The evolution of:
- Geoscience Education (GeoSciEd) conferences
- the International Geoscience Education Organisation (IGEO)
- the International Earth Science Olympiad (IESO) and
- the International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Technology Transfer (COGE)
- International Geoscience Education Organisation (IGEO) teacher workshops

Chris King, Emeritus Professor of Earth Science Education, Keele University

**Summary**
The sections below comprise:
- a timeline of GeoSciEd conferences, IGEO and IESO meetings and development
- a GeoSciEd conference section
- an International Geoscience Education Organisation (IGEO) section
- an International Earth Science Olympiad (IESO) section
- an International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Technology Transfer (COGE) section

**Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1990</td>
<td>International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Training (COGEOED)</td>
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<tr>
<td>1993</td>
<td>International Conference on Geoscience Education and Training, Southampton, UK</td>
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<td>1994</td>
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<td>1995</td>
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<tr>
<td>1997</td>
<td>GeoSciEd II, Hilo, Hawaii, USA</td>
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<td></td>
<td>International geoscience education association development committee formed, Hilo, Hawaii, USA</td>
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<td>1998</td>
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<td>1999</td>
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<td>2000</td>
<td>GeoSciEd III, Sydney, Australia</td>
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<tr>
<td></td>
<td>Internal Geoscience Education Organisation (IGEO) formed; first General Meeting, Sydney, Australia</td>
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<td></td>
<td>First IGEO Council meeting, Sydney, Australia</td>
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<td>2001</td>
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<td>2002</td>
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<tr>
<td>2003</td>
<td>GeoSciEd IV, Calgary, Canada</td>
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<td></td>
<td>Second IGEO General meeting, Calgary, Canada</td>
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<tr>
<td></td>
<td>Second IGEO Council meeting, Calgary, Canada</td>
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<tr>
<td>2004</td>
<td>32nd International Geological Congress (IGC), Florence, Italy, IGEO organisation of three themes (school, higher and outreach education)</td>
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<tr>
<td></td>
<td>Third IGEO Council meeting, Florence, Italy</td>
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<td></td>
<td>Formation of the International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Technology Transfer (COGE), Boulder Colorado, USA</td>
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<td>2005</td>
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<tr>
<td>2006</td>
<td>GeoSciEd V, Bayreuth, Germany</td>
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<tr>
<td></td>
<td>Third IGEO General meeting, Bayreuth, Germany</td>
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<tr>
<td></td>
<td>Fourth IGEO Council meeting, Bayreuth, Germany</td>
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<tr>
<td>2008</td>
<td>33rd International Geological Congress (IGC), Oslo, Norway, IGEO organisation of an education theme</td>
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<td></td>
<td>Fifth IGEO Council meeting, Oslo, Norway</td>
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<td></td>
<td>Meeting of members of the International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Technology Transfer (COGE)), Oslo, Norway</td>
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<tr>
<td></td>
<td>2nd International Earth Science Olympiad, Manila and Bicol, the Philippines</td>
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<tr>
<td>Year</td>
<td>Events</td>
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<tr>
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</tbody>
</table>
| 2009 | • 3rd International Earth Science Olympiad, Taipei, Taiwan  
• IGEO supported the International Conference for Global Development (GeoDev), Dhaka, Bangladesh |
| 2010 | • GeoSciEd VI, Johannesburg, South Africa  
• Fourth IGEO General meeting, Johannesburg, South Africa  
• Sixth IGEO Council meeting, Johannesburg, South Africa  
• 4th International Earth Science Olympiad, Yogyakarta, Indonesia  
• IGEO supported the Joint Assembly of Geoscience Organisations in the Americas, Iguassu Falls, Brazil |
| 2011 | • 5th International Earth Science Olympiad, Modena, Italy |
| 2012 | • 34th International Geological Congress (IGC), Brisbane, Australia, IGEO involvement in two themes 1.2 Geoscience education and 2.3 Developing geoscience education and awareness for the benefit of society  
• Seventh IGEO Council meeting, Brisbane, Australia  
• IUGS-COGE Commission meeting Brisbane, Australia  
• 6th International Earth Science Olympiad, Olavarria, Argentina |
| 2013 | • 7th International Earth Science Olympiad, Mysore, India |
| 2014 | • GeoSciEd VII, Hyderabad, India  
• Fifth IGEO General meeting, Hyderabad, India  
• Eighth IGEO Council meeting, Hyderabad, India  
• 8th International Earth Science Olympiad, Santander, Spain |
| 2015 | • 9th International Earth Science Olympiad, Pocos de Caldas, Brazil  
• Teacher Training Workshops, in Goa, Mangaluuru and Bengaluru, India in July |
| 2016 | • 35th International Geological Congress (IGC), Cape Town, South Africa  
• Ninth IGEO Council meeting, Cape Town, Cape Town, South Africa  
• 10th International Earth Science Olympiad, Mie, Japan |
| 2017 | • 11th International Earth Science Olympiad, Nice, France |
| 2018 | • GeoSciEd VIII, Campinas, São Paulo, Brazil  
• 12th International Earth Science Olympiad planned for Thailand |
| 2019 | • 13th International Earth Science Olympiad planned for the Republic of Korea |
| 2020 | • 36th International Geological Congress (IGC) planned for New Delhi, India  
• 14th International Earth Science Olympiad |

**Future plans**

<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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</thead>
</table>
| 2018 | • GeoSciEd VIII, Campinas, São Paulo, Brazil  
• 12th International Earth Science Olympiad planned for Thailand |
| 2019 | • 13th International Earth Science Olympiad planned for the Republic of Korea |
| 2020 | • 36th International Geological Congress (IGC) planned for New Delhi, India  
• 14th International Earth Science Olympiad |

**GeoSciEd Conferences**

- Senior Officers:
  - Chair: Gerry Cooray
  - Secretary/Treasurer: Dorrik Stow

1993 - The first geoscience education conference:
**International Conference on Geoscience Education and Training**
- Dates: 20th – 24th April, 1993
- Venue: University of Southampton, UK
- Main sponsors: the Association of Geoscientists for International Development (AGID) and the International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Training (COGEOED)
- Additional sponsors: ICSU, ASE (International), ESTA (UK), Geological Society, Geographical Association, BGS plus a wide range of financial sponsors
- Conference convenor: Dorrik Stow (UK); theme convenors:
  - Geoscience education in schools: Chris King (UK) and David Thompson (UK)
  - Higher Education: Bill Gaskarth (UK) and Brian Daley (UK)
  - Geoscience Training for Business, Industry and Public Service: Tony Reedman (UK)
Public understanding of geoscience: Ian Sutton (UK)

- Abstract volume: published by the Geology Department, University of Southampton, UK, 1993

Notes:
- David Thompson, Nir Orion and Chris King met in a small café to discuss the development of an international association.

1997 – GeoSciEd II

- Venue: University of Hawaii at Hilo, Hawai‘i, USA
- Conference convenors: John Carpenter (USA), Vic Mayer (USA), Nir Orion (Israel), Frank Ireton (USA) Laure Wallace (USA)
- Support for production and distribution of Proceedings volume provided by:
  - National Science Foundation, Directorate for Education and Human Resources (US)
  - National Aeronautics and Space Administration, Mission to Planet Earth programme (US) Conference registrations
  - The Ohio State University, School of Natural Resources and Office of Applied Communications
  - The Alphyl Memorial Endowment Fund of the Ohio State University, a fund established in honour of Victor C. and Phyllis C. Mayer.
- Awards for lifetime service to geoscience education:
  - Yolanda Alba de Gonzales (Venezuela)
  - Victor J. Mayer (USA)
  - Emmanuel Mazor (Israel)
  - David Thompson (UK)
- Notes:
  - A group of geoscience educators met in a small restaurant (Uncle Billy’s Hilo Hideaway) in a rainstorm to formalise a proposal for an international association, prompted by Nir Orion.
  - This proposal was put to the general assembly at the conference, and was enthusiastically endorsed.
  - This was the formal beginning of an international association for earth science education.
  - Nir Orion and Chris King agreed to lead a development committee that would, among other things, determine the name of the association.
  - Later, having discussed different names, including the International Geoscience Education Association (IGIA), the name of the new association was eventually agreed as the International Geoscience Education Organisation (IGEO).

2000 – GeoSciEd III

- Dates: 16th – 21st January, 2000
- Venue: University of New South Wales, Sydney, Australia
- Major sponsor: Australian Geological Survey Organisation (AGSO)
- Conference convenors: Malcolm Buck (Australia), Ian Clark (Australia), Gary Lewis (Australia)
- Award for lifetime service to geoscience education:
  - John Carpenter (USA)
- Notes:
  - The International Geoscience Education Organisation name was formally approved.
  - IGEO Chair elected: Chris King.
  - Later, the IGEO logo, website and constitution were developed.
2003 – GeoSciEd IV
- Venue: University of Calgary, Alberta, Canada.
- Major sponsors: IGEO, EnCana Corporation, Canadian Society of Petroleum Geologists Educational Trust
- Conference convenors: Alan Morgan and Godfrey Nowlan
- Awards for lifetime service to geoscience education:
  - Gerry Cooray
  - Ward Neale
- Notes:
  - IGEO Chair elected: Ian Clark (Australia).
  - The IGEO contribution to the forthcoming 32nd International Geological Congress in Florence, Italy in 2004 was planned.

2006 – GeoSciEd V
- Venue: University of Bayreuth, Germany.
- Major sponsors: IGEO
- Conference convenors: Sylke Hlawatsch (Germany), Gabriele Obermaier (Germany), Ulrike Martin (Germany)
- Notes:
  - IGEO Chair elected: Chan-Jong Kim (South Korea).
  - Plans were presented for the 1st Earth Science Olympiad, to be held at Seoul National University in Korea in October 2007.
  - Presentations were made to host GeoSciEd V by India and South Africa; South Africa was chosen.
  - Later the Senior Officers decided that IGEO should support:
    - the International Conference for Global Development (GeoDev) to be held in Dhaka, Bangladesh, on the 26th – 31st October, 2009 and
    - the Joint Assembly of Geoscience Organisations in the Americas, to be held at the Iguassu Falls, Brazil, on the 8th - 13th August, 2010.
2010 – GeoSciEd VI
- Venue: University of the Witwatersrand, Johannesburg, South Africa.
- Major sponsors: IGEO
- Conference convenor: Ian McKay
- Notes:
  - IGEO Chair elected: Sylke Hlawatsch (Germany).
  - IGEO Chair Elect elected: Rajasekhariah Shankar
  - The IGEO contribution to the forthcoming 34th International Geological Congress in Brisbane, Australia, in 2012 planned.
  - A presentation was made by India to host GeoSciEd VII, which was approved.

2014 – GeoSciEd VII
- Venue: University of Hyderabad, Hyderabad, India
- Major sponsors: IGEO
- Conference convenor: Rajasekhariah Shankar
- Notes:
  - IGEO Chair elected: Rajasekhariah Shankar (India).
  - IGEO Chair Elect elected: Roberto Greco (Brazil)
  - The IGEO contribution to the forthcoming 35th International Geological Congress in Cape Town, South, in 2016 was planned.
  - Brazil was elected to host GeoSciEd VIII in 2018.
International Geoscience Education Organisation (IGEO)

1997 The formation of an international geoscience education association proposed and endorsed.
Chairs of the association development committee: Nir Orion and Chris King.

First General Meeting.

Senior Officers, 2000 - 2003:
- Chair: Chris King (UK).
- Newsletter editors: Laure Wallace (USA) and Mary Dowse (USA)

IGEO logo, constitution and website developed.

2003 Second IGEO General meeting (Calgary, August 2003)
Second IGEO Council meeting (Calgary, August 2003)

Senior Officers, 2003 - 2006:
- Chair: Ian Clark (Australia)
- Vice-Chair (retiring): Chris King (UK)
- Vice-Chair (elect): Chan-Jong Kim (Korea)
- Secretary/treasurer: Alan Morgan (Canada)
- Newsletter editor: Bronte Nicholls (Australia)

2004 Third IGEO Council meeting (Florence, Italy, August 2004)

2006 Third IGEO General meeting (Bayreuth, Germany, September 2006)
Fourth IGEO Council meeting

Senior Officers, 2006 - 2010:
- Chair: Chan-Jong Kim (Korea)
- Vice-Chair (retiring): Ian Clark (Australia)
- Vice-Chair (elect): Sylke Hlawatsch (Germany)
- Secretary/treasurer: Alan Morgan (Canada)
- Newsletter editor: Bronte Nicholls (Australia)

2008 Fifth IGEO Council meeting (Oslo, Norway, August 2008)

2010 Fourth IGEO General meeting (Johannesburg, South Africa, September 2010)
Sixth IGEO Council meeting (Johannesburg, South Africa, September 2010)

Senior Officers, 2010 - 2014:
- Chair: Sylke Hlawatsch (Germany)
- Vice-Chair (retiring): Chan-Jong Kim (Korea)
- Vice-Chair (elect): Shankar Rajasekharaiah (India)
- Secretary: Roberto Greco (Italy)
- Treasurer: Gabriele Obermaier (Germany)
- Newsletter editor: Bronte Nicholls (Australia)

2012 Seventh IGEO Council meeting (Brisbane, Australia, August 2012)

2014 Fifth IGEO General meeting (Hyderabad, India, September 2014)
Eighth IGEO Council meeting (Hyderabad, India, September 2014)

Senior Officers, 2014 - 2018:
- Chair: Shankar Rajasekharaiah, India
- Vice-Chair (retiring): Sylke Hlawatsch, Germany
- Vice-Chair (elect): Roberto Greco, Brazil
- Secretary: Anish Warrier, India
- Treasurer: Gabriele Obermaier, Germany
2016  Sixth IGEO General meeting at the 35th International Geological Congress (Cape Town, South Africa, August 2016)  
Ninth IGEO Council meeting at the 35th International Geological Congress (Cape Town, South Africa, August 2016)
International Earth Science Education Olympiads (IESO’s)

1st International Earth Science Education Olympiad
- Venue: Daegu and Youngwol, Korea.
- Convenor: Moo Young Song
- Number of participating countries: 8
- Chair of the IESO Advisory Committee: Chan-Jong Kim
- Chair of the IESO Coordinating Committee: Moo Young Song

2nd International Earth Science Education Olympiad
- Dates: 31st August – 8th September, 2008
- Venue: Manila and Bicol, the Philippines.
- Convenor: Miguel Cano
- Theme: Cooption in Addressing Climate Change
- Number of participating countries: 7
- Chair of the IESO Advisory Committee: Chan-Jong Kim
- Chair of the IESO Coordinating Committee: Moo Young Song

3rd International Earth Science Education Olympiad
- Dates: 14th – 22nd September, 2009
- Venue: National Taiwan Normal University, Taipei, Taiwan.
- Convenor: Chun-Yen Chang
- Theme: Human environment
- Number of participating countries: 17
- Chair of the IESO Advisory Committee: Chan-Jong Kim
- Chair of the IESO Coordinating Committee: Moo Young Song

4th International Earth Science Education Olympiad
- Venue: Gadjah Mada University, Yogyakarta, Indonesia.
- Convenor: Hendra Amijaya
- Theme: The present is the key to the future
- Number of participating countries: 18
- Chair of the IESO Advisory Committee: Chan-Jong Kim
- Chair of the IESO Coordinating Committee: Moo Young Song

5th International Earth Science Education Olympiad
- Dates: 5th – 14th September, 2011.
- Venue: Department of Earth Science of Modena and Reggio Emilia University, Modena, Italy.
- Convenor: Roberto Greco
- Number of participating countries: 34
- Chair of the IESO Advisory Committee: Sylke Hlawatsch
- Chair of the IESO Coordinating Committee: Moo Young Song
6th International Earth Science Education Olympiad
- Dates: 8-12 October 2012
- Venue: Olavarria, Argentina
- Convenor: Jose Sellés Martinez
- Theme: Energy, Water and Minerals for Sustainable Development
- Number of participating countries: 18
- Chair of the IESO Advisory Committee: Sylke Hlawatsch
- Chair of the IESO Coordinating Committee: Moo Young Song

7th International Earth Science Education Olympiad
- Dates: 11-19 September
- Venue: Mysore, India
- Convenor: Rajasekhariah Shankar
- Theme: The Earth is indeed a family
- Number of participating countries: 27
- Chair of the IESO Advisory Committee: Sylke Hlawatsch
- Chair of the IESO Coordinating Committee: Sylke Hlawatsch

8th International Earth Science Education Olympiad
- Dates: 22-29 September 2014
- Venue: Santander, Spain
- Convenor: Rajasekhariah Shankar
- Theme: Sea and Mountains
- Number of participating countries: 24
- Chair of the IESO Advisory Committee: Shankar Rajasekhariah
- Chair of the IESO Coordinating Committee: Shankar Rajasekhariah
9th International Earth Science Education Olympiad
• Dates: 13-20 September 2015
• Venue: Poços de Caldas, Brazil
• Convenor: Marcelo Bregagnoli
• Theme: Soil
• Number of participating countries: 27
• Chair of the IESO Advisory Committee: Rajasekhariah Shankar
• Chair of the IESO Coordinating Committee: Rajasekhariah Shankar

Participants during the 9th IESO in Brazil were asked to investigate why this rock has this shape.
Photo: R. Shankar

10th International Earth Science Education Olympiad
• Dates: August 20-27, 2016
• Venue: Mie, Japan
• Convenor: Ken Hisada
• Theme: Our Future: Earth & Space
• Number of participating countries: 29
• Chair of the IESO Advisory Committee: Shankar Rajasekhariah
• Chair of the IESO Coordinating Committee: Shankar Rajasekhariah

A multinational group of students carrying out the International Team Field Investigations (ITFI) during the 10th IESO, Mie, Japan.
Photo: R. Shankar
11th International Earth Science Education Olympiad
- Dates: August 22-29, 2017
- Venue: Côte d'Azur, France
- Convenors: Fabrice Jouffray and Jean-Luc Berenguer
- Theme: … standing on the Earth, gazing at the Planets!
- Number of participating countries: 29 countries with student teams, 5 countries with observers
- Chair of the IESO Advisory Committee: Shankar Rajasekhariah
- Chair of the IESO Coordinating Committee: Shankar Rajasekhariah
The International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Technology Transfer (COGE)

The Commission was formed in November, 2004 in Boulder, Colorado with the following membership:

- Gary Lewis - Commission chairperson (Geological Society of America - USA)
- Wesley Hill - Commission secretary and treasurer (Geological Society of America - USA)
- Chan-Jong Kim (Seoul National University - South Korea)
- Greg McNamara (Geological Society of Australia - Australia)
- Alan Morgan (Waterloo University - Canada)
- Chris King (Keele University - United Kingdom)
- Hans Albert Dahlheim (Germany)
- Ian Clarke (University of Adelaide - Australia)


Membership from 2011:
- Jesús Martínez Frías - Chair (Spanish National Research Council, Spain)
- Chris King – Vice Chair (Keele University - United Kingdom)
- Jennifer Nocerino (Secretary/Treasurer – Geological Society of America)
- Miguel Cano (Bicol University - Philippines)
- Ian Clarke (University of Adelaide - Australia)
- Ochir Gerel Mongolian University of Science & Technology, Mongolia)
- Chan-Jong Kim (Seoul National University - South Korea)
- Gary Lewis (Geological Society of America)
- Greg McNamara (Geological Society of Australia - Australia)
- Alan Morgan (Waterloo University - Canada)
- Adriana Niz (National University of Catamarca, Argentina)
- Rajasekhariah Shankar (Mangalore University, India)
- Ashvin Wickramasooriya (South Eastern University of Sri Lanka)

Membership in 2015:
- Jesús Martínez Frías - Chair (Spanish National Research Council, Spain)
- Chris King – Vice Chair (Keele University - United Kingdom)
- Jennifer Nocerino (Secretary/Treasurer – Geological Society of America)
- Miguel Cano (Bicol University - Philippines)
- Ian Clarke (University of Adelaide - Australia)
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- Adriana Niz (National University of Catamarca, Argentina)
- Rajasekhariah Shankar (Mangalore University, India)
- Ashvin Wickramasooriya (South Eastern University of Sri Lanka)
- Kmar Ben Ismail-Lattrache (University of Tunis El Manar, Tunisia)
- Yamina Bourgeoini (Cadi Ayyad University, Morocco)
- Elyvin Nkhonjera (Community Improvement Project, Malawi)
Membership from September 2016:

- Chris King – Vice Chair (Keele University, United Kingdom)
- Jesús Martínez Frias - Chair (Spanish National Research Council, Spain)
- Ian Clarke (Secretary/Treasurer - University of Adelaide, Australia)
- Greg McNamara (Webmaster - Geological Society of Australia, Australia)
- Miguel Cano (Bicol University, Philippines)
- Ochir Gerel Mongolian University of Science & Technology, Mongolia)
- Gary Lewis (Geoetc, USA)
- Adriana Niz (National University of Catamarca, Argentina)
- Rajasekhariah Shankar (Mangalore University, India)
- Ashvin Wickramasooriya (University of Peradeniya, Sri Lanka)
- Yamina Bourgeoini (Cadi Ayyad University, Morocco)
- Elyvin Nkhonjera (Community Improvement Project, Malawi)
- Lola Pereira (Universidad de Salamanca, Spain)
- Young-Shin Park (Chosun University, Korea)
- Jaroslav Dostal (Saint Mary’s University in Halifax, Canada)

The latest website can be found at: http://www.iugscoge.com/ and is still hosted by Greg McNamara.

Note: This series of histories is the best recollections of some of those involved. Please email any corrections or updates to the Webmaster.
International Geoscience Education Organisation (IGEO) teacher workshops

2014 – IGEO teacher workshop – linked to GeoSciEd VII
- Dates: July 2015
- Venues: Hyderabad
- Major sponsors: IGEO
- Organiser: Rajasekhariah Shankar
- Presenter: Nir Orion

2015 – IGEO teacher workshops
- Dates: July 2015
- Venues: Goa, Mangaluuru and Bengaluru, India
- Major sponsors: IGEO
- Organiser: Rajasekhariah Shankar
- Presenters: Chris King, Nir Orion

School students excitedly learning about minerals and rocks at the Earth Science Exhibition, Bengaluru, India, 2015 linked to the teacher workshops (left) and Pune, India, 2016 (right). Photos: R. Shankar