

ENI AWARD 2016

New Frontiers of Hydrocarbons - Upstream Prize

Christopher Ballentine

Winner

Novel Tracers for Determining the Fluid Processes Controlling Subsurface Gas Origin and Behaviour

Biography

Chris Ballentine studied physical chemistry (BSc) at the University of Manchester Institute of Science and Technology and gained his PhD in geochemistry from the University of Cambridge, UK. He has spent his scientific career developing ways to better understand where gases and liquids come from in different Earth systems and the key roles they play in those systems. These include identifying the processes controlling the origin, migration and interaction of subsurface water, hydrocarbons and carbon dioxide in a variety of continental settings. His interests also encompass understanding how the Earth gained its gaseous inventory, the processes controlling deep earth (mantle) interaction with the oceans and atmosphere and, through this interaction, how these different systems have changed over time. After Cambridge, his career has taken him to Switzerland (Paul Scherrer Institute and ETH Zurich); the US (University of Michigan), back to the UK (University of Manchester) and most recently (2013) to the University of Oxford as Professor and Chair of Geochemistry held in the Department of Earth Sciences.

Chris Ballentine is a Professorial Fellow of St Hugh's College, Oxford. He is winner of the Geological Society 'Bigsby' medal (2008) for eminent contributions to geology, was elected Fellow of the American Geophysical Union (2013) for his leading geochemistry work in understanding the origin of Earth's volatile elements, and holds an advanced European Research Council award (2011-2016). He was a founding co-director of the Deep Energy Community, Deep Carbon Observatory (DCO) (2011-2012). He is a strong proponent of building the profile of international geochemistry and providing the mechanisms for efficient science communication. He has been Vice President, President, and Past President of the European Association of Geochemistry (EAG) (2011-2016) helping build the membership to just under 3000 geochemists. He has been involved in organizing and building the governance and structure of the EAG Goldschmidt conferences since 2007; chairing Davos 2009, as the Goldschmidt officer for Prague 2011, and as co-chair of the meeting in Florence (2013) which attracted over 4200 delegates.

The University of Oxford is a world class center of excellence in research and teaching and widely recognized as one of the world's leading science universities. This is reflected in the Department of Earth Sciences, which is ranked highly internationally and in the last UK research excellence framework (REF 2014) was ranked number one in the UK for Earth and Environmental Sciences.