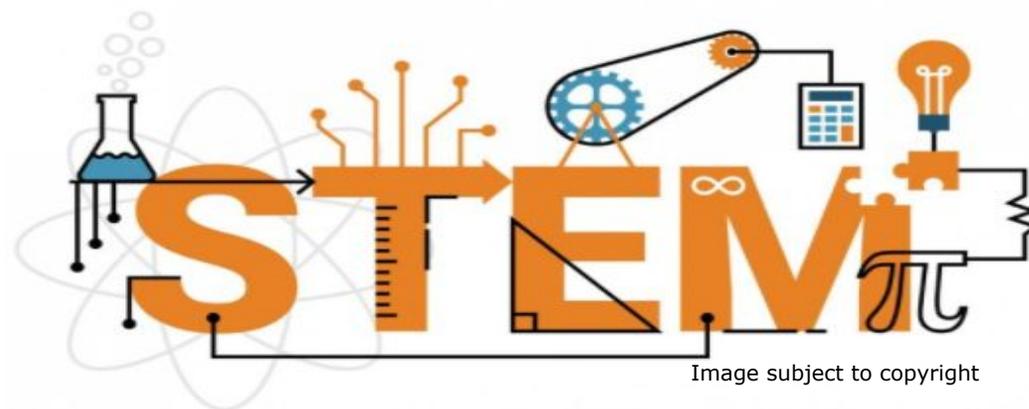




"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 741128".

Gender Equality in Engineering through Communication and Commitment GEECCO



NEWSLETTER n° 2 July 2018

Introduction

The GEECCO newsletter provides information regarding tasks and collaborative actions carried out through the project, collaboration actions, interesting concepts and readings about gender equality, events, etc.

Our newsletter is published periodically and is also available for download under the following link:

[www://http://www.geecco-project.eu/resources_results/](http://www.geecco-project.eu/resources_results/)



https://www.linkedin.com/feed/?trk=nav_logo



https://twitter.com/GEECCO_H2020

Download the project leaflet

If you have comments on the content, or suggestions – let us know. Enjoy reading, and we look forward to your feedback to: irene.jorge@upc.edu.

Want to change how you receive these emails? You can update your preferences or **unsubscribe** from this list. Please send an email to: geecco_newsletter@list.tuwien.ac.at



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GEECCO PROJECT

GEECCO is an EU funded project, which brings together a consortium that is characterized by the focus on the STEM (Science, Technology, Engineering, and Mathematics) field.

GEECCO will be a step forward establishing tailor-made **gender equality plans** (GEPs) in Research Performing Organisations (RPOs) and implementing the **gender dimension in research funding programmes** in Research Funding Organisations (RFOs), pursuing the 3 following objectives:

- [Removing barriers to the recruitment, retention and career progression of female researchers;](#)
- [Addressing gender imbalances in decision making processes;](#)
- [Integration of a gender dimension in teaching and research.](#)

An effective dissemination and exploitation strategy has the aim of making the GEECCO approach accessible to other actors.

- ❑ Call for proposal: H2020-SwafS-03-2016-2017
- ❑ Topic: [Support to Research Organisations to Implement Gender Equality Plans](#)
- ❑ From 2017-05-01 to 2021-04-30
- ❑ Contract number: 741128

GEECCO BEST INITIATIVE FOR WOMEN ENGINEERS MADE BY WOMEN IN 2017



[GEECCO project judged the best women's initiative in infrastructure and transport in the TOR competition in Poland](#)

The Third Forum of Women in Infrastructure and Transport was held in Warsaw, Poland on 6th June 2018. It was organised by the TOR Academy and the National Board of Business Advisors (ZDGTOR, [Zespół Doradców Gospodarczych](#)).

The first forum took place on 17th June 2016 and it was a great success: the Forum Programme Board was created with 28 female experts, with Professor Lidia Zakowska from **Cracow University of Technology** as a member representing academia.

FORKO 2018 was the third edition of the conference. It was combined with networking for women who hold managerial positions in transport and infrastructure and for those who wish to start their career in the transport industry.

The objectives of the Forum are to popularise the engineering industry among students and young women seeking a career path in infrastructure and transport engineering, but also to help networking and exchange of experience among women who study and work in the transport industry.

The [FORKO 2018](#) conference offered presentations, panels, discussions and less formal meetings about women's management of companies operating in the business, especially in the area of railways, infrastructure and public transport.

At this year's conference, more than 250 people from the infrastructure and transport sector had the chance to be involved in the debate on three issues:

- **Women in engineering** - innovative implementations in industry, infrastructure and transport
- **World of many roads** - how experiences in different sectors affect career development
- **Faces of success.** The panellist invited to the debate "**Faces of success**" was the **GEECCO partner and Cracow University of Technology researcher, Dr Eng. Lidia Zakowska.** She presented the current concept of equality in transport, as part of EU strategy and as part of H2020 project GEECCO.

Within the framework of the Forum, an open competition was organised in three categories:

1. 2017 Woman of the Year in Infrastructure and Transport
2. Women's initiatives in infrastructure and transport
3. Technical projects run by women

During the announcement of the final results, the **GEECCO project was awarded a prize in the second category, women's initiatives in infrastructure and transport.**



The GEECCO project has been recognised as the best in the country: an innovative project and an outstanding one at the European level, with the valuable aim of building and implementing a Gender Equality Plan (GEP) at the participating technical universities in the EU, in particular at Cracow University of Technology, the first among the Polish universities.



The award was received by Prof. Lidia Zakowska and Sabina Puławska- Obiedowska. The core team of the executive committee of GEECCO Poland also includes Dr Zofia Bryniarska and Dr Anton Pashkievich.



GENDER EQUALITY GLOSSARY: Gender-sensitive research

According to the [Gender in EU-funded research toolkit](#) published by Yellow Window Management Consultants in 2009, under the FP7 programme, there are sound reasons for the research community to invest in a gender-sensitive research agenda.

Gender-sensitive research takes a twin approach: it pays attention to the participation of women and men, providing **equal opportunities for all, and** it integrates **gender into the research content** all the way from the initial research idea to the dissemination of results

Investing in equal opportunities for men and women in research makes for teams that **perform better and attracts top-level researchers.**

The best possible team. Research has shown that mixed teams – if wellmanaged – are more efficient than single-sex teams: mixed teams are more creative, contain more diverse points of view and show an improved quality of decision-making.

The best possible talent. To achieve excellent research you need to get the best talent from the entire potential talent pool.

In order to do so, you need to create working conditions and culture that allow men and women to have equally fulfilling careers.

Investing in a gender-sensitive approach to the **research content makes for higher quality and validity.**

The best possible research validity. if research takes into account the differences between men and women in the research population, the results will be more representative. General categories such as 'people', 'patients' or 'users' do not distinguish between men and women. Research based on such categories may well draw partial conclusions based on partial data.

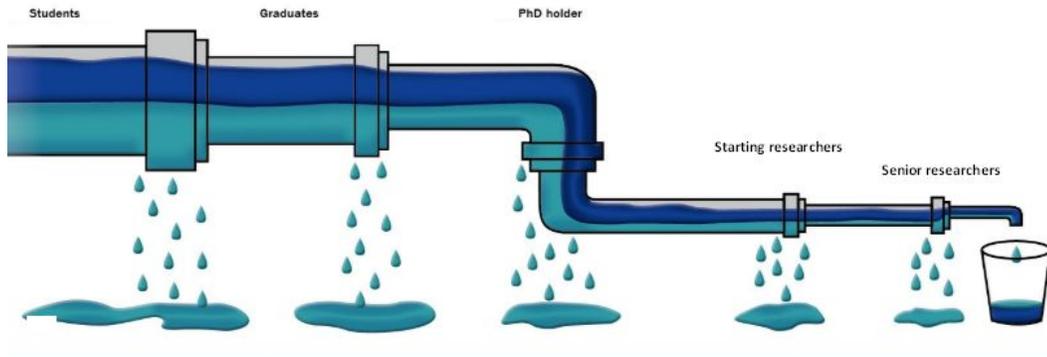
The best possible research utility. Gender-sensitive research will reach a broader group of end-users in a more relevant way. Taking gender into account and asking from the start who will use the results, when and how, can avoid an unintentional gender bias in the outcome.

Further readings: [How to make research gender-sensitive research](#) and [Gender-sensitive aspects of research assessment metrics](#) section, within deliverable 1.1- Conceptual framework, H2020-[GEDII project](#).

GENDER METAPHORS

Leaky pipeline

The under-representation of women researchers is still apparent across the EU. This contributes to a **'leaky pipeline' phenomenon**, whereby an increase in the number of women graduates does not lead to an increase in the proportion of women amongst researchers (Jensen, 2005)



Self-made image

Academic Careers and Gender Inequality. Research organisations are involved in intense competition for talent. This makes it especially necessary to address the full pool of talents, including women — even when they are under-represented. It also requires retaining research staff over time and giving them the opportunity to achieve their personal and professional objectives and potential.



It has been shown that women are abandoning their scientific careers in much greater numbers than men.

Described as the **'leaky pipeline' of women in science.**

This phenomenon has a considerable impact: a loss of knowledge, an organisational cost and a reduced and limited perspective in scientific research¹.

Gender Equality in Academia and Research. It also feeds a vicious circle: as women leave research in greater numbers, research becomes less attractive to women.

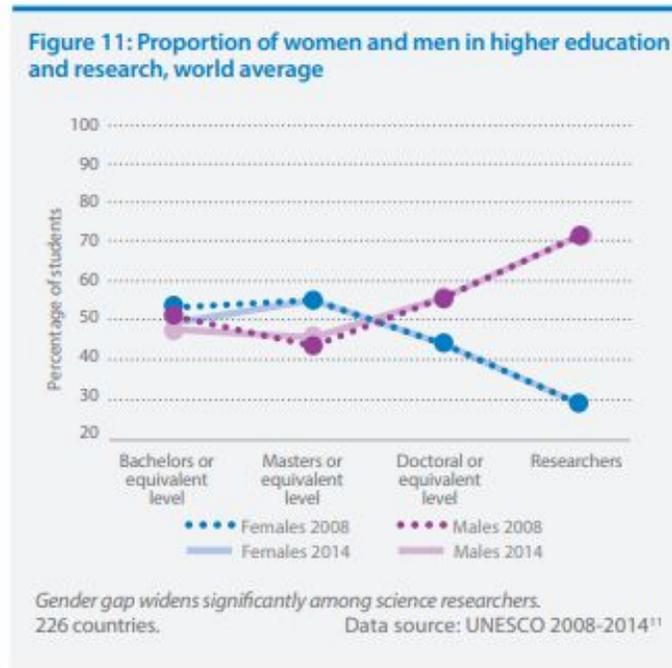
Attracting and retaining female researchers in a knowledge-based economy can only be reached if the full spectrum of gender bias and inequalities in research is addressed².

UNESCO's STEM and Gender Advancement (SAGA) project has found that the gender gap in science widens significantly in the transition from Bachelor's to postgraduate levels (e.g. Master's or Doctorate levels) and into research and careers.

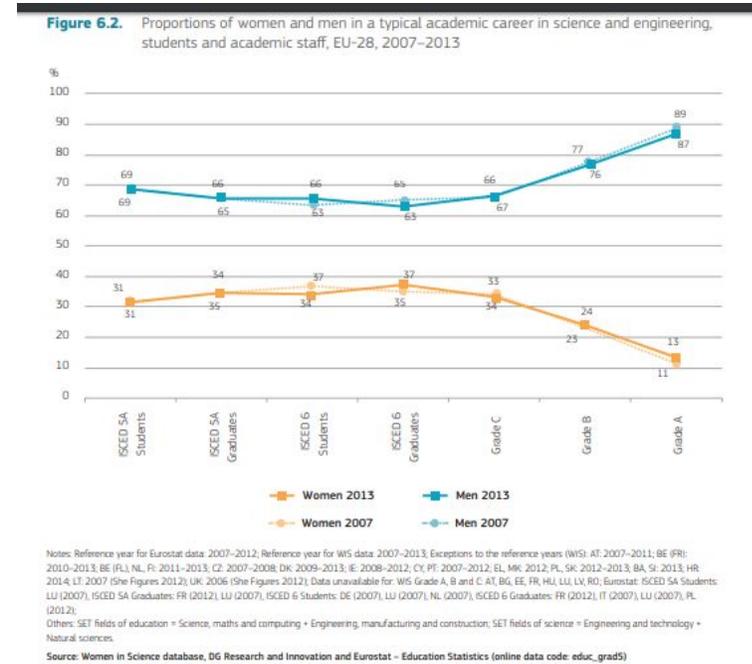
The highest level of attrition can be found at post-doctoral level as women do not take up careers in their fields of study, despite the large amount of time invested in education prior to employment.

SHE FIGURES 2015. There are many factors that influence women’s transition into STEM careers, including perceived compatibility of certain STEM fields with female identity, family obligations, the working environment and conditions.

While acknowledging the importance of these factors for female participation in STEM careers, this is beyond the scope of this review, which focuses on education³.



The gap between women and men across a typical academic career is wider in science and engineering than across all fields of study.



If one considers the situation in the field of science and engineering specifically, it becomes apparent that the significant gains made by women in education do not apply equally across different fields of study.

Indeed, Figure 6.2 shows that **women represent only 31 % of students and 35 % of graduates at the first level of tertiary education** (in the fields of Science, maths and computing + Engineering, manufacturing and construction) and that these numbers have not changed since 2007, with the exception of a 1 percentage point increase at the graduate level. The situation is similar at the **second stage of tertiary education**, with **women representing 34 % of students and 37 % of graduates in 2013**, compared to 37 % and 35 % respectively in 2007.

At the level of academic staff the gap widens as the grade increases. Indeed, **women represented 33% of grade C staff, 24% of grade B staff and 13% of grade A staff** in 2013 (in the fields of engineering and technology + natural sciences), with very little change since 2007 across all levels (1 to 2 percentage points). When comparing these proportions with the proportion of women and men in a typical academic career, students and academic staff EU-28, 2007-2013.

It can be concluded that the gap is wider in science and engineering than across all fields of study taken together and that a significant amount of work will be required to rectify this situation.⁴

Sources or references:



1 Academic Careers and Gender Inequality: Leaky Pipeline and Interrelated Phenomena in Seven European Countries. Gendering the academy and research: combating career instability and asymmetries (GARCIA) EU-FP7 PROJECT (G.A number 611737).

2 Source: Gender Equality in Academia and Research: GEAR Tool, 2016, This publication was prepared under the gender mainstreaming programme of the European Institute for Gender Equality.

<http://unesdoc.unesco.org/images/0025/002534/253479e.pdf>

3 Source: SHE FIGURES 2015. European Commission. Directorate-General for Research and Innovation, 2016
https://ec.europa.eu/research/swafs/pdf/pub_gender_equality/sh_e_figures_2015-final.pdf

4 Cracking the code: Girls' and women's education in science, technology, engineering and mathematics (STEM) Published in 2017 by the United Nations Educational, Scientific and Cultural Organization,
<http://unesdoc.unesco.org/images/0025/002534/253479e.pdf>

SISTER PROJECT SECTION



This section has been created as a starting point for collaboration with **projects** that, like GEECCO, **have a work program dedicated to the inclusion of the gender dimension in European institutions.**

The second delivery is dedicated to the project: [GENDERACTION](#)

GENDER equality in the ERA Community To Innovate policy implementation. Coordination and Support Action

Basic Information:

- **Topic:** [SwafS-19-2016 - Networking of National representatives and resources centres on Gender in R&I](#)
- **Call for proposal:** H2020-SwafS-2016-17
- **Funding scheme:** CSA - Coordination and support action
- **Duration:** from 01-04-2017 to 03-03-2021

GENDERACTION objectives

1. Map and analyse Members States' progress towards implementation of gender equality in R&I through national ERA action plans and strategies
2. Provide training events to build consistent and professional capacity in gender equality in R&I among responsible national representatives and Horizon 2020 National Contact Points.
3. Provide mutual learning opportunities to maximize existing experience among policy makers and other relevant stakeholders

4. Prepare policy briefs on advancing gender equality in the ERA
 5. Build new collaborations to advance gender equality in international cooperation in science, technology and innovation
- The GENDERACTION **consortium** consists of 13 organisations from 12 countries and 5 Associate Partners from additional five countries

Interview with Marcela Linkova, project coordinator of GENDERACTION project and Head of the National Contact Centre of Gender and Science, Institute of Sociology of the Czech Academy of Sciences, Czech Republic.

How was the idea of GENDERACTION project born?

The call text focused on the networking of national representatives and establishment of a forum to support the implementation of gender equality in the European Research Area. This was a perfect opportunity because we had a solid ground for such cooperation established in the Helsinki Group on Gender in Research and Innovation, which was an advisory group to the Commission until June 2017.

The opportunity for further and closer collaboration among national representatives was very welcome because we can only advance the gender equality agenda in the European Research Area if all stakeholders contribute, and this also concerns actions and exchanges at the level of member states and associated countries.

The Council Conclusions on Advancing Gender Equality in the ERA from 1st December 2015 served as a starting point to develop the framework for our activities.

In this sense, which actions are planned in GENDERACTION for the implementation of gender equality in R&I through national European Research Area (ERA)?

A survey carried out in GENDERACTION Work Package 3 to analyse the ERA National Action Plans and Strategies (NAP) revealed large differences across countries.

While some countries have the full policy mix focusing on all three ERA priorities (gender balance in decision making, gender balance in research teams and the gender dimension), other countries focus only on one of them. There are also countries where their NAP formulates only a very general commitment to gender equality or it does not address the priority at all. Only two thirds of the NAPs actually define concrete targets or measures, which is very problematic.

Another thing the survey shows is that despite the fact that gender equality should be treated as a cross-cutting topic in the ERA, only 7 countries treat it this way. It must be said that we discovered large differences between the old and new member states: while the NAP was the first policy document on gender equality in research and innovation in 57% of new members, this was the case only in 25% of the old ones.

SISTER PROJECT SECTION

New member states also acknowledge more difficulties regarding the development of ERA Priority 4 - GENDER EQUALITY AND GENDER MAINSTREAMING IN RESEARCH.

Where are, in your opinion, the biggest challenges for the integration of gender dimension in research and innovation? What strategies would you recommend to overcome these challenges?

The biggest challenge is the uptake by national Research Funding Organizations (RFO). If national RFOs introduced or expanded the requirements for the integration of the gender dimension in research and innovation into their national programmes, that would of course be a major step forward, and with proper grant assessment, monitoring and evaluation provisions in place, the research community would follow.

While we see great strides forward in several countries, others remain completely inert. It is quite disheartening to see the [draft text for Horizon Europe](#). The former Helsinki Group on Gender in Research and Innovation made very concrete proposals for taking this further in the next Framework Programme, and I would say that this issue is hugely pressing in relation to innovation, given the European Innovation Council pilot. I have not seen any provision for ensuring "gendered innovations" there.

How could the mutual learning opportunities be improved to maximize existing experiences among policy makers, funding organisations and research organisations?

In GENDERACTION we are in the process of designing novel forms of mutual learning following needs assessment we carried out among members of the ERAC Standing Working Group on Gender in Research and Innovation, who are the primary targets for our mutual learning exercises.

While the focus is clearly on bridging the gaps in policy implementation between countries less and more advanced in gender equality policy, we also want to create opportunities for mutual learning across countries that are more advanced.

Our experience shows that having more actions or more concrete actions and policies in place does not mean that you do not face setbacks or resistances, and your communication strategies and lines of argumentation may be different.

What would you recommend to carry out new collaborations to advance gender equality in science, technology and innovation?

We need more collaborative research to understand discriminatory mechanisms across countries with different socio-economic and historical developments and in different disciplines.

European funding should be a perfect opportunity for this. We should find ways how to learn from the experience of the structural change projects funded since 2009.

To this end, we are organizing a workshop in GENDERACTION for the sister projects next year but a regular exchange and dissemination should be in place, not only among the project but towards the wider research community and national representatives.

I hope that the recently launched ACTonGender project* will be one avenue to do this. The European Research Area and Innovation Committee (ERAC) Standing Working Group on Gender in Research and Innovation is also clearly keen to exchange with the projects. I think we also need more collaboration between researchers and gender equality practitioners and national representatives, democrats in national bodies if you will, who should strike alliances and support each other.

I think that we are at a very important time in history where we see pushback against gender equality and gender knowledge and scholarship. This is very dangerous and so mutual support is crucial.

* ACT (Communities of Practice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe) is a Coordination and Support Action project funded by the European Union's Horizon 2020 under the call SwafS-08-2017.

INTERESTING READINGS

Kristin Auckland: [Two thoughts at once - pilot project on both gender equality and gender perspectives.](#) Kifinfo, April 2016

Olga Khazan: [The More Gender Equality, the Fewer Women in STEM.](#) The Atlantic, February 2018

Angela Wroblewski, Anke Lipinsky: [Steering by evaluation in times of impact orientation and monitoring.](#) Fteval journal, issue n°45, March 2018.

Gijsbert Stoet, David C. Geary. [The Gender-Equality Paradox in Science, Technology, Engineering and Mathematics Education.](#) Psychological Science, February 2018

Laura Sherbin: [6 Things Successful Women in STEM Have in Common.](#) Harvard Business Review (27 April 2018),

Carol Morris, Alice Moncaster (eds.), Felizitas Sagebiel, Kate White (guest eds.): Special Issue: Gender and Masculinities in Careers and Leadership in Higher Education. International Journal of Gender, Science and Technology, Vol 10, No 1 (2018), Table of Contents: <http://genderandset.open.ac.uk/index.php/genderandset/issue/view/29> (articles freely available for download)

EVENTS WITH GEECCO PARTICIPANTS



In this section, events in which GEECCO project partners have participated are collected. It has also been considered relevant to include, in summary form, the specific/s action/s of added value carried out. However, due to space limitations, not all the events that have counted with the participation of the partners representing the GEECCO project are included.

- **Gender aspects in juries, committees and boards**, 2nd May - 2018, Viena. Participant: WWTF. Participation in meeting with city government representatives and presentation of the GEECCO project
- **[Second LERU Gender Conference, 14-15 June - 2018, Zurich.](#)** Participant: GESIS. Good analysis of gender biases and a set of recommendations. [Implicit bias in academia: A challenge to the meritocratic principle – and what to do about it](#)
- **Gender AG (II)**, 18th June-2018, Vienna. Participant: WWTF. Exchange workshop with other Austrian RFOs and non-university research institutions on gender bias in recruitment and selection process. Reporting progress and state of play of GEECCO.

EVENTS WITH GEECCO PARTICIPANTS

- **XII Iberoamerican Congress of Science, Technology and Gender**, 18th July 2018, Bilbao. Participant: UPC. Paper presentation ([Gender Equality at UPC: a continuous challenge](#)).
- **2nd UPC Workshop on Research**, 29th June 2018, Barcelona. Participant: UPC. Including gender dimension in research and also presentation about Responsible Research and Innovation, a cross-cutting issue in Horizon 2020.
- **Conference of Italian rectors: guidelines on Gender Budgeting to be adopted by Italian Universities**, 4th July 2018, Rome. Participant: UNRIC. Proposal about the adoption of Gender Budgeting at the Italian University, as part of the criteria to assess their performances.

*In the case of some partners, work and attendance at scientific events based exclusively on gender topics is not taken into account in the individual evaluation mechanisms of the research, unless it is coherent with the research topics defined for the "scientific disciplinary sector" where the researcher has been recruited.

NEXT EVENTS



- **IEEE Women in Engineering International Leadership Summit 2018 (WIE ILS)**, 10th Aug-2018, Tunis.
- **ICCGFR 2018: 20th International Conference on Culture of Gender and Feminist Research** 13rd Aug-2018. Bergen, Norway.
- **10th European Conference on Gender Equality in Higher Education and Research 2018**. 20th/22th Aug-2018, Dublin.
- **Platform of women of research and innovation**, 27th September - 2018, Prague.
- **INWES-APNN International Network of women engineers and scientists, Asia and Pacific Nation Network**, 18th Oct-2018, Hanoi.
- **STEM Gender equality congress 2018**, 11st Nov-2018, Amsterdam.
- **CGSH 2018: 20th International Conference on Gender, Sex and Healthcare**, 14th Nov-2018, Venice.
- **The Week of Science and Technology**, Nov-2018, Prague.
- **WFEO-World Federation of Engineering Organizations. Women in Engineering SC**, 22nd -23rd- 2018, London.
- **5th National Conference on Gender and Science**, 31st Dec-2018, Prague.