

Gender and diversity in geosciences related Union session at the European Geosciences Union General Assembly in Vienna 2019-2021

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Abstract. Review of the sessions related to gender and diversity at the EGU Gas in Vienna, both on site and online.

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OVERVIEW

The European Geosciences Union (EGU) is an international academic association in the fields of Earth (geo), planetary and space sciences. Its forerunners were the European Geophysical Society and the European Union of Geosciences, which merged in autumn 2002. Each year, a General Assembly is convened for a week, featuring sessions proposed in a bottom-up manner by conveners together with co-conveners, in line with the 22 scientific divisions. The first author attended the General Assemblies of the European Geophysical Society in 2001-2003 in Nice, France, and, since 2004, many of those held by the EGU, in 2004 in Nice, and since 2005 in Vienna, Austria. In 2020 and 2021 there were online editions. Attendance exceeds 15 000 from over 100 countries. There is a strong sub-division on Natural Hazards and Society, where the first author's session (on natural hazards and urban planning) was featured. In addition to this session, the first author held one in 2006 on materials of cultural heritage, and another in 2017 on role model women in geosciences. The most long-lasting series of sessions on women in geosciences was that on the initiative of the European Research Council (ERC), although there were other sessions in parallel, and

in 2017 both were featured on the same day in EGU flyers.

There was a Union Session in 2019 (Promoting and supporting equality of opportunities in geosciences, Co-sponsored by AGU – American Geosciences Union – and JpGU – Japan Geosciences Union, Convener: Claudia Jesus-Rydin | Co-conveners: Alberto Montanari, Robin Bell, Chiaki Oguchi, Lily Pereg (deceased)), after being held several times in 5 years. The session was opened by Alberto Montanari, JpGU and AGU representatives. Since 2014, gender data are collected on EGU nominations and awards. The session has been held since 2016. In 2018 there was also a Splinter meeting. Since 2018, there has been an EGU working group. In the strategy, in addition to several other measures, there is one on naming medals and awards after women. The target is to have women exceed 30% of nominations and awardees. Alongside the Union symposium, there was also an ordinary session (Diversity and Equality in the Geosciences, Co-sponsored by AGU, EAG, and JpGU, Convener: Claudia Jesus-Rydin | Co-conveners: Holly Stein, Liviu Matenco, Jill Karsten, Tim van Emmerik). Badges with gender-related symbols were distributed. The Union session was live-streamed. Information on the ordinary session is featured here.

FIRST PART OF THE UNION SYMPOSIUM – GENDER

The first speaker (Erika Marín-Spiotta) #MeTooSTEM stated we should treat our people better than our data. After that, AGU devised a diversity and inclusion strategic plan (December 2018). ERC contribution features women as 17% of submissions. Success rates for women were presented.

Jill Karsten presented her career. AGU – 40% of membership from outside the USA. Members were asked about the topic via the annual survey. Goal 1 “change the culture”. Goal 2 “Improve the climate”, Goal 3 “Empower the membership”, Goal 4 “Be leader for Diversity&Inclusion”, Goal 5 “Be a model organisation”. There is a new standing and advisory committee on D&I.

In the discussion it came out that leadership is important. Other topics were: reverse bias (women more easily accepted?), the role of societies, one is valued on grants and publications and not on how inclusive teaching is, and how to encourage non minorities to attend events about minorities.

2ND PART OF THE UNION SYMPOSIUM – WIDENING

There was an introduction by EGU’s president Robin Bell, who has been working in geophysics for 35 years and has been seeing the change.

The 1st talk (Giulio di Toro) tackled underperforming countries in research, and featured an example sourced from ERC data. There are no Italian universities in the top 200. 50% of researchers remain in Italy with ERC-related activities. 15 years ago, ERC awardees got permanent positions and direct calls to bring researchers from abroad. Discussion: the problem with strict research sector designations, what to do to attract residents from Eastern countries.

The 2nd talk (Barbara Romanowicz) touched on women under-representation in the submission stage: success rate is not a problem, underperforming countries at both submission stage and success rate from over 10 years of data. The gender equality plan includes sessions at EuroScience Open Forum; EGU; EMBO,

participation to gender summit. There is a widening working group (ERC visiting fellowships – national initiative of 9 countries, costs are covered by sending institutions). Women tend to be underestimated. FP7 Grantees: 20% are women. H2020 – 27%. The success rates now became comparable. In life sciences, women still have a poorer performance. Panels aim to stimulate dialogue with scientific societies. The majority of evaluated proposals are from EU15 and PL HU RO from EU13. Mobility does not mean brain drain, but brain circulation. Major losers of ERC are TR and RO (no inflow), many grantees are already abroad. Winners are CH and AT. Closing of the speech was on how to encourage women and EU13. This means concrete measures at EGU: courses during lunch breaks when most people can attend.

The 3rd talk (Liviu Matenco – Romanian, now in Utrecht) covered normalised publications, authors etc. for East and West, EU15 and EU13. People from the East have 6 times higher collaboration rates with the West than the other way around. There is scientific integration and scientific nationalism (recently in the East). Publications are high in the East despite up to 0.3% GDP investment in research. Participation in the EGU is questioned and not all authors come to EGU. The problem of funding is also questioned. The East goes to Scopus listed conferences. There are very few Eastern EGU leaders (West selects West). There is only 1 of 133 in leadership positions from the East. But the East represents more than 30% of Europe. The correct name would be Western European Geosciences Union and guests. Western colleagues consider those in the West with an Eastern passport to be the solution.

THE ORDINARY SESSION

This time it included role models, but papers were still largely statistical. The contribution of professional societies was highlighted, such as Institut de Physique du Globe (IPGP) Equality Group (EG) (where an MCAA event also took place).

The EGU awards committee was featured with a poster.

There was a paper on AGU Fall Meeting showing women are more rarely oral and one on

AGU 2014-2018 compared with membership. One more paper with AGU members was mentioned.

A role model paper was oral.

“Experiences when trying to manage two ambitious careers and a family” by Ylona van Dinther from Utrecht University was on international mobility and dual career.

Posters

Two more role model papers were presented in poster format.

“Reclaiming the memory of pioneer female geologists – digging deeper” by Aude Vincent, ENSEGID Bordeaux INP. Help to women came more often from parents than from husbands, and many times this ended in celibacy and having female mentors.

“Being a mother and a scientist: the experience of a senior scientist” by Catherine Chauvel Institut de Physique du Globe de Paris, Paris, France – professor and mother. Some women look for a more stable position before having children.

“Examples of recommendations in the hiring process of professors” by Frédéric Herman, Université de Lausanne, presented the fact that if less than 30% are female candidates, the position gets readvertised.

“In Austria, there is no female full professor in any field of geosciences” told Franz Neubauer.

Other topics included the education of girls in Israel and a festival programme for minorities in the green city of Bristol. A workshop on gender issues in hydrology was held in Bristol in February 2019.

didthisreallyhappen.net: Promoting gender equality in academia through comic strips (from more countries) gathered 40 testimonies.

According to JpGU, women hold fixed term positions up to 5 years longer than men.

This time, the Splinter meeting could only be attended via invitation. A reception took place.

There was a short course on unconscious bias attended by 40% men.

DIGITAL EDITIONS (2020 AND 2021)

EGU2020: Sharing Geoscience Online (#shareEGU20) was open to anyone, the authors just had to cover the abstract fee, but there was no

registration. Two sessions were featured in Educational and Outreach symposia (EOS).

The first session was the traditional EOS6.1 “Promoting and supporting equality, diversity and inclusion in the geosciences”, co-sponsored by AGU, JpGU, and EAG, Convener: Claudia Jesus-Rydin | Co-conveners: Raffaele Albano, Lisa D. White, Liviu Matenco (who presented again the East-West differences and discussed with the first author), Chiaki Oguchi, over two blocks, which were featured as chat. One month before the conference and one month afterwards, it was possible for anyone to comment the displays and get answers from other commenters and the authors. The first author followed the session and wanted to highlight that there was a display on the MCAA (Marie Curie Alumni Association) GEDI (Gender, Equality, Diversity, Inclusion) group by Ira Didenkulova, who is running a Humboldt Networking Initiative on role models including women in geosciences at the EGU. EGU policy and facts and figures were presented on several displays. Another noteworthy display aimed to realise an exhibition of posters on role models of pioneer women in geosciences. Another highlight was “Moving from Latin America to Germany: challenges for a geoscientist family” talking of fixed term positions, like “Mind matters” on mental health connected to this (the first author now participates in a COST action on “Researcher mental health”, which deals with these problems). The second session was EOS6.2 “Enabling Women in Geoscience: Inspiration, Challenges and Best Practice”, Convener: Madeleine HannECS | Co-conveners: Sarah Boulton, Jodie Fisher, Daisy Hassenberger. The format was the same.

#vEGU21: Engage • Discover • Inspire was different. This time there was more time to prepare the virtual conference, and zoom presentations were permitted. The diversity and equality programme was richer, and to a certain extent also focused on obtaining the overseas perspective. Firstly, a short course on “Promoting diversity in geosciences” took place.

Similarly to 2019, there was a great debate, namely a union wide session “Challenging discrimination in the geosciences: amplifying unheard voices” showing the EGU policy.

Convener: Helen Graves | Co-conveners: Hazel Gibson, Claudia Jesus-Rydin. Like the 2019 Great Debate, this one was also recorded and made available on the conference webpage (egu2021.eu; for the previous egu2019.eu). The EGU policy was visible from 2021 in the EDI label to sessions (equality, diversity, inclusion), which reflected if a session had conveners from different countries, genders and career stages.

The traditional session “Promoting and supporting equality, diversity and inclusion in the geosciences”, Co-sponsored by AGU and JpGU, Convener: Claudia Jesus-Rydin | Co-conveners: Anouk Beniést, Chiaki Oguchi, Billy Williams, featured vPICO presentations. PICO is a presentation format promoted by the EGU as an alternative to traditional oral and poster formats, where an oral presentation is seen as higher recognition than a poster (and this is also a topic discussed during this session, namely gender diversity in oral presentations). In-person PICO presentations used a tablet-like screen with a touch surface to present the different slides on screen while the speaker stood next to it as during poster presentations, after a short oral introduction of 2 minutes. With the vPICO format, each presenter had one image slide like a poster for a 2-minute presentation, followed by zoom rooms for discussion with session participants. Since the first author was a conference participant as well as a presenter in other sessions, this format could be experimented with and compared to PICO attendance in other years in Vienna. However, in 2021, participation to the EGU was restricted to registered participants, although there were huge

reductions for low income scientist categories depending on career stage and country.

But the real highlight of the vEGU 2021 was the screening of the film on gender and diversity. In previous years, the geocinema concept was used. This was discontinued several years ago, but had a comeback in 2021, among other elements. The film titled “Picture a scientist” was screened twice over several days. It was not unknown to the first author, a Marie Curie alumna, as it was also screened by the GEDI working group of the Marie Curie Alumni Association (MCAA) previously. MCAA GEDI is the successor of the MCAA GEMS (Gender Equality for Mobile Researchers in Science) working group, on behalf of which the first author organised said session on role model women in geosciences. “Picture a scientist” is a 2020 documentary on gender inequality in geosciences, biology, and chemistry (the latter associated to racism as well) mainly overseas. Geoscientist Jane Willenbring took part in the panel at the great debate recorded at the conference, and the film was discussed after the screening. While the women scientists were at different stages of their careers, having tenure gave them the courage to speak up. Jane Willenbring’s complaint made the Marchant glacier get renamed due to early harassment exercised by David Marchant on her trip to Antarctica as postgraduate student. The film is available on Netflix, as is the recording of the great debate on the webpage. Although they are not as interactive as the projection and the event held at the conference, where participants were able to ask questions to the speakers, they provide anyone interested in the topic the chance to passively enjoy one of the conference’s highlights.