

United Kingdom National Committee of the UNESCO/IUGS International Geoscience Programme (IGCP)

Report for 2016

Preamble

The [International Geoscience Programme](#) (IGCP) is one of two components of UNESCO's [International Geoscience and Geoparks Programme](#) (IGGP), the other being the [UNESCO Global Geoparks](#).

UNESCO supports research and capacity-building in geology and geophysics through the IGCP. The programme is co-funded principally by the [International Union of Geological Sciences](#) (IUGS) and also by China; two projects in Africa are specifically funded by the Swedish International Development Agency. The IGCP sponsors international research projects under five themes:

- Earth Resources: Sustaining our Society;
- Global Change: Evidence from the geological record;
- Geohazards: Mitigating the risks;
- Hydrogeology: Geoscience of the water cycle;
- Geodynamic: Control our environment.

The IGCP research programme is administered by a Secretariat at UNESCO and directed by a [Scientific Board](#), responsible for assessing proposals and quality control of projects. The Scientific Board reports annually in February to the assembly of [National Committees](#). National Committees organise and coordinate IGCP-related outreach in each country and seek to sustain linkages between national geological institutions and individuals. In particular, the National Committees:

- endorse new IGCP project proposals coming from the country's geoscientific community before they are sent to the IGCP Secretariat;
- propose candidates for the IGCP Scientific Board;
- stimulate the participation of their country's geoscientists in new IGCP projects and enables them to share the ongoing international relevant geoscience research.

In some countries, IGCP projects are supported by national funding administered through the National Committees, although this is not currently the case in UK, where national funding for this programme ceased some years ago.

The National Committee for the UK is the External Relations Committee of the Geological Society of London:

- Mike Young, chair, formerly of the British Geological Survey (sfa@geolsoc.org.uk)
- Nic Bilham, secretary, The Geological Society of London
- Dr Richard Bevins, National Museum of Wales
- Dr Marie Edmonds, University of Cambridge
- Ms Marie Fleming, Arup
- Joel Gill, British Geological Survey
- Dr Sarah Gordon, Satarla
- Mike Harris, Rio Tinto
- Ms Naomi Jordan, Geology Resources
- Dr Rob Larter, British Antarctic Survey

- Pete Loader, Aquinas College
- Prof John Ludden CBE, British Geological Survey (corresponding member)
- Prof David Norbury, David Norbury Ltd
- Dr Colin Prosser, Geological Association
- Dr Martin Smith MBE, British Geological Survey
- Prof Iain Stewart MBE, University of Plymouth (corresponding member)
- Prof Bernie Vining, Royal Holloway, University of London

The Committee met on three occasions in 2016.

The following UK scientists sit on the Scientific Board:

Earth Resources

- Prof Reimar Seltzmann, Natural History Museum

Global Change and Evolution of Life

- Prof Suzanne Leroy, Brunel University

Geohazards

- Prof Andy Cundy, University of Brighton
- Prof Iain Stewart, University of Plymouth

Hydrogeology – none

Geodynamics

- Prof Randell Stephenson, University of Aberdeen

UK involvement in IGCP projects in 2016

During 2016, scientists from the UK were involved in 15 of the 26 active IGCP projects:

- 587: The Ediacaran (Vendian) Puzzle
- 589: Development of the Asian Tethyan realm
- 591: The Early to middle Palaeozoic revolution
(There have been 432 participants in this project, from 41 countries. These included 51 UK participants from 15 universities, 5 museums, and from industry (2015 data).
- 592: Continental construction in central Asia *
- 609: Cretaceous sea-level changes
(149 researchers from 41 countries, including 14 from UK).
- 610: From the Caspian to Mediterranean: environmental change and human response during the Quaternary
- 624: OneGeology *
- 628: The Gondwana map project
- 630: Permian-Triassic Climatic and Environmental Extremes and biotic responses *
- 632: Continental crisis of the Jurassic
(152 participants, including nine from UK)
- 637: Heritage stone designation*
- 639: Sea-level changes from minutes to millennia
- 640: Significance of Modern and Ancient Submarine Slope and Landslides *
- 648: Supercontinent Cycles and Global Geodynamics
(163 participants from 35 countries, including one from UK).
- 653: The onset of the Great Ordovician Biodiversification Event *

* Described below.

Selected projects

The following are current projects in which UK-based scientists have had a leading or co-ordinating role.

[592: Continental construction in central Asia](https://sites.google.com/site/igcp592/)

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- Co-leader: Prof Reimar Seltmann, Natural History Museum
- 10 UK-based scientists are involved, from the Natural History Museum, London and from the universities of Durham, Leicester and Royal Holloway, London University. In all, some 270 scientists have been engaged worldwide. 2016 was the project's 5th and final year of operation.
- During 2016, the project contributed to the proceedings of four relevant conferences, held in China and India, and at the EGU (Vienna) and the IGC (South Africa). The [final project conference](#), which was supported by the Geological Society, was held in October 2016 at the Natural History Museum, London.
- [Two papers](#) describing the results of the project were presented in the IUGS publication *Episodes* in 2016.

[624: One Geology](http://www.onegeology.org/)

<http://www.onegeology.org/>

- UK board member: Dr Matt Harrison; project finance/operations secretariat: Dr Tim Duffy, British Geological Survey.
- The project board, which comprises members from nine countries, convened on [three occasions](#) in 2016.
- 119 countries participate in this project by supplying or using data. The project membership comprises BGS, BRGM and 27 Principal Members (as of Jan 2016), most of which are national geological survey organisations. The Principal Members convened in 2016 at the IGC, where a technical workshop was also staged.
- The 2015 costs of the project, approx. €250,000, were met by BGS, BRGM and the 27 Principal Members. IGCP contributes €3,500 pa, used in 2016 to finance attendance of African delegates at the IGC One Geology workshop.

[630: Permian-Triassic Climatic and Environmental Extremes and biotic responses](http://igcp630.cug.edu.cn/Aspx/ResearchTimetable.aspx)

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- UK co-leaders: Prof Steve Kershaw, Brunel University; Prof Mike Benton, University of Bristol; Prof Paul Wignall, University of Leeds
- There are 154 participants from 26 countries (2014 data),
- The 3rd annual meeting took place in 2016 at the IGC in Cape Town.

[637: Heritage stone designation](http://globalheritagestone.com/igcp-637/)

<http://globalheritagestone.com/igcp-637/>

- UK Board member: Dr Brian Marker OBE.
- The IGCP project provides valuable support for conference attendance at meetings of the IUGS/IAEG Heritage Stone Task Group (HSTG), which in 2016 included the EGU and the IGC.
- 50 countries are involved.
- The status of the project was described in a [special edition](#) of *Episodes* in 2015. A further update was published in [Geosciences](#) in 2016.

640: Significance of Modern and Ancient Submarine Slope and Landslides

<https://sites.google.com/a/utexas.edu/s4slide/home>

- UK Co-Chair: Claudio Lo Iacono, National Oceanographic Centre.
- 30 countries participate in this project.
- Conference sessions and presentations during 2016 included sessions at the IGC, South Africa, the 12th International Symposium on Landslides, Italy, and GSA Annual Meeting, Denver, USA. IGCP funding enabled several delegates to travel to participate in these events.
- The project was described in *Episodes* in 2016. Some 40 papers attributed to the project were published in 2016.

653: The onset of the Great Ordovician Biodiversification Event

<http://www.igcp653.org/>

- UK Leader: Prof David A.T. Harper, University of Durham.
- Over 170 scientists representing more than 95 institutions in 30 countries are currently participating in IGCP 653. The 10 UK participants come from the Universities of Birmingham, Cardiff, Durham, Glasgow and Leicester; from the Natural History Museum and the National Museums of Scotland and Wales; and from the British Geological Survey.
- The project began in 2016 and the *opening conference* was held in Durham in September 2016. Nearly 40 scientists attended, from nearly 20 countries.

Mike Young

Secretary for Foreign and External Affairs, The Geological Society of London
Chair, External Relations Committee (UK National Committee for IGCP)

January 2016