



Division reports

News brought to you from four EGU divisions

In each edition of GeoQ division presidents contribute reports updating EGU members with news from their divisions. Issue 8 gives voice to Charlotte Krawczyk (Seismology), Artemi Cerdà (Soil System Sciences), Norma Crosby (Solar–Terrestrial Sciences) and Susanne Buiter (Tectonics and Structural Geology).

Seismology

The ongoing work of the EGU Seismology (SM) Division is guided by the idea that a broadening of our research topics and an opening to wider, interdisciplinary collaborations within the EGU will foster scientific exchange and will address the growing need for the combination of basic science and applied topics. Here, seismology as a discipline is significant, since it contributes to a large variety of both basic and applied thematic fields and urgent questions. The SM Division, therefore, wants to strengthen its value by enhancing the development from static to dynamic models, from acquisition parameters to petrophysical properties, and from geomodels to geotechnical applications. Thereby, our ability to make relevant predictions for the future is also growing.

This concern shaped the SM Division programme at the EGU 2013 General Assembly and also finds its way in the [call for abstracts](#) for the 2014 meeting. Here, we give particular emphasis to new sessions dealing with the connection from depth to surface, thereby also allowing for co-organised sessions with hydrology, geomorphology, cryospheric or soil system sciences. You will also find a new sub-category – ‘Education and outreach’ – in our programme that should help increase awareness for explaining and transferring our knowledge to different groups and using different tools. For this topic, as well as for non-seismic methods and receiver functions, the division could benefit from having volunteers who could foster these parts of our scientific portfolio.

Highlights at the 2013 General Assembly included the Beno Gutenberg Medal Lecture by [Jeroen Tromp](#) and the Great Debate on ‘[Shale gas: to frack or not to frack?](#)’, which was organised under the leadership of the Geochemistry, Mineralogy, Petrology & Volcanology Division with seven other divisions. Two outstanding student posters [were identified this year](#) and will be awarded during the Division Meeting next year.

The community itself drives the division forward. Therefore, please don’t forget to leave a time slot free in your 2014 General Assembly schedule for the Division Meeting, which will be held during the lunch break immediately preceding the Beno Gutenberg Medal Lecture.

Charlotte Krawczyk
SM Division President



The SSS Division is a strong contributor to EGU’s open access geosciences image repository, [Imaggeo](#). This [photo](#) shows peaty soil in the Andean highlands of Ecuador (Credit: Martin Mergili)

Soil System Sciences

The Soil System Sciences (SSS) Division has been very active during the last six months trying to show that soil science is an interdisciplinary research topic within the EGU, with implications to the wider society. The SSS Division have proposed 149 scientific sessions for the EGU 2014 General Assembly with a large number of co-organised and co-listed sessions with other EGU divisions. This reflects the interdisciplinary nature of soil science, which lies at the interface between water, rocks, biota, atmosphere and human activity.

The SSS Division is also busy leading the launch of a new EGU–Copernicus publication: an innovative open access journal, called SOIL, dedicated to soil science and all the related disciplines that work on the soil system. This journal will be edited by Johan Six, Eric Brevik, Jorge Mataix-Solera, John Quinton and Kristof van Oost, who will be the journal’s executive editors, as well as 50 active and well-known associated editors. The journal SOIL will be launched at the EGU 2014 General Assembly and we expect the first issue to be published in 2015.

The SSS Division is also organising contests to find the best speaker, the best poster, the best convener and the best session flyer at the EGU 2014. Antonio Jordán is leading this dissemination and awards programme, which will be launched soon. We are making a huge effort to improve our outreach programme, which already involves the use of [Twitter](#), [Facebook](#), [Google+](#), as well as a [blog](#), a [newsletter](#) and a [webpage](#).

On other news, the SSS Division is happy to [announce](#) that the recipient of the Duchaufour Medal 2014 is Johan Six and the Division Outstanding Young Scientist award 2014 goes to Markus Stefens. Both of them will be honoured at the next EGU 2014 General Assembly in Vienna. We have also [recently presented Outstanding](#)

[Student Poster Awards](#) relating to the 2013 General Assembly. The four winners are: Andra-Rada Iurian, Claudia Guidi, Stuart Rae and Alexander-André Remke.

The EGU 2014 General Assembly has a promising set of proposals that bring together the traditional topics of soil science with new and challenging ideas for an active and cooperative scientific society. We look forward to your participation in the meeting!

Artemi Cerdà
SSS Division President

Solar–Terrestrial Sciences

The Solar–Terrestrial Sciences (ST) Division covers the physical processes occurring on the Sun and in the solar wind, as well as in the Earth's magnetosphere and ionosphere. In 2013, the EGU General Assembly in Vienna included a wide range of inter-disciplinary ST sessions on data analysis and the interpretation of space-borne and ground-based data, as well as theoretical studies and different modelling techniques. ST oral sessions were very well attended and the atmosphere during the ST poster sessions was excellent. In 2013, [PICO](#) (Presenting Interactive COntent) sessions were held for the first time at the EGU meeting and one of these sessions was included in the ST programme.

This year several EGU medals in the solar-terrestrial sciences were awarded at division level. [Göran Marklund](#) received the 2013 Hannes Alfvén Medal for his outstanding contributions in auroral physics, especially his discovery of downward directed magnetic-field aligned electric fields, an essential feature of the auroral circuit, and their association with black aurora. [Nikolai A. Tsyganenko](#) was awarded the 2013 Julius Bartels Medal for his pioneering contributions to modelling the near-Earth magnetic field and his unflinching commitment to supporting the research community in the application of these models to solving key problems in magnetospheric physics.

At Union level, [Alexis P. Rouillard](#) was awarded the 2013 Arne Richter Award for Outstanding Young Scientists for his innovative studies of the solar atmosphere, the interplanetary medium, the shielding of the Earth from galactic cosmic rays, centennial variations of the Sun, the generation of energetic particles, and the impact of interplanetary disturbances on Earth. Furthermore, the 2013 Jean Dominique Cassini Medal & Honorary Membership was awarded to [Roger-Maurice Bonnet](#) in recognition of his visionary and inspirational leadership at the heart of the establishment of space science in Europe.

The ST Division continues to promote, support and inspire scientists in the beginning of their career. Two 2012 General Assembly Outstanding Student Poster (OSP) Awards for ST were awarded during the 2013 ST Division Meeting: to Ivana Richterova for the poster entitled 'Model of secondary electron emission from small dust grains – shape influence' and to Shiyong Huang for the poster entitled 'Electron acceleration in the reconnection diffusion region: Cluster observations'.

The 2014 EGU medallists and 2013 OSP awardees, including those who were honoured for research in the solar-terrestrial sciences,

were also recently [announced on the EGU website](#). They will receive their prizes during the EGU 2014 General Assembly.

Norma B. Crosby
ST Division President



Tectonics and Structural Geology

The Tectonics and Structural Geology (TS) Division focuses on rock deformation at all scales, aiming to decipher its complex relationships with Earth dynamics. The division is highly interdisciplinary and this is reflected in our methods and in our close ties with many of our fellow EGU divisions. I am very pleased to see that the wide interests of TS are reflected in our session programme for the 2014 General Assembly! New features for the TS Division in the 2014 meeting include several poster-only sessions, daytime poster sessions and [PICO](#) sessions. I hope everyone will engage actively to make all TS sessions buzzing and the place to be!

We are currently exploring closer ties with the [Tectonophysics Section of the AGU](#) and the [Structural Geology and Tectonics Division of GSA](#). In practice this will become visible through co-sponsoring of sessions at our respective meetings, but we are open to suggestions for other means of widening the scope of such collaborations.

The former workshop series on Alpine Geological Studies is now part of the EGU conference series and in early September 2013, the first Emile Argand Conference on Alpine Geological Studies was held in Graz, Austria. Other workshops with close ties to our community include the GeoMod meeting (September 2014 in Berlin) and the Deformation Mechanisms, Rheology and Tectonics Meeting. Keep an eye on our meeting calendar at <http://ts.egu.eu> to find tectonics and structural geology meetings of interest.

The TS Division is looking for a young geoscientist to work with us in setting up a TS young scientist network, help with involving young scientists in sessions, and represent TS in the EGU young scientist platform. Please contact me (ts@egu.eu) if you could see yourself in this role.

Information on the TS Division, including the committee that builds the TS programme for the EGU 2014 General Assembly and the awards & medal committees, can be found on <http://ts.egu.eu>. Follow us for division news!

Susanne Buiter
TS Division President