

International Earth Science Olympiads: inspiring a new generation of geoscientists

J.-E. Sivertsen¹, H. F. Kleiven², B. F. Moen³ and A. Rotevatn²

¹*St. Olav vgs., Jens Zellitzgt. 33, 4008 Stavanger; john-erik.sivertsen@skole.rogfk.no*

²*Department of Earth Science, University of Bergen, P.box 7803, 5007 Bergen; kikki@uib.no and alle.rotevatn@uib.no*

³*Geological Society of Norway c/o NGU, P.box. 6315 Sluppen, 7491 Trondheim; berit.moen@ngu.no*

Since 2007, International Earth Science Olympiads (IESO) have been held with participants from more than 30 countries throughout the world. Norway participated for the first time in 2014 in Spain and again in 2015 in Brazil, and has started the qualifications for IESO 2016 in Mie in Japan.

IESO is arranged by the International Geoscience Education Organisation (IGEO) and is aimed at stimulating the interest of upper secondary school students for further studies and professions in the geosciences. Each country is represented by four students and two mentors; during three days of competition, the students increase their knowledge in a range of geoscientific disciplines, such as geology, hydrology and meteorology, as well as other science subjects such as mathematics, physics and chemistry as integral parts of geoscience. Also environmental sciences, georesources and geohazards are subjects that are vital both for the national and international communities. Working and interacting with international students with a range of backgrounds, the participants broaden their horizons and develop an appreciation for the international aspects of the geosciences.

IESO is considered prestigious in many countries, and the level is somewhat more advanced than what Norwegian students are taught in their curriculum. Our four participants are selected based on competitive tests during local qualifications as well as a four-day national training and qualification session at the Department of Earth Science at the University of Bergen. Here they meet university students and young researchers studying and working with geoscience subject matters, and they get an introduction to field and laboratory methodology.

Our students have demonstrated that they meet the required standards as bronze medals were won during the Olympiads in both Spain and Brazil. In Norway, the interest for IESO has increased from 100 participating schools in 2014 to 120 in 2015, when 730 students participated in the qualifications.

In Norway the recruitment for natural science education has been low for several years. As an incentive to meet this deficit, geoscience was introduced as a subject matter in upper secondary schools in 2007. Through the participation in IESO, the intention is to further incentivate and stimulate the interest in the natural sciences. Even more important than reaching the students that qualify for the olympiad, are the big number of students that participate in the qualification. Through the participation in the olympics, it is our hope that more students will be inspired to pursue a career in natural sciences, and geoscience in particular.