of Institute of Earth environment, CAS and State Key Laboratory of Loess and Quaternary Geology, CAS (2000-2010).



She has published about 200 refereed papers in academic journals. She has supervised more than 30 PhD and Master of Science students. She teaches courses of radiocarbon chronology, Global Change, Cosmogenic Nuclides Environmental Tracing.

She was a Member of PAGES/CLIVAR Intersection Working Group (2004-2008) , and now is Member of Chinese Academy of Sciences (elected in 2009), Member of the Academy of Sciences for the Developing World (TWAS) (elected in 2010), Associate editor of the international journal Radiocarbon (1997-now); Fellow of American Geophysical Union (elected in 2016); Member of the AGU Devendra Lal Memorial Medal Selection Committee (2017-2019) and the AGU Joanne Simpson Medal Selection Committee (2018-2019). She is now the member of the IGCP (The International Geoscience Programme) Council (2018).

She is mainly engaged in the research of cosmogenic nuclides (^{14}C , ^{10}Be , etc.), Quaternary Geology and global change. Among her original academic works can be mentioned: She identified the detailed picture of the fluctuating Younger Dryas (YD) event in the East Asian monsoon area, revealing the importance of high and low latitude climate interactions. She developed a mathematical method to disentangle the global geomagnetic field and regional precipitation signals in Chinese loess ^{10}Be . Using this method, she reconstructed high resolution geomagnetic excursion and monsoon precipitation histories for the last 130 ka from Chinese loess ^{10}Be , suggesting that the increase precipitation of MIS 3 in the mid latitude was forced by the summer radiation gradient between Northern and Southern Hemispheres. Zhou has solved a long-standing problem of timing offset in the of the Brunhes/Matuyama reversal boundary between terrestrial and marine sediments, providing a critical time marker for the loess chronology and for correlation between loess and other paleoclimate archives. She established an AMS Center that is designated as one of the ten “National Platform of Science Instrument Centers” in China, capable of carrying out reliable measurements on ^{10}Be , ^{14}C , ^{26}Al and ^{129}I , and etc.