

Candidate for IUGS Executive Committee

Position: Councilor 2020-2024

Name: Professor Jennifer McKinley

Affiliation: School of Natural and Built Environment, Queen's University Belfast, UK

Nominating Organization: International Association of Mathematical Geoscience (IAMG)



Biography:

As a Chartered Geologist of the Geological Society of London (GSL), I currently hold a number of international strategic roles including President of the International Association of Mathematical Geoscientists (IAMG), Vice Chair of the Royal Irish Academy (RIA) Geosciences and Geographical Sciences committee and Communications Officer for the IUGS Initiative on Forensic Geology (IFG). I was also pleased to serve as Trustee and Council Member of Geological Society of London from 2015- 2018. My research has focused on the application of spatial analysis techniques, including geostatistics and Geographical Information Science (GIS), to soil geochemistry, environmental and criminal forensics, human health, geohazards and weathering studies. I have authored more than 100 scientific articles, including peer-reviewed journal articles, a co-authored book Geoforensics, peer-reviewed book chapters, technical reports and numerous international conference contributions. Throughout my career I have taken an active role in promoting equality, diversity and inclusion in academia and have contributed to this globally. Interdisciplinary collaboration and strong partnership working underpins my commitment to high impact global research.

Statement:

My significant connection with the IUGS began in 2012 in my strategic leadership roles as the Executive President of the IAMG (2012-2016) and more recently the IAMG President (2016-2020). The IAMG has supported the International Geological Congress (IGC) of the IUGS and I have been actively involved in organizing sessions, presentations and delivering workshops at IGC conferences (IGC2012, IGC2016). As IAMG President, I represented the IAMG as a founding partner in the first IUGS-recognized big science program - Deep-time Digital Earth (DDE) and signed the DDE accord. As Communications Officer of the IUGS -IFG since 2012, I have increased awareness and training in the use of GIS and geoinformatics in forensic geoscience at IUGS-IFG knowledge transfer events in collaboration with UK, European Forensic Science Regulators and law enforcement agencies worldwide.

I would welcome this opportunity to join the IUGS Council and believe that my experience of strategic leadership and good governance would equip me to serve effectively on the Council. My involvement in professional organizations, both nationally and globally, has highlighted the benefits of cross border and international collaboration in geoscience research to address growing global environmental and climate issues.

In particular, my experience in scientific research development, education and communication among international, interdisciplinary scientists, industry and governmental bodies has equipped me with strong expertise and cultural awareness to foster new IUGS partnerships worldwide. I would embrace fully the opportunity to work with national members and international associations to promote and advance the development of the Earth sciences for the benefit of society.