Report about the conference "Impacts and their Role in the Evolution of Life"

Tällberg, Siljan impact crater area, Sweden10-13 June 2019

General features

The conference "Impacts and their Role in the Evolution of Life" was organised as a 4-days event lasting from June 10th to 13th, 2019, with 3 full days of programme, one day of excursion and June 9th and 14th functioning as a departure day, respectively.

Attendees

48 researchers and students attended the event, 24 of them were early career people. The relatively high latter number was probably due to the fact that we offered a considerable number of talk slots to early career scientists and, last, but not least, because of the co-funding from Europlanet. A substantial contribution came also from the Swedish Research Council. Albeit the total numbers of participants might be considered a bit on the small side (especially if one compares with EPSC), but the research community associated with the conference theme is small and, as one conference attendee put it "the vast majority of important people in the field were there". Generally, the proficiency level of attendees was very high, on of the early career scientists present (Andrew Gangidine) won the poster prize at AbSciCon (against 240 competitors) and another attendee (Nicolle Zellner) was awarded another prize at the same event. To the attendee statistics in detail:

- Number of participants of Inclusiveness states: 2 (+ one invited speaker with Polish nationality based in the UK at the moment)
- Number of female participants: 17
- Number of male participants: 31
- Number of early career scientists: 24 (50%)
- Participants from Industry: 0 (the subject is of limited industrial interest)
- Amateur Participants: 1 (retired professor of veterinary science)
- Participants from outside Europe: 12

Scientific Programme

The following sessions were organise in the conference:

- Impacts, the Early History of the Solar System and the Formation of the Moon
- Late Accretion and Delivery of Volatiles to the (early) Earth
- Physical and Chemical Characterisations of Impactors (meteorites, comets etc.)
- Identification and Exploration of Impact Features
- Ecological and Climatic Consequences of Impacts
- Impact Craters and Impact Hydrothermal Systems as Habitats for Life
- Geoconservation of Impact Areas
- Impacts as Subjects for Science Education and Outreach

For every session we had invited at least one keynote speaker (one of them, Anna Losiak, in an early career scientists) as well as several contributed talks selected from the abstracts). The following leading scientists gave talks at the meeting:

Natalia Artemieva, Planetary Science Institute, USA Antoine Bercovici, Smithsonian Institution, USA Jamie Elsila, NASA Goddard Space Flight Centre, USA Cecile Engrand, INPN, France Anna Losiak, University of Exeter, UK Bernard Marty, CNRS, France Steven Mojzsis, University of Boulder, Colorado, USA Gordon Osinski, Western University, Canada Wolf Uwe Reimold, University of Brasilia, Brazil

The programme was very appreciated by the attendees. As an experienced conference organiser I also saw that very few laptops were open during sessions – always a good sign at a meeting.

A one days excursion was organised mainly to visit geologically interesting sites, as the Styggforsen waterfall with extremely interesting outcrops from the Siljan waterfall as well as the Falu copper mine. Onr of the early career scientists functioned as field guide at Styggforsen.

Long-term impact of the meeting

People praised the interdisciplinary layout of the event and maintained that they learned a lot from each other during the event. This holds especially, but not exclusively for the early career scientists. In the new European Astrobiology

Institute there will be a Project team "Impacts and their role in the Evolution of Planets, Moons and Life" which is headed by one of the keynote speakers and in which many of the attendees will participate. This team will organise a similar event in 3-4 years. So there will be a long-term impact of the conference.

Co-funding

The event was co-funded by Europlanet, the Swedish Research Council and the Stockholm University Astrobiology Centre. The Europlanet funds will be used for meals and lodging of (preferably early-career) European scientists attending the meeting and, to a much lesser extent for lecture room hire and rental of poster walls.