

NEWSLETTER 1/17

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WEBSITE, SOCIAL MEDIA AND MEMBERSHIP UPDATE

We invite all current members to register on our new website through online membership registration. You will then be able to log in and maintain your membership details. If you have colleagues who are interested in joining, please send them the link to our website so they can register. There is no fee for membership.

Please click on this link to update your [Membership](#)

We are now also on Twitter – www.twitter.com/igeoscienced
handle: @igeoscienced

Our Facebook page is receiving many visits each week and this is where you can find the most up to date information about our activities.

I would like to take this opportunity to introduce our webmaster, Takashi Sawaguchi and to thank him for his work on creating and maintaining our website.

10th INTERNATIONAL EARTH SCIENCE OLYMPIAD IESO 2016 – JAPAN

The 10th International Earth Science Olympiad (10th IESO) was held during August 20 - 27, 2016 in Tsu city, Mie, Japan, with Mie University as the main venue. It was attended by 100 students, 10 guest students and 89



mentors and observers from 29 countries. The ITFI (International Team Field Investigation) was carried out in the Kumano area (Oni-ga-jo and Shichiri-mihama beach). The IESO in Japan was originally planned for 2012. However, it was postponed due to the Great East Japan Earthquake in 2011. The 10th IESO was organized by the Japan International Earth Science Olympiad Organisation Committee and Japan Earth Science Olympiad Committee, and co-organized by Japan Science and Technology Agency, Japan Geoscience Union, Mie Prefectural Government and Mie University. In addition, the Ministry of Education, Culture, Sports, Science and Technology also supported the Olympiad.

Participants busy carrying out the International Field Team Investigation(ITFI).

Ten gold, 21 silver and 35 bronze medals were awarded to the top 10%, 20% and 30% of the students based



on their scores in the written and practical tests. In addition, student groups of mixed nationalities carried out International Team Field Investigation (ITFI) and Earth System Project (ESP). The ITFI activity was carried out in the Kumano city. —Living on the edge of a tectonic platell was the topic for ESP. Each group of students presented the results for ITFI (oral and poster) and ESP (oral). A jury adjudicated the three best teams each in ITFI and ESP for the gold, silver and bronze awards.

International Field Team Investigation(ITFI) presentation in progress.

One of the goals of the 10th International participating students and the local students.



Earth Science Olympiad was to allow interaction between the The high school student executive committee collected randomly from Mie Prefecture High Schools whole-heartedly participated in the opening and closing ceremonies. Three Mie Prefectural High Schools of Shiroko, Ujyamada Commercial and Kinomoto also contributed to musical performance, exchange event and ITFI respectively. The total number of high school students who eventually participated in the 10th IESO went up to 230. The 10th IESO ended successfully with the Mie Prefecture Declaration titled —What we can do to prevent global warmingll by the Mie high school student executive committee and the participating students. We firmly believe that the friendship forged in 10th IESO will be utilized to build a sustainable society in future.

*Participating international teams and local high School students attend the Closing Ceremony.
R. Shankar*

11th INTERNATIONAL EARTH SCIENCE OLYMPIAD IESO 2017 – FRANCE

Preparations for the 11th IESO, France The 11th edition of the International Earth Science Olympiad will be held during August 22-29, 2017 at Cote d'Azur in France.



The organisers have unveiled the logo for the 11th IESO with a tag line - *Standing on the Earth, gazing at the Planets!*

For updates and newsletters, please visit the website for the 11th IESO:

<http://univ-cotedazur.fr/ieso2017/events/ieso2017>

Preparations for future editions of IESO

- 12th IESO, 2018, Thailand.
- 13th IESO, 2019, South Korea

35TH INTERNATIONAL GEOLOGICAL CONGRESS, CAPE TOWN, SOUTH AFRICA, 2016

A number of IGEO members were chosen to act as “Theme Champions” to promote and coordinate sessions and workshops at the 35th IGC in Cape Town in August 2016 as part of the “Geoscience in Society” theme. About 20 papers and posters were presented in the Geoscience Education at school level session, including the launch by Prof. Chris King of the ‘Sand on a sill’ international collaborative project.



*Prof. Chris King demonstrating the Earthlearningidea: The Screaming Roller-coasterride - How fast am I travelling due to the Earth's spin and orbit?
Bronte Nicholls*

Workshops included the UNESCO-IGEO survey on Geosciences and International Text-book. The IGC presentations and workshops have been critical to the promotion of geoscience education in the past, and there is every reason to hope for this to continue at New Delhi in 2020.

UNESCO-IGEO SURVEY ON GEOSCIENCES

The survey of school-level geoscience education is a collaboration between IGEO and UNESCO. The survey will be run in all countries where IGEO has active council members, together with all Latin American and Caribbean countries. For Latin American countries where there is no IGEO council member, UNESCO has put out a ‘Call for experts’ to complete and submit the survey. The survey is focused on the Earth science component of school-level education and uses a questionnaire carrying 111 questions (latest draft). The questionnaire will be completed by an ‘expert’ in each country, in collaboration with his/ her colleagues. The commercial organization Nielsen has also been asked for input.

The current stage (November, 2016) is the seeking of experts. The Montevideo Office of UNESCO, under Dr.



*Workshop on UNESCO-IGEO Survey on Geosciences during the IESO, Tsu, Japan.
R. Shankar*

Dr. Maria Frick, is currently conducting a trawl of experts across Latin American countries. Meanwhile, IGEO has been updating its list of active Council members and inviting them to take part in the survey as well. As part of the survey, three Workshops/meetings were conducted in Montevideo, Uruguay (July, 2016) and Mie, Japan (on the sidelines of the 10th IESO; August, 2016) and Cape Town, South Africa (during the 35th IGC, September 2016). During these meetings, the questionnaire was discussed in detail providing feedback to the developers. The survey will run in early 2017.

IGEO COUNCIL MEETING, AUGUST 31, 2016 CAPETOWN, SOUTH AFRICA

The IGEO council met in August 31, 2016, during the 35th International Geological Congress in Cape Town, South Africa. Several IGEO country councillors and deputy councillors participated in the meeting chaired by Prof. R. Shankar (Chair, IGEO). Dr. Takashi Sawaguchi was introduced as the website manager of IGEO and the council also voted Dr. Sawaguchi to the Senior Executive of IGEO. The points below summarise the meeting (details are provided in other articles in this newsletter):

- GeoSciEd VIII will be held in Campinas, São Paulo, Brazil, July 22 – 27, 2018.
- The 10th edition of the International Earth Science Olympiad (IESO) was successfully held in Mie, Japan, the week prior to the International Geological Congress. Future IESO events will be held in Nice, France (2017), Thailand (2018) and Korea (2019).
- The International Geoscience Syllabus, a joint IGEO/IUGS-COGE project was completed in 2014 and is available on the IGEO web site. The syllabus is based on existing curricula around the world and is presented on a single page with further exemplification of what all students should know by age 16.
- Prof. Chris King briefly discussed the proposed international textbook that was discussed in a workshop the preceding Tuesday. The International textbook will be aligned with the International Geoscience Syllabus, and be freely available on the web. The goal is to have educators adapt the textbook for their own regions by adding local examples and material.
- The proposed UNESCO-IGEO survey of earth science education was discussed at three workshops (held during the IGC in South Africa, the IESO in Japan, and Montevideo, Uruguay) and a brief report was made to the council. This effort is being driven by UNESCO and will build on the previous surveys conducted by IGEO (most recently updated in 2012/2013). The proposed plan is that UNESCO will send the surveys to geological societies/surveys in member countries.
- Other activities of IGEO noted at the meeting included: promoting the Earth Learning Ideas, opportunities for teacher training, collaborative projects related to teaching and learning in the Earth Sciences and the My Earth Science Educator Story project. For further details and how you can be involved, please visit the IGEO web page.

R. Shankar

THE 'SAND ON THE SILL' PROJECT – TIME FOR YOU TO TRY IT OUT

Now we have sorted some website technological issues – it is time for the grand 'Sand on a sill' launch. Please go to http://www.earthlearningidea.com/PDF/219_Sand_on_sill.pdf and read how to run the 'Sand on a sill' activity. Then go to http://www.earthlearningidea.com/home/Research_project.html and click on 'Observer evaluation'. Having completed the consent form, go to the evaluation sheet and print off a copy. Then put a coloured sand grain on the window sill and run the activity with a group of students (groups aged from 5 years to 65+ years old). Complete the evaluation form and then input the data to the website and submit it. Your 'action research' will then become part of the global database of feedback we are building, to test the range of theories listed at the foot of the 'Observer evaluation sheet'. The more people who complete the sheet, the more we will learn, so if you have a large class, divide them into smaller discussion groups and ask one of the members of the group to complete the sheet for that group and give it to you to input the data. The range of discussions and evaluations submitted so far has been amazing – let's all continue to be amazing!

Chris King.

EARTHLEARNINGIDEA – MORE THAN 250 AND APPROACHING 3,000,000 – ADD TO THIS SUCCESS

Earthlearningidea at <http://www.earthlearningidea.com/> publishes a new Earth science teaching activity every two weeks. By the end of 2016, 251 activities had been published in English and another 20 activities were in the pipeline. The website carries, or links to, more than 820 translations. Most translations are in Spanish, Catalan, Portuguese, Norwegian, Italian, Japanese and German, but there are also translations in Polish, Slovakian and South Korean. We are hugely grateful for the efforts of our colleagues around the world in translating all these Earthlearningideas. Pdfs of the free-to-download activities are currently being downloaded at a rate of more than 40,000 per month, with the total number of downloads approaching 3 million. Apart from a small grant to run the website, all Earthlearningidea activity is voluntary – so please join us by suggesting new activities or offering to translate activities into your own language and we will pay you just the same as we get paid ourselves – nothing at all!

Chris King, Peter Kennett and Elizabeth Devon.

EARTH SCIENCE EDUCATOR STORY

IGEO launched its 'Earth Science educator Story' initiative at: http://www.igeosci.org/?page_id=396 in 2016 and has published a new story every week since then. You will find 58 inspirational stories published on the website, with another eight in the pipeline. The project records the features of our own lives which have led us to become Earth science educators – so that we can pass on our learning, wisdom and enthusiasm to the next generation. Passing on this knowledge is vitally important, so everyone reading this should not be reluctant or too modest to join us as one of our 'storytellers', or to suggest the names of other 'storytellers'. Each story should be a maximum of 1000 words (with 3-6 photos including a 'mug shot' photo of your face) and written in English, but if you would like to repeat your story in another language beneath, you would be most welcome to do that too. So far we have received stories from 22 countries from educators ranging in age from 32 to 87 years old – and a huge variety of backgrounds, insights and experiences. If you're asking 'who does this include' – the answer is that anybody who feels they have contributed to Earth science education has a story to be told. Experience tells that writing a story takes about half a day – so please send us yours (a guidance document and template can be provided) – to chrisjhking36@gmail.com – and add to the well of enthusiasm and knowledge to be passed on to the next generation.

Chris King.

PROGRESS WITH THE SCHOOL-LEVEL GEOSCIENCE TEXTBOOK

A workshop was convened at the International Geological Congress in Cape Town, South Africa in September 2016 to develop a textbook to teach the IGEO/IUGC-COGE international syllabus (at: http://www.igeosci.org/?page_id=269). Writing of the textbook is underway, and so far nearly six of the seven chapters have been drafted. The textbook is aimed at teachers of pupils up to the ages of 16, the focus of the syllabus. The version being drafted is the 'international version' illustrated by photographs sourced widely across the world and with small interesting case studies, also sourced globally. From this, volunteers have offered to prepare 'regionalised' versions of the textbook for their own regions, countries, states or even cities, by replacing the photographs with local examples, by including local case studies, and by translating the text, where necessary. The next steps are to:

- complete and review the text;
- have the text checked by experts;

- have all the diagrams redrawn to a similar style (and removing labels in English so that these can easily be replaced by translators) – Tanja Reinhardt has kindly offered to do this redrawing for us;
- publish the international version on the IGEO and IUGS-COGE websites and to send it to those who have offered to ‘regionalise’ and translate the book – for their work to begin;
- publish their versions on the IGEO and IUGS-COGE websites, when they are completed;
- develop a companion volume of section by section suggestions for practical activities and questions for students.

Chris King

EARTH SCIENCES EXHIBITION, OCTOBER 6 – 9, 2016 PUNE, INDIA

A four-day Earth Sciences Exhibition was held in Pune, India, October 6-9, 2016. It was jointly organized by the Maharashtra Vriksha Samvardhini and Jividha Pune, and co-sponsored by the International Geoscience Education Organisation (IGEO). The Exhibition was inaugurated by Mr. Rahendra Shende (Formerly Director, UNEP), Dr. L.K. Kshirsagar (Principal, Maharashtra Institute of Technology, Pune) and Dr. K.S.



Venkatraghavan (Principal, Nowrosjee Wadia College, Pune).

The exhibits displayed were from the personal collection of Mr. M. F. Makki. They included different fossils like dinosaur’s egg, teeth, bones, ammonoids, trilobites, fish fossils, insects trapped in amber, hair of Siberian mammoth, leaf impressions, petrified wood etc. Apart from fossils, various ore minerals of economic importance were also exhibited for the benefit of school students and common people. A meteorite specimen was also displayed. Apart from specimens, several self-explanatory posters and charts were on display to underscore the role of earth sciences in our day to day life. More than 2000 students from schools and colleges

along with their teachers visited the Exhibition. Their queries and questions were answered by a number of volunteers at the venue.

R. Shankar

Editor’s note:

If you have an activity you would like to organise in your region, you can apply for a small amount of financial support from IGEO – please visit our website via the link below:

[IGEO Guidelines for the Financial Support of Activities](#)

8TH INTERNATIONAL CONFERENCE ON GEOSCIENCE EDUCATION (GEOSCIED), BRAZIL

Planning for the successful organisation of the 8th Edition of *GeoSciEd* has begun in earnest and a dedicated page has been created on Facebook (<https://www.facebook.com/geoscienced2018/>).

Roberto Greco

OTHER FUTURE CONFERENCES

Goldschmidt conference - Paris Aug 13-18 2017

An Education, outreach and career opportunities theme has been included for the first time in the Goldschmidt conference in Paris 2017 Aug 13-18 (<http://goldschmidt.info/2017/index>).

International Association of Geomagnetism and Aeronomy (IAGA) - Cape Town 27 August - 1 September 2017

An Education and Outreach Session is included in the Joint Assembly of the International Association of Geomagnetism and Aeronomy (IAGA) running in Cape Town from 27 August to 1 September 2017 (<http://www.iaga-aiga.org/>)

Earth Science Teachers' Association (ESTA) - 29 September - 1 October 2017

The 50th anniversary conference of the Earth Science Teachers' Association (ESTA) will take place at Keele University, UK, from 29 September to 1 October 2017 (<http://www.esta-uk.net/conference.htm>)

Arabian Geosciences Union (ARABGU), the African Association of Women in Geosciences (AAWG) and the African Geoparks Network (AGN) conference 'Earth sciences for society' - Morocco 20-24th March 2018

The first circular of the Arabian Geosciences Union (ARABGU), the African Association of Women in Geosciences (AAWG) and the African Geoparks Network (AGN) conference 'Earth sciences for society', which will include an educational theme, has recently been published at: <http://www.aawg.org/>. The conference will run in El Jadida / Marakesh, Morocco from 20-24th March 2018

Resources for Future Generations conference - 16 – 21 June 2018

The Resources for Future Generations conference focussing on energy, minerals, water and the Earth, with a strand focussed on 'Education, Outreach and Young Leaders', run by the International Union of Geological Sciences (IUGS), will take place in Vancouver, Canada from 16 – 21 June 2018 (<http://www.rfg2018.org/>)

INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

Please note that IGEO is officially affiliated with the IUGS and we thank them for their on-going support.

Keep up with what's on through their Electronic Bulletins available on:

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

If you have any articles, conference updates, courses or links of interest to other IGEO members, please email them to the Newsletter editor for inclusion in the next edition by **2nd July 2017**.

IGEO Newsletter editor

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