

## Candidate for IUGS Executive Committee

**Position: Councilor 2020-2024**

**Name:** ZHANG Minghua

**Affiliation:** Development Research Center, China Geological Survey

**Nominating Organization:** Geological Society of China



### **Biography:**

After graduation from Guilin College of Science and Technology in 1984, I experienced 5 years of field work at the Institute of Geophysical Exploration of Ministry of Metallurgical Industry of China and received a second grade award from the Ministry for discovery of Xiangyu large iron deposit with team work.

I continued my Ms and PhD study in applied geophysics at China University of Geosciences (Beijing) since 1989 and completed postdoctoral research at Beijing University of Science and Technology in mineral and oil & gas exploration in 1998, when I contributed new magnetic anomaly interpretation techniques to a national program and completed mineral assessment of northeast China with GIS.

Then I worked in Chinese Academy of Geoexploration for 3 years and transferred to the Development Research Center of China Geological Survey in 2003.

I became a group leader and division leader of 20 staff members for national geodatabase, geophysical exploration and international cooperation. With 10 years of hard work, some 20 key national databases have been developed and widely used in China and overseas. One national project with the participation of 208 professionals under my leadership in 2007-2013 on gravity interpretation with GIS for national mineral assessment received the highest award from the Ministry of Nature Resources of China in 2018. The joint work of geoscience compilation of China seas and west Pacific was nominated a special award from China Marine Science in 2019. Our geophysical software RGIS became the most popular software in China since 2011 (the ministry news) and it's now being used in 20 countries. We have also developed online data processing and rock recognition technologies with machine learning recently.

As projects leader from 2008 to 2019 of CCOP metadata standard and integrated geoscience data processing for ASEAN, I devoted to harmonized international team work with successful publication of the standard and adoption by ASEAN, and

interdisciplinary data processing technique trained and promoted to ASIA, Africa and other regions.

I joined the Commission for Geoscience Information (CGI) of IUGS in 2014 and became Co-Secretary General in 2016, and helped CGI become more visible with activities and standard implementation by team work. I also participated in IUGS recognized big science program DDE in setting up the DDE standard task group.

I have published 8 books as the first author and 13 papers in international journals, and got 6 software copyrights.

My work is always portrayed as dutiful, devoted and hardworking, and I just like it, enjoying a busy and happy life devoted to geosciences.

**Statement:**

I am applying for a Councilor position of the new term on IUGS EC because I can devote my talent to serve IUGS become even better in AI application and data driven survey and discovery in geosciences.

If I had the honor to become the Councilor on IUGS EC, I will act strictly with the Statutes and Bylaws of IUGS and fully carry out the duty of Councilor with full respect to the leadership, and actively follow up decisions of IUGS EC.