Candidate for IUGS Executive Committee

Position: President

Name: Professor John Ludden CBE

Affiliation: The Lyell Centre, Heriot-Watt University, Edinburgh, UK

Nominating Organization: Geological Society of London, UK



Biography:

John is Bicentennial Research Professor at Heriot-Watt University, following 13 years as Executive Director of the British Geological Survey. Drawing on his extensive experience as an international leader in the Earth and Environment sector, his current role focusses on science governance and diplomacy, with a remit to develop links across disciplines and strengthen communication with the public and policymakers.

He has held numerous science leadership posts in the UK, France and Canada in the Earth and Environmental sector with a focus on resource development. He has worked as a professor and research scientist at the French National Research Centre (CNRS) where he was Associate Director for Earth Sciences, at the University of Montreal, Columbia University and MIT/WHOI.

Experienced in the academic, government and research sectors he holds a doctorate from the University of Manchester, UK, and numerous visiting and honorary professor posts in UK and European Universities. He is a member of Academia Europaea, Foreign member of the Russian Academy of Sciences, and Past President of the European Geosciences Union and EuroGeosurvey Organisation. In 2016 he was awarded a CBE for Service to Geoscience.

Statement:

With professional experience in government, research and academia, serving on numerous boards in government and industry in the Earth, Environment and Energy sectors, I will bring my unique expertise in governance and strategy in these sectors to the IUGS.

Earth scientists need to reconnect discovery science, applied science and translation of science. I will seek to engender a cultural shift towards a more solutions-based approach to our science at the interface of geological, environmental, engineering

and social science that responds to the urgent global problems posed by the UN Sustainable Development Goals (UNSDG).

IUGS needs to champion some big Earth Science projects that match or exceed those of the planetary scientists and astronomers. Even if these are aimed at geoengineering of planetary solutions, they will require significant fundamental research and thus provide science platforms that enable discovery and innovation.

A significant development will be the creation of data platforms that integrate the entire earth system, which are created from open, reliable and FAIR data and updated in real time, and include examples of the limitations of the data's application. These should be created in discussion with end-users. IUGS is already showing global leadership in creation of the Deep-Time Digital Earth.

University research and teaching on oil and gas (and minerals) is decreasing and the concept of leaving it (training and research) to the companies is beginning to creep in, as some universities see divestment as a means of attracting students. We will thus need to provide new and varied (non-academic) career paths for Earth science students.

IUGS can play a vital role as global leader in this challenging geoscience transition and I feel that I am uniquely qualified to be its President, having worked at the highest level in geosciences in government and academia and with industry.

I would be honoured to dedicate myself to this important global challenge.