

2016 IUGS Science Excellence Award in Geoscience Information



Stephen Richard

Interdisciplinary Earth Data Alliance
Lamont-Doherty Earth Observatory, Columbia University, New York, USA
(previously Senior Geologist and Head of Geoinformatics, Arizona Geological Survey, Tucson, USA)

Award Citation

Steve Richard has been a global leader in the field of geological informatics for many years, and is well known and respected by the entire community. It is the CGI Council's pleasure to nominate him for the outstanding scientist award.

Steve was a research geologist and Head of Geoinformatics at the Arizona Geological Survey from 1992 until 2016, but his influence on North American and international geoinformatics extends way beyond the borders of Arizona.

Steve was a leading member of the North American Geological Map Data Model (NADM) Steering Committee from 2000 to 2007. He worked with this consortium of American and Canadian geoscientists, database designers, and developers of geologic map information to develop a comprehensive geological data model that would form one of the foundations for global standards development through the IUGS Commission for the Management and Application of Geoscience Information (CGI).

Steve was a founding member of the IUGS CGI Interoperability Working Group in 2004. As part of this group, Steve was a leading force for over 10 years in the development of the GeoSciML standard for geoscience data transfer. In 2016, GeoSciML is now recognised as the data transfer standard for geoscience data sharing projects around the world, including OneGeology, INSPIRE, USGIN, AuScope and others.

Steve has also been deeply involved in development of international geoscience vocabularies through the IUGS CGI Controlled Vocabularies Working Group, and was the founding Chair of the successor CGI Geoscience Terminology Working Group. Over 30 internationally-agreed vocabularies were published under Steve's leadership.

Steve has been a leader in technical development of the US Geoscience Information Network (USGIN) - especially as chief architect of the US National Geothermal Data System - to deploy web services for geoscience information exchange. His advocacy of OGC and CGI standards in US geological surveys has led to these global standards being embedded in North American data delivery best practice.

Steve has also recently worked with the International Organization for Standardization as the editor of the ISO19115-3 geospatial metadata standard, and is an active participant in the Earth Cube geoscience community in the USA.

"I am deeply honoured to have received the Science Excellence Award 2016 In Geoscience Information. Thank you for the nomination!" said Steve.