STANDING COMMITTEE FOR GENDER EQUALITY IN SCIENCE



SECOND ANNUAL REPORT

2021-2022

https://gender-equality-in-science.org/

scges.genderequality@gmail.com

SCGES PARTNERS

International Astronomical Union* (IAU)

International Council for Industrial and Applied Mathematics* (ICIAM)

International Mathematical Union* (IMU)

International Union of Biological Sciences* (IUBS)

International Union of History and Philosophy of Science and Technology* (IUHPST)

International Union of Pure and Applied Chemistry* (IUPAC)

International Union of Pure and Applied Physics* (IUPAP)

Association for Computing Machinery* (ACM)

GenderInSITE* (GIS)

International Union of Geological Sciences (IUGS)

International Union for Physical and Engineering Sciences in Medicine (IUPESM)

International Geographical Union (IGU)

International Union of Psychological Science (IUPsyS)

International Union of Biochemistry and Molecular Biology (IUBMB)

International Union of Soil Sciences (IUSS)

International Federation of Societies for Microscopy (IFSM)

International Union of Crystallography (IUCr)

International Union of Immunological Societies (IUIS)

Scientific Committee on Antarctic Research (SCAR)

International Union for Quaternary Research (INQUA)

International Union of Materials Research Societies (IUMRS)

^{*} Founding partner

EXECUTIVE SUMMARY

The Standing Committee for Gender Equality in Science (SCGES) is an independent committee formed in 2020 by nine international scientific organizations, most of which are full members of the <u>International Science Council</u> (ISC). These founding partners had worked together on the ISC supported project <u>A Global Approach to the Gender Gap in Mathematical, Computing, and Natural Sciences: How to Measure It, How to Reduce It?</u>, which became known as the "Gender Gap in Science Project". At the time of this report, SCGES has 21 partners, 19 of which are ISC International Union Members. They represent scientists around the world, brought together across disciplines to promote gender equality in science.

The aim of SCGES is to ensure liaison amongst international scientific unions to foster gender equality and the implementation of <u>recommendations</u> of the "Gender Gap in Science Project", especially in the scientific communities that the scientific unions represent.

SCGES works to encourage and systematize the exchange of information on gender equality and women in science amongst scientific unions. The present report, compiled after the Committee's first year of existence, is evidence of its current and future work on this endeavor. It contains brief reports from the 21 partners of SCGES, all of which have a stated commitment to gender equality. Exchanging information on all related issues and making them visible is a major motivation for the partners who work together in SCGES.

In 2022, SCGES has started a series of webinars in which relevant topics are discussed: the situation of women in various scientific disciplines around the world, the work towards gender equality, the results of research on women and gender, and more broadly on intersectionality in disciplines where such research is carried out.

SCGES membership among international scientific unions has more than doubled in two years. One of our priorities is to further increase the number of partner unions.

https://gender-equality-in-science.org/

Contact: scges.genderequality@gmail.com

CONTENTS

Introduction, by Catherine Jami, SCGES chair	1
SCGES Webinar Series	3
Reports from SCGES Partners	
International Astronomical Union (IAU)	5
International Council for Industrial and Applied Mathematics (ICIAM)	7
International Mathematical Union (IMU)	9
International Union of Biological Sciences (IUBS)	11
International Union of History and Philosophy of Science and Technology (IUHPST)	13
International Union of Pure and Applied Chemistry (IUPAC)	15
International Union of Pure and Applied Physics (IUPAP)	17
Association for Computing Machinery (ACM)	19
GenderInSITE* (GIS)	21
International Union of Geological Sciences (IUGS)	23
International Union for Physical and Engineering Sciences in Medicine (IUPESM)	25
International Geographical Union (IGU)	27
International Union of Psychological Science (IUPsyS)	29
International Union of Biochemistry and Molecular Biology (IUBMB)	30
International Union of Soil Sciences (IUSS)	32
International Federation of Societies for Microscopy (IFSM)	34
International Union of Crystallography (IUCr)	35
International Union of Immunological Societies (IUIS)	37
Scientific Committee on Antarctic Research (SCAR)	39
International Union for Quaternary Research (INQUA)	41
International Union of Materials Research Societies (IUMRS)	42

INTRODUCTION

What is SCGES?

From 2017 to 2019, a number of international organizations, most of them scientific unions that are members of the International Science Council (ISC), took part in the project A Global Approach to the Gender Gap in Mathematical, Computing, and Natural Sciences: How to Measure It, How to Reduce It? (hereafter "Gender Gap in Science Project", supported by ICSU and then ISC). After this project was successfully completed, there was a shared wish among these organizations to continue to act together to further promote gender equality in science by continuing and enlarging the work accomplished by this project, and in particular by supporting women's and girls' equal access to science education and fostering equal opportunity and treatment for females in their careers. For this purpose, in September 2020, nine of these organizations set up the Standing Committee for Gender Equality in Science (SCGES).

The Partners

The nine founding partners of SCGES were IAU, ICIAM, IMU, IUBS, IUHPST, IUPAC, IUPAP, ACM, and GenderInSITE. Over the two years since the first meeting of SCGES in September 2020, these partners have been joined by twelve scientific unions that are all members of ISC: IGU, IUBMB, IUGS, IUPESM, IUPSyS, IUSS, IFSM, IUCr, IUIS, SCAR, INQUA, and IUMRS.

As the following reports, compiled by the 21 partners of SCGES, show, their situation regarding the promotion of gender equality varies greatly. Some, like IAU and IUPAP, have long had working groups for women in their discipline. Others, like IGU and IUHPST, have encouraged the development of research on women and gender in their respective disciplines. Others yet, like IMU and ACM, have dedicated budgets to support women scientists worldwide. In some others, the accession of women to the post of President represents an opportunity to institute lasting policies in favor of gender equality. Several of them have issued anti-harassment codes of conduct. Exchanging information on all these and making them visible is a major motivation for partners to work together in SCGES.

The contributions by the representatives of SCGES partners that have been compiled in the present report provide detailed information on their situation and on the actions that they have each undertaken as regards gender equality in the scientific discipline they represent.

Aims

One of the main aims of SCGES is to ensure a liaison among international scientific unions so as to foster the implementation in each of them of best practices that facilitate gender equality within these unions. In particular, SCGES's task is to encourage each of its partners to implement the recommendations of the Gender Gap in Science Project report, and to, in turn, encourage the implementation of best practices for gender equality in the scientific communities they bring together and represent.

While SCGES intends to actively cooperate with policy makers and international organizations, first and foremost ISC, for the promotion of gender equality in science, its specificity is that it brings together scientists across disciplines as main actors of this promotion.

How We Work

Each partner of SCGES appoints a representative and a deputy representative. All of us get together in a plenary meeting twice a year. During these meetings we exchange information on the actions taken by each partner and discuss the activity of SCGES.

Between these plenary meetings, officers of SCGES meet every other month to monitor the progress of current affairs and to work on proposals for further actions to be taken by SCGES.

Each year, SCGES fixes a contribution (usually between 250 and 300 euros) to be paid by each partner to fund the running of SCGES's website and its presence in the media.

Accomplishments and Priorities

SCGES works to encourage and systematize the exchange of information concerning actions in favor of gender equality in scientific unions.

Another major goal successfully pursued by SCGES during this year has been to extend the partnership to other ISC member unions. During the past year, the number of SCGES partners that are international scientific unions has gone up from 14 to 20.

This increase was achieved in part thanks to the SCGES's presence at the second ISC General Assembly. On 11 October 2021, SCGES partners held a session entitled "Gender Equality in Science: From a Project to a Permanent Network of Scientific Unions" at the ISC Members Forum which took place on the first day of that General Assembly.

The SCGES Webinar Series

In 2022, SCGES has started a series of webinars in which relevant topics are discussed: the situation of women in various scientific disciplines around the world, the work towards gender equality, the results of research on women and gender, and more broadly on intersectionality in disciplines where such research is carried out. The four webinars organized so far have attracted a good audience worldwide and continue to be viewed by hundreds of persons on the SCGES's YouTube channel.

Taking part in IYBSSD

SCGES supports the <u>International Year of Basic Science for Sustainable Development</u>. Accordingly, our webinars for the duration of IYBSSD are part of its events.

Looking Ahead

SCGES will continue its webinars, and intends to continue its cooperation with ISC to promote gender equality in international scientific unions and in other scientific institutions.

SCGES will support the 2023 Global Women Breakfast (GWB), scheduled for February 14, 2023. GWB is an initiative of IUPAC. Its 2023 edition will include groups from all scientific disciplines as part of IYBSSD. Further, SCGES looks forward to bringing together scientists from all disciplines to cooperate on fostering gender equality in their communities at the local, national, regional, and international levels.

Catherine Jami Chair, Standing Committee for Gender Equality in Science

SCGES Webinar Series

What is the series?

The SCGES Webinar Series is a series of events organized by Partner Institutions and coordinated by the Standing Committee for Gender Equality in Science. It highlights various topics of interest around the focus tasks of the Committee, and each event is hosted by one or two of the member institutions. The webinars are streamed to the YouTube platform where anyone with internet connectivity can access. All webinars are recorded, and recordings are available on the SCGES YouTube channel, https://www.youtube.com/channel/UC25VqRgj6KrDpw4neB7QaJQ. The initiative was launched in 2022 and has had four events so far with two more planned by the end of the year.

Webinar 1, Feb. 16, 2022, "Gender Equality in Mathematics"

In this Webinar, representatives of the International Mathematical Union (IMU) and the International Council of Industrial and Applied Mathematics (ICIAM) presented:

- Results of the Gender Gap in Science project about mathematics and applied mathematics
 - o Chair: Marie-Francoise Roy
 - o Speaker: Colette Guillopé
- 50 years of activities of the AWM and its efforts and success to reduce the gender gap
 - o Chair: Carol Woodward
 - o Panelists: Linda Rothschild (Emeritus UCSD), Cathay Kessel (ret.), Kathryn Leonard (Occidental College)

The recording is available at: https://www.youtube.com/watch?v=RgjI83H9By4&t=7s. As of Sept. 15, this recording has had 863 views.

Webinar 2, March 24, 2022, "Inclusion and Participation of Women in Global Science Organizations"

In this webinar, the results of a collaborative study conducted by GenderInSITE, the InterAcademy Partnership (IAP) and the International Science Council (ISC) were presented. Global surveys of science academies that are members of the IAP and the ISC, as well as international disciplinary unions and associations that are members of the ISC, show that women remain underrepresented in global science.

Speakers included Roseanne Diab, Emeritus Professor at the University of KwaZulu-Natal, South Africa and Director of GenderInSITE, and Vivi Stavrou, Executive Secretary for the Committee for Freedom and Responsibility in Science and Senior Science Officer at the ISC. The event was moderated by Alice Abreu, Professor Emerita, Federal University of Rio de Janeiro, Brazil.

The recording is available at: https://www.youtube.com/watch?v=MEr4qiEa1iQ.

As of Sept. 15, this recording has had 533 views.

Webinar 3, June 13, 2022, "Toward Gender Equality in Science: Perspectives from Psychology"

This webinar, organized by members of IUPsyS, presented examples from psychology in relation to gender equality. The purpose was to provide examples of data from psychological science that address issues of global significance and data to improve our social world. The webinar was chaired and introduced by Professor Pam Maras who set out the context of gender in relation to the discipline

of psychology, in particular outlining the global context. Two main speakers then provided examples from two different perspectives. First, Professor Vindhya Undurti from India, provided a presentation on Gender equality in psychology taking an intersectional feminist perspective and focusing on South Asia. Professor Isabelle Régner from France then discussed the influence of gender stereotypes on cognitive performances and hiring decisions including in academia. The webinar ended with an opportunity to take questions.

The recording is available at: https://www.youtube.com/watch?v=_n-tnKnhD4o&t=2s. As of Sept. 15, this recording has had 801 views.

Webinar 4, June 29, 2022, "Quotas for women in science: Are they an effective step towards equality and/or equity?"

In this webinar, organized by IUBS, four speakers presented the issue of quotas in the sciences from differing perspectives then participated in a moderated discussion.

The Chairs/moderators were: Michele Garfinkel, Head of EMBO Policy Programme and Annelies Pierrot-Bults, Member of the IUBS Committee on Gender Equality and board member of The University Women of Europe.

Speakers included:

- Marguerite Evans-Galea, Director of the STEM Careers Strategy with the Australian Academy of Technology and Engineering and co-founder and CEO of Women in STEM Australia
- Renee Borges, Indian Academy of Sciences, "Gender in STEM streams in India"
- Gerlind Wallon, Deputy Director EMBO, EMBO Women in Science, "Exploring quotas in academia"
- Silvia González Pérez, Vice-chancellor of Research, Universidad Técnica Particular de Loja, Ecuador, "Why is there gender equity at UTPL?"

The recording is available at: https://www.youtube.com/watch?v=I0qKgaT-zJU. As of Sept. 15, this recording has had 376 views.

International Astronomical Union (IAU)

https://www.iau.org

Representative and deputy representative

Currently, the Chair and Co-chair of the IAU Women in Astronomy Working Group (WiA WG) are the representatives for SCGES. As of August 2022, the Chair and Vice-chair of WiA WG are respectively Mamta Pommier and Priya Hasan.

Relationship between the SCGES representatives and the officers of the union

The representative and co-representative are not officers of the IAU. However, the WiA WG is an Executive Committee of IAU and there is a representative of the Executive Committee on the organizing committee of the WiA WG.

Webpages dedicated to gender equality or women in science

The WiA WG has a dedicated website:

(https://www.iau.org/science/scientific bodies/working groups/122/womeninastronomy/)

as part of the IAU web presence, as well as a page describing the structure of the working group and Organizing committee membership within IAU:

(https://www.iau.org/science/scientific bodies/working groups/122/).

An additional page https://sites.google.com/view/iau-women-in-astronomy/home was also set up.

Existence of a structure for gender equality or women in science inside the union

The Women in Astronomy Working Group (WiA WG), formed in 2003, is the main structure for gender equity within the union. Additional affinity groups that have tangential concern for gender equity issues related to women and intersectional identities include the Working Group on Astronomy for Equity and Inclusion formed in 2012. Other offices within the IAU also address gender equity concerns as part of their overall mission, including the Office of Astronomy for Development, the Office for Young Astronomers and the Office of Astronomy for Education.

Existence of a budget for gender equality or women in science activities

There is no dedicated budget for gender equity or women in astronomy activities. We are exploring means of generating funds to support diverse research activities and careers of Women in Astronomy worldwide.

Existence of explicit policies for gender equality

The IAU has a number of policies that exist to improve gender equity. These include:

- A Code of Conduct, that includes anti-harassment language at all IAU events;
- Reviews and monitoring of gender equity with respect to (invited) speakers in proposals for IAU symposia;
- A new Junior membership category to improve the gender balance across the membership since the percentage of women in astronomy ages 30-40 is higher (30%) than in the membership generally.

In Strategic Plan 2020-2030:

• Future plans for searchable keywords for members in the IAU directory (entered on a voluntary basis) that allow for gender equity when searching for experts on particular topics.

Activities to promote gender equality or women in science inside the union

The IAU has a number of activities to promote gender equity. These include:

- Monitoring of the percentages of female IAU members by member country;
- Promotion and monitoring of gender equity across leadership positions;
- Explicit endorsement by WiA WG to support symposia that address issues of gender equity;
- Sessions at General Assembly meetings dedicated to discussions around topics of gender equity and equity across gender intersectional concerns;
- Women in Astronomy Lunches at the General Assembly meetings;
- Educational activities that promote women and girls to participate in astronomy both as a career and as a passion;

In Strategic Plan 2020-2030

- Future plans include the possibility of training sessions at International Schools for Young Astronomers, (ISYAs), and IAU events;
- The IAU Office of Astronomy for Development (OAD), established in 2011, has a goal to positively affect gender equity, and other UN Strategic Development Goals (SDG), through OAD projects on all of the populated continents.

Research activity about gender equality or women in science

The WiA WG did a very detailed statistical analysis of women in IAU Membership as well as conducted a survey of 750 participants from all over the world to study the issues, work-life balance and details of women astronomers which was published in Women in Astronomy *Ensemble* Magazine issue 1- December 2021.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The Women in Astronomy Working Group organized sessions on Interviewing Scientists, Career Challenges faced by Women, Mentoring Sessions and Enterprising Women, recordings of which are available on our website and YouTube page.

We have also been working in collaboration with the WGs of the IAU, the IAO and the Women and Girls in Astronomy Project.

At the IAU General Assembly, held in Busan, Korea in August 2022, we had 5 sessions on Women in Astronomy coupled with a WiA lunch which were informal discussions between men and women on relevant issues.

Specific initiatives related to gender equality or women in science in Covid times

We had three Training Programs for Women (5 days, 2 hours each).

Other relevant information

Details are available on our websites.

International Council for Industrial and Applied Mathematics (ICIAM)

https://iciam.org

Representative and deputy representative

Representative: Carol Woodward; Deputy Representative: GuiYing Yan.

Relationship between the SCGES representatives and the officers of the union

The ICIAM Representative and Deputy Representative are members of two societies included in the ICIAM. They are not nor have been officers of the union. They report to the officers via email correspondence.

Webpages dedicated to gender equality or women in science

ICIAM has two relevant web pages. One focuses on ICIAMS's activities in support of gender equality (https://iciam.org/iciam-activities-support-gender-equality) and includes information on the first SCGES webinar, the Gender Gap in Science Project, and the SCGES statement on Covid-19 as well as recent news articles on the topic of gender equality. The goal is to grow the content of this page to reflect activities of member societies in support of gender equality. In addition, ICIAM has a page about the Standing Committee on Gender Equality in Science (https://iciam.org/standing-committee-gender-equality-science-scges) that describes the standing committee and its activities.

Existence of a structure for gender equality or women in science inside the union

ICIAM has no explicit structures to promote gender equality.

Existence of a budget for gender equality or women in science activities

There is no explicit budget for gender equality activities in ICIAM.

Existence of explicit policies for gender equality

ICIAM holds a large Congress every four years as its main scientific venue. ICIAM's Bylaws state that the Scientific Program Committee and invited speakers be "balanced with respect to geography, discipline, and gender" (see the file, "ICIAM Bylaws (11 May 2013)" at the bottom of this page https://iciam.org/iciam-bylaws).

ICIAM has created a canvassing committee for its prizes to "identify qualified candidates, representing ICIAM's diversity (gender, background and geography), for the five ICIAM prizes and encourage their nominations in response to the call from the subcommittees" (see "Rules for ICIAM Prizes" and "Canvassing Committee for the 2023 ICIAM Prizes" files at the bottom of this page: https://iciam.org/iciam-prizes).

Activities to promote gender equality or women in science inside the union

In recent years, one third of the ICIAM Officers (executive committee) have been women.

ICIAM actively participated in creating the Standing Committee for Gender Equality in Science and has also had several newsletter articles on the activities of the Gender Gap in Science project, the formation of the SCGES, and the activities of the SCGES.

In addition, ICIAM was one of the two co-organizers of the inaugural session of the SCGES webinar series. That session was on "Gender Equality in Mathematics." The webinar featured a presentation on the results of the <u>Gender Gap in Science project</u> specific to Mathematics and Applied Mathematics

as well as a panel session focused on the challenges facing women in mathematics and how the Association for Women in Mathematics has supported women in facing those challenges in the past and currently. The link to the recording can be found here. To date, this webinar has had over 850 views on YouTube.

SCGES Deputy Representative, GuiYing Yan, submitted an article in the journal "Mathematical Advances in Translation" with a translation into Chinese of the IMU and ICIAM input to the SCGES first annual report as well as some introductory material on the SCGES.

Research activity about gender equality or women in science

ICIAM is currently co-funding a study (with IMU) on the results of the Global Survey run during the Gender Gap project, specifically for Mathematics and Applied Mathematics. A statistical analysis of all answers has been completed, and two articles are in preparation to disseminate the results.

ICIAM supported the Gender Gap Project and will occasionally support research projects. All such projects must be approved by the Board because ICIAM does not have a research budget.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

A message was sent to all our members (more than 50 learned societies across the globe) explaining the results of the project with links pointing to results of the three tasks. Member societies were asked to distribute the news among their membership (about 70,000-80,000 persons in total). In the message, we emphasized the importance of implementing the recommendations.

A prior message was sent to all our member societies with links to the book and booklet of the Gender Gap in Science Project.

Specific initiatives related to gender equality or women in science in Covid times

ICIAM officers approved the SCGES statement on "Standing for Gender Equality in Science in Times of Covid-19" produced by the SCGES. The statement has been linked from the ICIAM website on activities in support of gender equality in science.

The ICIAM newsletter included an article about the video, "Words of women in mathematics in the time of Corona" available for screening at https://www.wpi-aimr.tohoku.ac.jp/WWMTC/. This video collects words of some 86 women in mathematics from 37 countries telling us about their experience in the time of Corona in 25 different languages. This project emanates from a group of mathematicians: Sonia Mahmoudi (Tohoku U., Japan), Claudia Malvenuto (U. di Roma La Sapienza, Italy), Sylvie Paycha (U. Potsdam, Germany) and Eriko Shinkawa (Tohoku U., Japan) after informal conversations about their experiences during the pandemic. The article is available at https://iciam.org/news/21/6/16/words-women-mathematics-time-corona.

International Mathematical Union (IMU)

https://www.mathunion.org/

Representative and deputy representative

Representative: Marie-Françoise Roy; Deputy Representative: Carolina Araujo

Relationship between the SCGES representatives and the officers of the union

The representative Marie-Francoise Roy and deputy representative Carolina Araujo are chair and vice-chair of the Committee for Women in Mathematics (CWM) of the IMU and are not IMU officers. CWM is chosen by the EC and its members are not elected by the IMU General Assembly. There is an Executive Committee representative serving as liaison between CWM and the EC. This person is currently Carlos Kenig, IMU president. The connection is excellent.

Webpages dedicated to gender equality or women in science

CWM, similarly to all the committees and commissions of IMU, has a specific section on the IMU website https://www.mathunion.org/cwm. The IMU archivist is working every week on the CWM website.

Existence of a structure for gender equality or women in science inside the union

CWM was created in 2015 and has been renewed in 2018. It has 10 members (currently 8 women and 2 men) from all over the world. Moreover CoD, an ad hoc Committee on Diversity, was created by IMU in August 2020. One of its members was proposed by CWM.

Existence of a budget for gender equality or women in science activities

CWM has a budget (20 K euros per year). This budget makes it possible to support various initiatives for women in mathematics mainly in developing countries and to partly support the World Meeting for Women in Mathematics (WM)² which is taking place every four year since 2018 as a satellite event of the International Congress of Mathematicians (ICM).

The second (WM)² was held in hybrid mode on July 1-2 2022 and was part of the UN International Year of Basic Sciences for Sustainable Development (IYBSSD) program. More than 1000 people registered from more than 100 countries. The program featured, on July 1, a virtual session with four plenary lectures by distinguished female mathematicians: Maryna Viazovska, Natalia Maslova, Mina Aganagic and Eugenia Malinnikova. This session was followed by a lively virtual panel discussion "Girls and Mathematics: reflections and initiatives", dedicated to the memory of Yulia Zdanovska.

The program of (WM)² 2022 on July 2 was devoted to the Olga Alexandrovna Ladyzhenskaya (OAL) Celebration, in a live joint session organized by (WM)² and the Probability and Mathematical Physics conference in Helsinki. The OAL celebration started with the world premiere of Ekaterina Eremenko's film about OAL and her influence and continued with the awarding the OAL Prize: Presentation of the Prize by Ingrid Daubechies, former IMU president, Announcement of the Prize Winner, Svetlana Jitomirskaya, Laudatio by Artur Avila and Lecture by the Prize Winner. The (WM)² has been recorded and can be seen on (WM)² YouTube channel. More details here https://2022.worldwomeninmaths.org/.

Existence of explicit policies for gender equality

IMU was an active founding member of SCGES and contributed to defining its objectives. SCGES MoU can be considered as an explicit policy of IMU in the domain.

The importance of unconscious bias is outlined by IMU in the page https://www.mathunion.org/imu-awards/imu-awards-prizes-and-special-lecture. This text was

written independently of CWM and was never approved by a vote but appears in a good place on IMU website.

The following text was voted at the last IMU GA in 2022. "The Union adheres to the International Science Council's principle of embodying the free and responsible practice of science, freedom of movement, association, expression and communication for scientists, as well as equitable opportunities for access to science, its production and benefits, access to data, information and research material; and actively upholds this principle, by opposing any discrimination on the basis of such factors as ethnic origin, religion, citizenship, language, political or other opinion, gender, gender identity and sexual orientation, disability or age."

Activities to promote gender equality or women in science inside the union

There is an effort towards gender balance in the choice of lecturers at meetings organized directly by IMU or in IMU panels. The result is, for example, an increase of the proportion of the invited lecturers at ICM, which was above 20% in ICM 2022, while the proportion of women among authors of mathematical papers is about 30%, but the number of papers authored by women in top math journals remains under 10%.

Regarding IMU awards, one of the four Fields Medal awarded at ICM 2022 went to Maryna Viazovska. Another relevant example is the International Day of Mathematics (on March 14) where the gender balance is systematically reached in the activities.

In terms of IMU officers, one of the two vice-presidents has been a woman for several terms already, while Ingrid Daubechies has been the only woman IMU president. The newly elected EC reaches a reasonable gender balance with 4 women, out of a total of 10, the two vice-presidents Ulrike Tillmann and Tatiana Toro and the members at large Nalini Joshi and Tamar Ziegler.

Research activity about gender equality or women in science

Research activity about gender equality or women in science does not seem to be pertinent to our discipline, except of course for research on the history of mathematics.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

IMU was co-leading the project with IUPAC and is the publisher of the book reporting on the project. After the official end of the project, IMU launched an internship in common with ICIAM to study in more details the results in mathematics and applied mathematics, and in Africa. The database of good practices to reduce the gender gap in science is hosted by the IMU website and developed by members of IMU. Several virtual meetings were organized by CWM for its so called 150 CWM ambassadors, in Europe, Africa, Asia-Oceania and in Americas, as well as a global meeting, and they contained systematically a presentation of the results of the Gender Gap in Science project and its recommendations. However, the recommendations of the Gender Gap in Science project are not systematically implemented by IMU. For example, the recommendation "Add 18 months per child to all age-limits in scientific awards for people having taken care of children." is not currently followed by IMU and the age limit of the Fields medal for example (40 years) does not take into account maternity leaves or child care.

Specific initiatives related to gender equality or women in science in Covid times

There is a specific webpage on CWM website with testimonies and a bibliography. CWM also financially supported the film "Words of Women in Mathematics in the Time of Corona".

International Union of Biological Sciences (IUBS)

http://www.iubs.org

Representative and deputy representative

Representative: Guy Smagghe; deputy representatives: Nathalie Fomproix and Sarita Maree

Relationship between the SCGES representatives and the officers of the union

Sarita Maree and Guy Smagghe are both members of the IUBS Executive Committee. Nathalie Fomproix is the Executive Director of IUBS. They are all in close contact with the officers of the Union.

Webpages dedicated to gender equality or women in science

The IUBS website has one page dedicated to gender equality in science:

(http://www.iubs.org/iubs-activities/new-initiatives/gender-equality-in-science.html)

This page links to 3 activities on gender equality:

- 1) the Standing Committee on Gender Equality in Science
- 2) the IUBS Working Group on Gender Equality
- 3) the former project: "A Global Approach to the Gender Gap in Mathematical, Computing, and Natural Sciences: How to Measure it, how to Reduce it?".

Existence of a structure for gender equality or women in science inside the union

An IUBS working Group on Gender Equality in Science has been established in 2019 after a resolution approved at the General Assembly. The members of this group are:

John Buckeridge, former IUBS President,

Nathalie Fomproix, IUBS Executive Director,

Sarita Maree, IUBS Executive Committee Member

Annelies Pierrot-Bults, former IUBS Treasurer,

Guy Smagghe, IUBS Executive Committee Member, IUBS representative and vice-chair of the SCGES,

Lucilla Spini, bio-anthropologist.

Existence of a budget for gender equality or women in science activities

The IUBS budget dedicated to gender equality is divided in 2 parts: first the annual contribution to the SCGES, then a budget for the working group to organize meetings, conferences and webinars.

Existence of explicit policies for gender equality

IUBS has a policy regarding the grants awarded by our Union: conferences sponsored by IUBS must have women in the organizing/scientific committees. There should be gender balance in the list of invited speakers.

The conferences awarded with a young scientists grant should invite an equal number of male and female young scientists.

Chairs of IUBS scientific programmes/new initiatives are asked to nominate male and female experts in any steering committee that they establish.

The IUBS Nominations Committee should actively promote the nomination of women for IUBS executive positions through National/Ordinary and Scientific member bodies.

Activities to promote gender equality or women in science inside the union

The IUBS sponsoring of IUBS scientific programmes, conference, young scientists grants is subjected to an active involvement of women in these activities (see above). IUBS organized 2 webinars on gender equality.

IUBS organized the webinar "The Gender Gaps and the Biological Sciences" on 25 November 2021 in conjunction with the ICZ.

Speakers: Renuka Badhe (EPB, Netherlands), Lucilla Spini (UNIFI, Italy), Catherine Jami (CNRS, France), Hayley Clements (CST, South Africa) and Sarita Maree, (UP, South Africa)

Moderators: John Buckeridge (RMIT, Australia) and Lucilla Spini (UNIFI, Italy) see https://www.youtube.com/watch?v=nT_ukm7f-YI.

IUBS organized the webinar "Quotas for women in science: are they an effective step towards equality/equity?" in the framework of the SCGES webinar series on 29 June 2022.

Speakers: Marguerite Evans-Galea (Director STEM Careers strategy, Australia), Renee Borges (Indian Academy of Sciences, India), Gerlind Wallon (Deputy Director EMBO, Germany) and Sivia Gonzalez Perez, UTPL Vice-chancellor of Research, Ecuador)

Moderators: Annelies Pierrot-Bults (IUBS, UWE, The Netherlands, Michele Garfinkel (Head of Policy Programme, EMBO, Germany), see https://youtu.be/I0qKgaT-zJU.

IUBS sponsored the "GEM 2022: Empower Girls to Embrace their digital and Entrepreneurial Potential" organized from 11 to 15 July 2022 by University of Jaén (Spain). GEM Summer Campus framed in the GEM initiative is a European Union co-funded pilot project.

Research activity about gender equality or women in science

There is no research activity about gender equality or women in science in IUBS.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The report as well as the activities of the project are available on IUBS website. During the IUBS session at the International Congress of Zoology, 22-24 November 2021, the project was presented by Igle Gledhill. The project was mentioned during the welcome address given by Nathalie Fomproix on the opening of "GEM 2022: Empower Girls to Embrace their digital and Entrepreneurial Potential" organized from 11 to 15 July 2022 by the University of Jaén (Spain).

Specific initiatives related to gender equality or women in science in Covid times

The SCGES statement was published on the IUBS website.

International Union of History and Philosophy of Science and Technology (IUHPST)

http://iuhpst.org

Representative and deputy representative

Representative: Catherine Jami; Deputy Representative: Hanne Andersen.

Relationship between the SCGES representatives and the officers of the union

IUHPST consists of two divisions: DHST (history of science and technology) and DLMPST (logic, methodology and philosophy of science and technology). Catherine Jami is past Secretary General of DHST (2013-2021), and Hanne Andersen is a member of the DLMPST Council.

Webpages dedicated to gender equality or women in science

Website of the DHST Commission on Women and Gender in Science: https://agnodike.org/. The DHST website has a link to the SCGES website on its homepage.

Existence of a structure for gender equality or women in science inside the union

DHST has a Commission on Women and Gender in Science, and a Gender and Diversity Champion. IUHPST is in the process of changing its statutes to have a Gender and Diversity Champion.

Existence of a budget for gender equality or women in science activities

DHST gives a yearly grant of up to USD1500 to its Commission on Women and Gender in Science. In turn this Commission grants Agnodike Travel Research Fellowships (<u>five fellowships allocated</u> for 2022-2023).

Existence of explicit policies for gender equality

DHST has adopted a Respectful Behavior Policy, and is working on further improving it. The statutes of DHST have been amended to include the promotion of gender balance among its aims. The DLMPST Council has approved the changes to IUHPST Statutes to create the office of Gender and Diversity Champion at the union level approved by DHST in 2021. DLMPST will vote on this change in 2023.

Activities to promote gender equality or women in science inside the union

None

Research activity about gender equality or women in science

The Commission on Women and Gender in Science brings together scholars who do research on the topic. Two meetings were held during the past year:

- A workshop entitled 'Gender, Sciences, Knowledge: (For) committed research' was held in Nantes, 8-9 March 2022.
- A symposium entitled 'Boundings and Unboundings in the Sciences: Gender, Experimentation, and Authority', with 11 papers presented, was held at the ESHS Conference (Brussels, 7-10 September 2022).

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

None

Specific initiatives related to gender equality or women in science in Covid times None

International Union of Pure and Applied Chemistry (IUPAC)

https://iupac.org

Representative and deputy representative

Representative: Mei-Hung Chiu; deputy representative: Mark Cesa

Relationship between the SCGES representatives and the officers of the union

Representative: Mei-Hung Chiu, Elected member of Bureau and Executive Committee, IUPAC Deputy Representative: Mark Cesa, Former President of IUPAC, member of IUPAC Committee on Ethics, Diversity, Equity and Inclusion, Treasurer of SCGES.

IUPAC was one of the founders of the SCGES and currently is a member of ISC.

Webpages dedicated to gender equality or women in science

Please see the website at https://iupac.org/gwb/ IUPAC Distinguished Women in Chemistry or Chemical Engineering for IUPAC Global Women's Breakfast.

Please see the website at https://iupac.org/what-we-do/awards/iupac-distinguished-women; Committee on Ethics, Diversity, Equity and Inclusion, https://iupac.org/body/060/.

Existence of a structure for gender equality or women in science inside the union

IUPAC Council approved the Composition and Terms of Reference of the Committee on Ethics, Diversity, Equity and Inclusion, CEDEI, during the 51st IUPAC Council Meeting on 14th August 2021.

Existence of a budget for gender equality or women in science activities

Budget for sponsoring Global Women's Breakfast event project.

A budget for CEDEI will be included in the 2022-2023 biennium budget.

The Gender Gap in Chemistry-Building on the ISC-funded Gender Gap in Science project.

Distinguished Women in Chemistry and Chemical Engineering award.

Existence of explicit policies for gender equality

IUPAC's CEDEI has drafted a statement of policy and tasks for the committee, which will be reviewed at the next Bureau/EC meeting in November 2022.

Activities to promote gender equality or women in science inside the union

Organizing a SCGES Webinar on gender gap in chemistry on 26 Oct, 2022.

The next IUPAC Global Women's Breakfast will be held on 14 February, 2023. To celebrate IYBSSD, the women scientists from other scientific disciplines are also invited to join the event. 2022 UPAC Distinguished Women in Chemistry or Chemical Engineering, biennial awards.

Research activity about gender equality or women in science

Submission of a manuscript on the global survey of gender gap to a journal. Analyzing the data on good practices in chemistry. Analyzing publication patterns.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

See: https://iupac.org/diversity-and-inclusion/. IUPAC has endorsed the SCGES position statement, 'Standing for Gender Equality in Science in times of Covid-19.'

Specific initiatives related to gender equality or women in science in Covid times See: https://iupac.org/diversity-and-inclusion/

International Union of Pure and Applied Physics (IUPAP)

https://iupap.org

Representative and deputy representative:

Representative: Dr Gillian Butcher; deputy representative: Dr Rudzani Nemutudi

Relationship between the SCGES representatives and the officers of the union

Both are on IUPAP's Executive Council, as Vice President at Large: Gender Champion and Associate Secretary General.

Webpages dedicated to gender equality or women in science

The IUPAP website contains the webpage <u>Diversity in Physics</u>, which gives an overview of the need for diversity in science, along with some of the activities of IUPAP in fostering diversity. The link is under the Strategic Plan on the main tabs.

Further pages on specific activities that are linked from here are:

- <u>Waterloo Charter for Gender Inclusion and Diversity in Physics</u>: sets out guiding principles for gender diversity and inclusion, with recommended policies.
- Gender Champion Reports: the reports that review the IUPAP's own statistics on gender
- WG5: Women in Physics : summary pages of the Working Group
- <u>Gender Gap in Science Project</u>: contains summary information on the project, and links to the Gender Gap Project pages

Existence of a structure for gender equality or women in science inside the union

Two main structures exist within IUPAP for gender equality.

The Working Group for Women in Physics, WG5, was created in 1999 to survey the situation and report back, and to suggest means to improve the situation for women in physics. WG5 reports back annually to the Executive Council and Commission Chair meetings of IUPAP and the General Assembly. WG5 consists of members representing broad geographic regions, some of whom work with regional women in physics groups. WG5 has a global system of Country Teams, each with a Leader; at present 84 are listed, more than the number of members of IUPAP. These teams deliver papers on progress in their country at approximately 3-year intervals at the IUPAP International Conference on Women in Physics ICWIP, at which the WG5 members function as the International Organising Committee.

The role of Vice-President at Large with Gender Champion responsibilities was created in 2011 to ensure that IUPAP as an organisation is inclusive and diverse. The Gender Champion monitors and reports on gender representation within all IUPAP structures, including its Commissions, and at IUPAP-Sponsored conferences.

Existence of a budget for gender equality or women in science activities

The WG receives an annual budget of 2 500 Euros, mostly to cover member expenses to attend WG meetings, in line with other IUPAP working groups. WG5 also receives funding of 15 000 Euros to distribute travel (technology) grants to women from developing countries, to attend conferences. The WG is also awarded 17 000 Euros for its International Conference on Women in Physics held every three years.

Existence of explicit policies for gender equality

New Statutes, By-Laws and Articles were voted in at the October 2021 GA. These specifically include "fostering inclusiveness and diversity in physics" amongst the Union's purposes. The new Articles

include the requirement that amongst the Executive Council Officers (President, President Designate and Immediate Past President) that at least one will be a woman and at least one will be a man, and likewise for the Commission Officers (Chair, Vice Chair and Secretary). The Commission membership has the requirement that at least 4 out of the 12 members must be women: currently it is over 40%.

There are specific requirements for IUPAP sponsored conferences, without which they will not receive funding. The conference organisers must report on the gender balance of plenary/invited speakers, speakers, delegates, organising committee(s). The organisers must also put their statement on harassment (Code of Conduct) on the conference webpages and appoint people responsible for dealing with claims of harassment.

WG5 explicitly includes men in initiatives to foster gender equality. The WG includes at least one man, and a Country Team attending ICWIP must have at least one man if the size of the team exceeds 4 people.

Activities to promote gender equality or women in science inside the union

IUPAP's Executive Council has played a major role in vigorously campaigning for women within the Union. Through both authority and influence, these members of leadership are changing the face of IUPAP. The current President-Elect is a woman who has been a leader of gender equality nationally and internationally. At its Centenary Symposium in July 2022, there was a session devoted to gender equity and diversity more broadly.

IUPAP does not have individual members but territorial members, who are represented by delegates during GAs, and through appointed national liaisons outside GAs. In some countries, WG5 Country Teams are well integrated with physical societies and liaisons. In others, fostering gender equity through national liaison members is a challenge. The Waterloo Charter aims to promote gender equity to members.

Research activity about gender equality or women in science

Nothing further at this time.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The President Elect and Gender Champion wrote an article on Gender Equity in STEM for *Le Scienze*, the Italian version of *Scientific American*, in which results from the Gender Gap project were included. The Gender Champion also highlighted the work in presentations to the Swiss Physical Society Annual Conference.

ICWIP21 had a plenary session on the Gender Gap project, with the results for countries with high and low Human Development Index discussed at a workshop which focussed on Women in Physics in Developing Countries. Summaries of the plenary and workshop will appear in the Proceedings, which are in preparation and will be published by the American Institute of Physics.

Specific initiatives related to gender equality or women in science in Covid times

IUPAP released a statement on the gendered impact of COVID-19 and included articles on it in its newsletter. It contacted its conference organizers with the request that conference fees be reduced for those financially impacted, as articulated in the SCGES statement.

The IUPAP Conference on Women in Physics was virtual, and specific efforts were made to enable women from developing countries to attend through grants for Wi-Fi equipment, data, screens and devices.

Association for Computing Machinery (ACM)

https://www.acm.org

Representative and deputy representative

Representative: Ruth Lennon; deputy representative: Jodi Tims.

Relationship between the SCGES representatives and the officers of the union

Ruth Lennon, ACM-W Chair; Jodi Tims, ACM-W Past Chair.

Webpages dedicated to gender equality or women in science

Web site for ACM-W and its various projects: https://women.acm.org.

Existence of a structure for gender equality or women in science inside the union

ACM-W is a committee of ACM's Diversity & Inclusion Council, which reports to the general ACM Council.

ACM-W is comprised of an executive leadership board (10 members) and has several committees that drive its programmatic work – Professional Chapters Committee, Student Chapters Committee, Regional Committees (ACM-W Europe, ACM-W China, ACM-W North America, ACM-W India, ACM-W Asia Pacific), Scholarships Committee, and Rising Star Award Committee.

Existence of a budget for gender equality or women in science activities

ACM-W operates with a budget of USD 230,000, the majority of which is granted by ACM and the remainder from corporate philanthropic funds.

Existence of explicit policies for gender equality

ACM has an approved code of ethics and professional conduct (https://www.acm.org/code-of-ethics) that includes statements on non-discrimination. These statements are not limited to women, but intended to establish expectation of equitable and respectful behavior as related to all computing professionals. There is also a process defined if an ACM/ACM-W member experiences a violation of these expected policies in conjunction with ACM/ACM-W activities.

Activities to promote gender equality or women in science inside the union

ACM-W is a mature women-in-computing organization that operates on a global level. Regional committees drive much of the work of the organization within geographic regions. This work includes establishing/supporting student and professional chapters and running Celebration conferences to highlight the work of women in computing. Our Scholarships Program grants travel grants to women who wish to attend technical conferences with strong connections to computing/computer science, awarding approximately USD 35,000 annually to undergraduate and graduate students. Two years ago ACM-W received an endowment to establish the Rising Star Award, which is given to a woman within the first ten years of her career who has made a significant accomplishment to the advancement of computing. Regional committees also run various projects within their committees, but these vary from region to region. Most recently, ACM-W launched a webinar series, Celebrating Technology Leaders (further described below).

ACM-W also participates with several partner organizations via boards/councils (e.g., SCGES, NCWIT, CRA-WP, AnitaB.org, IE-WIRE) and is frequently contacted by governmental bodies,

international journals, other publications, and other service organizations to contribute expertise, content and sponsorship for their various efforts.

Research activity about gender equality or women in science

ACM-W does not directly drive research activity. However, ACM-W frequently partners with other organizations or individuals as co-investigators on research projects. The ACM-W also works with the ACM-TPC on related policy research and activities.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

ACM-W continues to reference the Gender Gap in Science book in member communications and in multiple articles that have been published by Jodi Tims and Reyyan Ayfer (e.g., the requested article in the upcoming issue of PAC, an editorial in *Communications of the ACM*, ACM-W's newsletter).

We are currently in the process of redesigning our website which will include a new section where we will highlight all of our partnership activities. Within that site, both the Gender Gap project and SCGES will be represented with appropriate links to associated websites.

Specific initiatives related to gender equality or women in science in Covid times

ACM-W was successful in continuing many of its major projects during the COVID pandemic to ensure women in computing could still experience the support of the organization. While many of our regional Celebration events were canceled in the very early days of the pandemic, the last academic year saw many events pivot to a virtual format and, in many cases, had record attendance.

ACM-W also runs a webinar series, Celebrating Technology Leaders (https://women.acm.org/celebrating-technology-leaders/) which commenced in August of 2019. Each webinar features women in the computing industry and is conducted as a panel discussion. The purpose of the series is to highlight the wealth of expertise amongst women in technology. Webinars are recorded and made available as a resource for those unable to participate during the live event, including our student chapters that can use them as material within their regular chapter meetings. These webinars continue beyond the pandemic.

In Europe the ACM-W Europe continued to host their flagship event An ACM Celebration of Women in Computing: womENcourageTM. The celebrations were run virtually which enabled a greater number of women to participate. Changes to the structure of the event were made to accommodate the online nature of the event. In India, the Grad Cohort was also hosted online to support students emerging from academia into employment. These are simply examples of the regional events which continued to occur, albeit in a modified manner, throughout the year.

Other relevant information

Jodi Tims has moved to deputy representative whilst Ruth Lennon has moved to representative for SCGES leadership for ongoing participation of ACM-W in this effort.

GenderInSITE (GIS)

https://genderinsite.net

Representative and deputy representative

Representative: Roseanne Diab; deputy representative: Alice Abreu

Relationship between the SCGES representatives and the officers of the union

Roseanne Diab is the Director of GenderInSITE and Alice Abreu is a member of the GenderInSITE (GIS) Steering Committee.

Webpages dedicated to gender equality or women in science

The entire website is dedicated to women in science given the nature of GenderInSITE. It includes sections giving an overview of GIS, a description of thematic areas covered by GIS, a section on resources which provides access to all published reports, and a news section.

The two regional focal points of GIS also have separate websites.

Africa regional focal point: https://genderinsite-africa.org

Latin America and Caribbean regional focal point: http://www.catunescomujer.org/gisalc/
The latter is a Spanish language website that is widely utilized for gender-related resources.

Existence of a structure for gender equality or women in science inside the union

No specific structure as GenderInSITE is an initiative to promote gender equality.

Existence of a budget for gender equality or women in science activities

GenderInSITE has had no core funding for this year.

Existence of explicit policies for gender equality

The vision, mission and 5-year strategic plan for GenderInSITE explicitly outline the role of GenderInSITE in gender equality.

Activities to promote gender equality or women in science inside the union

GenderInSITE works to influence its external partners, such as TWAS, IAP and ISC, as well as many others, to promote gender equality.

Research activity about gender equality or women in science

GIS advocates for the application of a gender lens to science, innovation, technology and engineering policies, particularly those related to development.

In September 2021, published two research reports

- "Gender Equality in Science: Inclusion and Participation of Women in Global Science Organizations: Results of Two Global Surveys"
 (GenderEqualityInScience TwoGlobalSurveys.pdf (genderinsite.net)
- "Gender Equality in Science: Inclusion and Participation of Women in Global Science Organizations: Concise Version" (GenderEqualityInScience ConciseVersion.pdf; genderinsite.net)

The results of this study will be presented at the IAP General Assembly in November 2022.

Currently undertaking research on "Eliminating Barriers to Women's Participation in Science: A Study of the African Research Universities Alliance, in collaboration with the Academy of Science of South Africa (ASSAf)

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The report was placed on our website.

Specific initiatives related to gender equality or women in science in Covid times None.

International Union of Geological Sciences (IUGS)

https://www.iugs.org/

Representative and deputy representative

Representative: Silvia Peppoloni; deputy representative: John Ludden.

Relationship between the SCGES representatives and the officers of the Union

The representative and deputy representative are officers of the IUGS.

Webpage dedicated to gender equality

A specific page of the IUGS website (https://www.iugs.org/scges) is dedicated to gender equality and to the MoU that IUGS signed with the Standing Committee on Gender Equality in Science (SCGES).

Existence of a structure for gender equality or women in science inside the union

During the 77th IUGS EC meeting in Paris, the IUGS EC decided to create a Task Group (TGDEI: https://www.iugs.org/taskgroups) that deals with problems related to diversity, equity, and inclusion within the IUGS scientific community. The purpose of the task group is to bring the IUGS constituent groups (commissions, subcommissions, task groups, initiatives) to a reasonable balance of their members with regard to issues such as gender, geographical provenance, discipline, career stage, etc.

Existence of a budget for gender equality or women in science activities

As the creation of the TGDEI is very recent, a budget to support its activities has not yet been allocated. However, considering the importance of the activities the TGDEI is developing, in the next IUGS EC meetings the possibility to support it with a dedicated budget will be discussed. The IUGS contributes to SCGES's activities with an annual amount of 250 Euros.

Existence of explicit policies for gender equality

The IUGS is working to develop initiatives and activities to promote gender equality in its community, starting from the analysis of the current situation within the IUGS constituent groups. The current presence of women in the IUGS commissions, boards, and task groups was investigated. Based on what emerged, the TGDEI is working to carry out strategies to guarantee gender balance in each group, and to develop guidelines and recommendations to ensure that women are well represented and hold positions of officers in the different IUGS bodies.

Activities to promote gender equality or women in science inside the union

On the occasion of the UN International Day of Women and Girls in Science Day (11st February 2022) and the International Women's Day (8th March), the IUGS has carried out and published on its website a set of video-interviews to inspiring women in geosciences from around the world, experts in different fields of geosciences, and at different career stages. This initiative has been very successful, especially among early career geoscientists (https://iugs60.org/iugs-women-ingeoscience-event/).

An important initiative of the IUGS to sensitize geoscience community on the gender equality issue has been the invitation of Marie-Françoise Roy, emerita professor and one of the leading experts on the issue of gender equality in science field, to give a speech for suggesting policies to be adopted and the most useful tools (web addresses, booklets, etc.) to guide the activities of the IUGS aimed at addressing the gender issue. Her participation in the 77th IUGS EC meeting in Paris, has been very successful, for the importance of the issues raised in the discussion and the fruitful hints, information and advice received by the IUGS officers. For this reason, the IUGS is considering repeating this

experience, involving representatives of other scientific organizations from time to time, for a useful sharing of ideas and discussion.

Research activity about gender equality or women in science

The IUGS intends to carry out activities about gender equality, in particular focused on how integrating gender dimension in research content improves quality of results and outcomes in geosciences. To this end, the gender diversity existing in the IUGS constituent groups has been already analyzed through a survey conducted by the IUGS Secretariat, based on the list of official participants in all IUGS constituent groups. In particular, the full gender analysis was conducted both by country and by constituent groups. Starting from these results, the task group is working to identify barriers and obstacles, to suggest strategies to be adopted, to share information and experiences on those issues with other scientific organizations, with the aim of progressively filling the gaps and eliminating the gender unbalances existing within the groups.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The IUGS shares communications relevant to gender equality in science among its members and networks, by using all means at its disposal, including social network accounts, website, newsletter. Moreover, the IUGS shares projects and initiatives with the goal of gender equality, led by affiliated organizations. In particular, the IUGS has a close cooperation with the IAPG - International Association for Promoting Geoethics (https://www.geoethics.org). The IAPG develops basic and applied research on ethical and social issues that affect the scientific community, promoting values such as inclusiveness, equity and respect for the dignity of people in the world of geosciences. Among the several activities, the IAPG is carrying out the "Zero tolerance towards Harassment and Discrimination" initiative, which is aimed at sensitizing the geoscientific community to the problems of harassment and discrimination against women, as well as to promote equal opportunities for access to roles and offices for women geoscientists.

Specific initiatives related to gender equality or women in science in Covid times

In times of pandemics, due to the limited or absent possibilities of events in presence, remote initiatives and activities were promoted. Among them, the aforementioned celebrations of the UN International Day of Women and Girls in Science and the International Women's Day. In any case, even in online events not specifically focused on gender equality, the IUGS gave wide space to the female presence, inviting numerous women in geosciences to deliver lectures on different themes (ranging from geo-resources to geological risks, from conservation of geological heritage to hydrogeology and geoethics), showing how important the contribution of women in geosciences is to address the global challenges of our times and to explore new pathways towards achieving a more sustainable planet (https://www.iugs.org/iugs60).

International Union for Physical and Engineering Sciences in Medicine (IUPESM)

https://2018.iupesm.org

Representative and deputy representative

Representative: Lenka Lhotska; deputy representative: Loredana Marcu

Relationship between the SCGES representatives and the officers of the union

Both the representative and the deputy representative are officers of the union.

Webpages dedicated to gender equality or women in science

https://2018.iupesm.org/wimpbme/

Existence of a structure for gender equality or women in science inside the union

Women in Medical Physics and Biomedical Engineering committee (WiMPBME)

Existence of a budget for gender equality or women in science activities

The budget is limited to an amount that would usually cover travel/accommodation expenses for an invited speaker to our congresses.

Existence of explicit policies for gender equality

None.

Activities to promote gender equality or women in science inside the union

- Increase the visibility and participation of women within IFMBE (International Federation of Medical and Biological Engineering) and IOMP (International Organisation for Medical Physics). Both organizations have the committees: Women in Biomedical Engineering Committee (WiMBE) and Women in Medical Physics Committee (WiMP).
- Very tight cooperation of WiMPBME with WiMBE and WiMP.
- Gather and disseminate information regarding the status of women in IFMBE and IOMP
- Acknowledge research success of female members
- Develop mentoring programs for young women and/or women from developing countries.
- Conduct research into the status of women in IOMP and IFMBE.
- Conduct surveys to gather information on the needs / challenges that women in science are facing; disseminate the results and take action accordingly.
- Promote women keynote / invited speakers at our international congresses.

Research activity about gender equality or women in science

In June 2022, the World Congress in Medical Physics and Biomedical Engineering (Singapore; https://wc2022.org/) took place; it is organized every three years to gather scientists throughout the world. Within this congress, WiMPBME has organized three special symposia dedicated to the topic of gender equity in STEM fields, followed by round tables and discussions. The following special session were successfully organized:

- (1) The impact of COVID pandemic on gender-related home office in STEM fields.
- (2) Leadership and collaboration in medical physics and biomedical engineering women leaders,
- (3) Grant writing and publishing in today's competitive world.

These sessions offered a great opportunity to various STEM professionals to share their research. All sessions attracted a large audience and increased interest in the work of the WiMPBME. As a consequence, all three committees (WiMPBME, WiMBE and WiMP) welcome new members,

mostly from countries not being represented before. All three committees organized their meetings during the World Congress.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

Our committee is active in publishing research data and survey results conducted within WiMPBME. Below are some recently published articles:

- (1) E Bezak, K Karson-Chahoud, LG Marcu, M Stoeva, L Lhotska, G Barabino, F Ibrahim, S Lim, E Kaldoudi, AM Marques da Silva, P Tan, V Tsapaki, M Frize. *The biggest challenges resulting from CoVID-19 pandemic on gender-related work from home in biomedical fields World-wide qualitative survey analysis.* Int J Environmental Res & Public Health 19(5):3109 (2022)
- (2) M Frize, V Tsapaki, L Lhotska, AM Marques da Silva, F Ibrahim, E Bezak, M Stoeva, G Barabino, S Lim, E Kaldoudi, P Tan, LG Marcu. *Women in Medical Physics and Biomedical Engineering: past, present and future.* Health & Technology (2022)

Furthermore, a number of publications on gender equity written by members of our organization can be found at: https://2018.iupesm.org/wimpbm-articles/.

Specific initiatives related to gender equality or women in science in Covid times

A survey was conducted among women in STEM (medical physics and biomedical engineering) during Covid-19 regarding remote working to assess and gender inequalities and gender-related challenges that were encountered during the lockdown. The quantitative results have already been published last year (see 2021 report) while part of the qualitative data was published this year (see above article nr. 1), and further processing and analysis is currently undergoing to be disseminated in the near future.

International Geographical Union (IGU)

https://igu-online.org

Representative and deputy representative

Representative: Céline Rozenblat; deputy representative: Unspecified.

Relationship between the SCGES representatives and the officers of the union

The representative and deputy representative are both vice-presidents of the union.

Webpages dedicated to gender equality or women in science

The union does not have a website specifically devoted to gender equality in science.

Existence of a structure for gender equality or women in science inside the union

The union is structured by commissions and task forces. One of the IGU 43 Thematic Commissions is called C20.11 Gender and Geography: Care, Connection and Change Chaired by Dr. Anindita Datta, Department of Geography, Delhi School of Economics, University of Delhi, Delhi, India and has the *overall mission* "to create a comfortable platform for people to exchange ideas concerning feminist and gender studies in geography; present and discuss new research on these issues; and create collaborations in research and other academic work among students and scholars working on these themes". Overall, "the Commission on Gender and Geography of the International Geographical Union is an active group with 750 members from 53 different countries in all parts of the world. The Commission has an active program in many countries, organizing one or two meetings each year and expanding its intellectual network through academic publications, newsletters and the website".

It can therefore be said that the acquisition of gender equality in science is also among its objectives. In the general website of the Union there is a link to the website of the Gender and Geography Commission, https://igugender.wixsite.com/igugender.

Existence of a budget for gender equality or women in science activities

Like all Commissions active within IGU, the Gender and Geography Commission receives an annual funding of USD 1,500.

Existence of explicit policies for gender equality

Beyond the focused activities of the Commission on Gender and Geography, the entire articulation of IGU is aimed at the achievement of gender equality in the sciences. Therefore, in the constitution of the executive board, there is a strict parity in the gender balance: 4 women and 4 men are vice-president. The president is a man (Michael Meadows), and the new first Vice-President is a woman (Nathalie Lemarchand). In the constitution of the board of each commission it is required that there is a gender parity. The support for young scholars is also taking a specific attention to support women equally to men, but also all fluidity gender and LGBTQ+. It also aims to achieve gender parity within its own structure as well. Therefore, it can be considered that in this way it also contributes to the pursuit of gender equality in social and physical sciences, since Geography is in between the two fields.

Research activity about gender equality or women in science

Geographical research can enhance the visibility of gender equality issues; specifically, it may make clear, on the one hand, how the world is still profoundly marked by gender inequalities and how, of the individuals who can be defined as poor at the global level, the vast majority are likely to be women. Since the empowerment of women has a key role to play in sustainable development, and

the Union has among its goals the pursuit of the UN Sustainable Development Goals (SDGs), geographical research cannot avoid considering gender issues.

In this perspective, it is quite clear that integrating gender dimension in research content improves quality of results and outcomes, The importance of gender to understanding space and place is quite clear; moreover, feminist geographers are interested in social justice; their work aims at recognizing how gender intersects with identity categories such as age, class, race, and sexuality. The union has a general focus on gender issues and gender equality within all social sectors.

The collection of bibliographical information related to geographical production on COVID is underway; many of these researches also refer to gender issues and how gender has impacted researchers in different ways, also in relation to their gender.

Specific initiatives related to gender equality or women in science in Covid times

The Gender and Geography Commission established in 2016 the YES! The Gender and Geography Commission's Young and Early Career Scholars. For its dynamic activities, the commission was first to receive in 2013 the award for the best IGU commission.

They remain very active, specifically in our Extraordinary International Geographical Congress that took place in Paris in late July 2022 where they organized 6 sessions.

- Urban care platforms and intersectional equalities, Sybille Bauriedl, Karin Schwiter & Anke Strüver
- Looking Back to Look Ahead-An Agenda for Gender and Feminist Geographies, Anindita Datta
 & Marianne Blidon
- Navigating Gender, Race, and Class in the Rise of Rural Populism, Ann M. Oberhauser
- Right to the city: creative explorations of safety and gender across material, relational and spiritual dimensions, Elena Vacchelli & Tanja Bastia
- Theorizing Feminist Urban Comparative Research: The GenUrb project I, Linda Peake
- Feminist pedagogy and geographical education in a time of crises, Kamalini Ramdas & Menusha De Silva

This Paris event was also the opportunity to celebrate the Tricenary Sessions Celebrating 30 years of the IGU Gender Commission with a specific roundtable:

Tricenary Roundtable on Feminist Praxis from Global South, Araby Smyth.

International Union of Psychological Science (IUPsyS)

https://www.iupsys.net

Representative and deputy representative

Representative: Pam Maras; deputy representative: Ava D. Thompson.

Relationship between the SCGES representatives and the officers of the union

Professor Pam Maras – Past President and officer from July 2022 (formally President) Dr Ava Thompson – Secretary General from July 2022.

Webpages dedicated to gender equality or women in science

None specifically. IUPsyS subscribes to and adheres to the ISC statement on circulation of scientists https://www.iupsys.net/events/congress/free-circulation-of-scientists.html including opposing 'discrimination based on such factors as ethnic origin, religion, citizenship, language, political or other opinion, sex, gender identity, sexual orientation, disability, or age.' Our statement above though informs all activity. IUPsyS website is being reconstructed (it has been held over pandemic years and the new site will have this.

Existence of a structure for gender equality or women in science inside the union

Our statement below informs all activity.

Existence of a budget for gender equality or women in science activities

None specifically – budgeting in IUPsyS is for specific activity and all activity must conform to equality statement above.

Existence of explicit policies for gender equality

None specifically –all activity must conform to equality statement above.

Research activity about gender equality or women in science

The Union as such does not conduct research. Examples of research in the discipline were given in our SCGES webinar session (https://www.youtube.com/watch?v= n-tnKnhD4o&t=241s).

Significant research and publications in psychology focus on gender and other protected (in most countries) characteristics.

Our Main Journal's (*International Journal of Psychology*) Editor in Chief is female as is one of the associate editors.

We are reviewing our editorial board and will take account of gender.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

All material for the project disseminated widely to our National Members, Regional Members and Affiliates (over 2 million psychologists).

Specific initiatives related to gender equality or women in science in Covid times

None specifically

Other relevant information

Three of four officers of IUPsyS are for the first-time female: Past President, Secretary General and Treasurer. Half of our Executive Committee are also female.

International Union of Biochemistry and Molecular Biology (IUBMB)

https://iubmb.org

Representative and deputy representative

Representative: Alexandra Newton; deputy representative: Ilona Concha Grabinger.

Relationship between the SCGES representatives and the officers of the union

Alexandra Newton is President of IUBMB; Ilona Concha Grabinger serves on the Executive Committee of IUBMB as Member of Congresses and Focus Meetings.

Webpages dedicated to gender equality or women in science

See: https://iubmb.org/diversity-and-inclusion/.

As part of our mission, we are pleased to highlight our Student Ambassador Bri Bibel's blog page on Women in Science, where you can read about many of the influential scientists who shaped the molecular biosciences, https://thebumblingbiochemist.com/lets-talk-science/women-in-science/.

Existence of a structure for gender equality or women in science inside the union

IUBMB is committed to ensuring gender equity, diversity, and inclusion in all of its leadership, training, and education missions in the field of biochemistry and molecular biology.

Existence of a budget for gender equality or women in science activities

We do not have a specific budget but we aim for gender equality in all our committees, awards, and programs.

Existence of explicit policies for gender equality

We clearly indicate in all our activities that we aim for gender equity.

Activities to promote gender equality or women in science inside the union

We are strongly committed to gender equity in all our activities and all committees are told to ensure this.

Research activity about gender equality or women in science

We do not have a specific research activity; instead, we have gender equality as a de facto requirement for everything we do.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

We have been promoting the results via our social media and in the President's address in newsletters. For example, this in the December 2021 Newsletter:

"I am very pleased that the IUBMB leadership team demonstrates our strong commitment to gender equity and to geographical diversity. According to a report on Inclusion and Participation of Women in Global Science Organizations, the IUBMB is one of the International Science Council unions in the physical/natural sciences with the highest percentage of women on the leadership team (38% where the average is 24%). Furthermore, our newly reconstituted Nominating committee, Congresses

and Focused Meetings committee, Education and Training committee, and Fellowship committee are each composed of at least 50% women."

(See https://iubmb.org/wp-content/uploads/2021/12/IUBMB-Newsletter-Issue-12.pdf.)

Specific initiatives related to gender equality or women in science in Covid times

We have not instigated any special initiatives related to women in science in Covid, but continue to support women throughout the world with our activities.

International Union of Soil Sciences (IUSS)

https://www.iuss.org

Representative and deputy representative

Representative: Laura Bertha Reyes Sánchez; deputy representative: Lucia Anjos

Relationship between the SCGES representatives and the officers of the union

Laura Bertha Reyes Sánchez is the President of the IUSS. Lucia Anjos is President of the Brazilian Soil Science Society belonging to the IUSS.

Webpages dedicated to gender equality or women in science

IUSS Notice of Non-discrimination https://www.iuss.org/about-the-iuss/iuss-notice-of-non-discrimination/.

Existence of a structure for gender equality or women in science inside the union Does not exist.

Existence of a budget for gender equality or women in science activities

Yes, as of this year, the IUSS grants awarded had the same budget for men and women.

Existence of explicit policies for gender equality

For the IUSS, the gender gap is not the only one to overcome. IUSS worked on a diversity, equity, and inclusion policy that will be presented to the Council in August of this year for its approval.

Activities to promote gender equality or women in science inside the union

In addition to the diversity, equity, and inclusion policy, during our World Congress this year there is a specific session to discuss how to move forward in DEI.

Research activity about gender equality or women in science

- * Dawson, L. A.; Brevick, E. and Reyes-Sánchez L. B. 2021. International Gender Equity in Soil Science. Eur J Soil Sci. 2021;72:1929–1939. DOI:10.1111/ejss.13118.
- * Eric C. Brevik, Laura Bertha Reyes-Sánchez, and Lorna Dawson. 2021. A Look at International Gender Equity in Soil Science. Blog of the Global Soil Biodiversity Initiative. https://www.globalsoilbiodiversity.org/blog-beneath-our-feet/2021/8/1/a-look-at-international-gender-equity-in-soil-science
- * Reyes-Sánchez, L. B. and Irazoque-Reyes, A. 2022. Reevaluating diversity and the history of Women in soil science: a necessary step for a real change. Spanish Journal of Soil Science from Frontiers. In press.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

Different national societies belonging to the IUSS organized specific activities on the International Day of Women in Science.

Specific initiatives related to gender equality or women in science in Covid times None at this time.

International Federation of Societies for Microscopy (IFSM)

http://ifsm.info/index.html

(The website is currently being processed. It will be opened during October 2022. The address will then be provided.)

Representative and deputy representative

Representative: Virginie Serin; deputy representative: Eva Olsson

Relationship between the SCGES representatives and the officers of the union

Executive committee of IFSM: Virginie Serin, member, and Eva Olsson, General Secretary.

Webpages dedicated to gender equality or women in science

The new website will be opened in October 2022 and will contain this information. There will be a section dedicated to women in science.

Existence of a structure for gender equality or women in science inside the union

Up to now, no. However, this will be addressed and brought up in the agenda of the Executive Committee and actions IFSM activities will be implemented.

Existence of a budget for gender equality or women in science activities

Up to now, no. The need for a budget for the planned activities will be brought up in the Executive Committee.

Existence of explicit policies for gender equality

No

Activities to promote gender equality or women in science inside the union

The YSA, Young Scientists Assembly, was introduced for the first time at the International Microscopy Congress 19 (ICM19) held in Sydney, Australia, 2018 (https://microscopy.org.au/events/event-1/). The IMC congresses are major international congresses held every fourth year. Next meeting is to be held in Busan, Korea.

The YSA gathers 50 young scientists in their early career. They apply to participate. The YSA takes care to have gender equality in selecting the young scientists that are invited to attend and participate in the YSA. The program includes inspiring talks by plenary and invited speakers and also group discussions where the young scientists interact with the senior scientists (also chosen having gender balance in mind) and discuss important aspects of a scientific career.

Research activity about gender equality or women in science

The YSA, Young Scientists Assembly, addresses this question.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

No except being a member of SCGES. The membership promotes the work of addressing these questions.

Specific initiatives related to gender equality or women in science in Covid times

No, because most of our activities are during ICMs and other larger microscopy conferences, and with covid most of our meetings were cancelled these last 2 years.

International Union of Crystallography (IUCr)

https://www.iucr.org/

Representative and deputy representative

Representative: Professor Jennifer L. Martin, Australia; deputy representative: Professor Sven Lidin, Sweden

Relationship between the SCGES representatives and the officers of the union

Professor Martin is a member of the IUCr Executive Committee, and Professor Lidin is the IUCr Immediate Past President and a member of the IUCr Executive Committee.

Webpages dedicated to gender equality or women in science

https://www.iucr.org/iucr/governance/advisory-committees/gedchttps://www.iucr.org/iucr/principles-and-policies/code-of-conduct

Existence of a structure for gender equality or women in science inside the union

The IUCr Gender Equity and Diversity Committee (GEDC) was established in 2018 to advise the IUCr Executive Committee on issues relating to gender equity, diversity, and inclusion. (See: www.iucr.org/_data/assets/pdf_file/0020/142058/IUCr-Gender-Equity-Committee-TOR-20Nov2018.pdf.)

At the Prague 2021 IUCr Congress, the General Assembly formally approved the GEDC Gender Equity and Diversity Statement:

www.iucr.org/__data/assets/pdf_file/0007/147922/IUCr-Gender-Equity-and-Diversity-Statement.pdf.

Existence of a budget for gender equality or women in science activities

There is no specific IUCr budget for gender equality or women in science activities. The regional associations and all IUCr-supported conferences are required to have gender equality policies and to ensure conference speaker gender balance policies and procedures are in place.

Existence of explicit policies for gender equality

IUCr has a conference policy and a code of conduct policy which support gender equality. See: https://www.iucr.org/iucr/governance/advisory-committees/gedc.

Activities to promote gender equality or women in science inside the union

Gender equality is considered at decision points within the Executive Committee, e.g., appointment of journal editors and support of conferences. An IUCr conference toolkit for inclusivity was developed by the GEDC and is regularly updated,

www.iucr.org/ data/assets/pdf file/0007/154690/ToolkitConferenceInclusivity March2022.pdf.

Research activity about gender equality or women in science

Data collected since 2017 show that our discipline comprises about 1/3 women.

IUCr is looking to review its processes and provide more transparency in the gender and geography of its committees, prize winners, and nominees.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

The Gender Gap in Science Project and its recommendations will be raised at the next Executive Committee and GEDC meetings (to be held in Q3/4 2022). Our analysis suggests that we are already addressing most of the recommendations.

Specific initiatives related to gender equality or women in science in Covid times

No specific initiatives have been developed to address gender equality or women in science in COVID times.

International Union of Immunological Societies (IUIS)

https://iuis.org

Representative and deputy representative

Representative: Prof. Dr. Paola Castagnoli; deputy representative: Prof. Dr. Hannes Stockinger.

Relationship between the SCGES representatives and the officers of the union

The SCGES representatives are in person chairperson and deputy chairperson of the Gender and Equality Committee (GEC) of IUIS and act completely independent to the Executive Board of IUIS.

Webpages dedicated to gender equality or women in science

https://iuis.org/committees/gec/

Existence of a structure for gender equality or women in science inside the union

International Union of Immunological Societies (IUIS): Gender Equality Committee (GEC)

Existence of a budget for gender equality or women in science activities

Yes, there is an annual budget for GEC activities.

Existence of explicit policies for gender equality

Yes, there are explicit policies for gender activities.

Activities to promote gender equality or women in science inside the union

IUIS-GEC in collaboration with the Federation of Clinical Immunology Societies (FOCIS) has been co-sponsoring for many years women trainees from the developing world to attend the FOCIS annual Meeting.

IUIS-GEC is supporting 2 students each year to attend the Basic Immunology Course and Advanced Immunology Course of the American Association of Immunologists.

Research activity about gender equality or women in science

IUIS-GEC proudly established the "Menarini Prize for Outstanding Woman Immunologist" thanks to the forward-looking vision and generous support of the Menarini Group. The USD 40,000 prize will be awarded for the first time at the 18th International Congress of Immunology in Cape Town, South Africa in 2023 and at future IUIS congresses thereafter. This award is the first and only IUIS prize that specifically recognizes women immunologists and their outstanding research accomplishments.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

IUIS-GEC actively participated in programming of IUIS International Conferences of Immunology and all IUIS supported conferences and meetings to assure that gender equality is reflected in the scientific programme and to assure gender diversity among the invited speakers. IUIS-GEC also takes care about childcare support at immunological congresses and highlights successes of women immunologists by organizing gender equity symposia.

Specific initiatives related to gender equality or women in science in Covid times

Two grants have been awarded to applicants from developing countries to travel internationally to laboratories fighting COVID-19 to learn special techniques or use special instrumentations for their ongoing or soon to begin COVID-19 projects.

Scientific Committee on Antarctic Research (SCAR)

https://scar.org/

Representative and deputy representative

Representative: Dr Renuka Badhe; deputy representative: Dr Morgan Seag.

Relationship between the SCGES representatives and the officers of the union

The representative and deputy representative are not officers of the Scientific Committee on Antarctic Research (SCAR). However, both serve on the Leadership Steering Group of the newly formed SCAR Equality, Diversity and Inclusion Action Group (EDI AG). The EDI AG is tasked with broadly looking at how EDI issues can be effectively dealt with within SCAR (including issues related to gender inequity) and what practical actions are relevant for the organization.

Webpages dedicated to gender equality or women in science

Women in Antarctic Research: https://www.scar.org/antarctic-women/ SCAR's EDI AG: https://www.scar.org/capacity-building/edi/home/

Existence of a structure for gender equality or women in science inside the union

In 2021, SCAR established a Scoping Group on Equality, Diversity, and Inclusion, which laid the foundation for the EDI Action Group which was launched in early 2022. Gender inequality is among the issues on which the EDI AG focuses, including issues faced by women, non-binary people, and people with other marginalized gender identities. The EDI AG meets on a regular basis. SCAR also has actively supported events on gender equity through its Capacity Building, Education, & Training Advisory Group (e.g., SCAR Women in Antarctic Research Wikibomb) since 2016. Before 2016, SCAR supported other organisations that work to bring gender equity in polar research, such as Women in Polar Science (WiPS). SCAR continues to support and work with WiPS.

Existence of a budget for gender equality or women in science activities

SCAR has budgets for overall Capacity Building, Education and Training (CBET) activities (USD 3000 per year), and also dedicated budgets for the EDI AG (USD 10000 per year).

Existence of explicit policies for gender equality

SCAR does not have explicit policies for gender equality. However, the SCAR EDI Action Group is working on policy recommendations for overall EDI issues within SCAR, including gender equality. Work is ongoing around the establishment of a Code of Conduct.

Activities to promote gender equality or women in science inside the union

SCAR has actively supported activities on gender equality since 2012, starting with the formation of WiPS by R Badhe in 2014 during her employment at the SCAR Secretariat. Since 2016, the biannual SCAR Open Science Conference (OSC) has hosted activities that have promoted gender equality and initiated on broader EDI issues in the polar community.

At the 2022 OSC, a workshop and two parallel sessions were held under the theme "Inclusive Collaborations in Antarctic Research." These integrated and built upon dialogues that have been taking place in polar research through a variety of organisations and networks, as well as the first Inclusive Collaborations in Antarctic Research parallel session and workshop, which were held at the SCAR OSC in 2020. During the 2022 workshop, 16 global organisations presented their work on gender and EDI issues (all talks will be made available on the SCAR YouTube Channel). During the 2022 parallel sessions, 20+ abstracts (both oral and poster) were presented, representing both new

research and best practices related to EDI (including gender equality) from across the Antarctic research community. Similar sessions have been held in at least three past SCAR Open Science Conferences, since 2016.

SCAR strongly encourages the nomination of women (and a geographic spread of nominations) in its Fellowships, Medals, and other awards, and has worked to increase the representation of women among recipients: for example, by streamlining the nominations process for SCAR Medals, which in 2022 resulted in an increase in the percentage of women receiving SCAR Medals.

Research activity about gender equality or women in science

In early 2022, SCAR hired a consultant to analyze data related to SCAR funding and recognition schemes through an EDI (including gender) lens. Data was collated and analyzed in relation to SCAR Fellowships, the SCAR Visiting Scholars Scheme, and SCAR Medals. Initial data also was compiled related to SCAR's organizational structure, but analysis has not yet been undertaken. Completed data analysis will be shared with the research community by SCAR's EDI AG through a peer-reviewed publication.

Between 2021-22, a SCAR Fellow led an international collaboration focused on gender equality. This international collaboration will result in a peer-reviewed paper reviewing intersectional gender inequality in international Antarctic research (currently in development).

SCAR is hosting the #100PolarWomen project, which is managed by Women in Polar Science.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

There are no specific activities to disseminate the results of this project yet, but both representatives appreciate the value of such a project.

Specific initiatives related to gender equality or women in science in Covid times

SCAR is supporting a research program on the effects of COVID-19 on Antarctic research and researchers, the "Antarctic COVID-19 Project" (https://www.scar.org/science/hass/covid-project/info/). The project studied the impact of COVID-19 on Antarctic research and researchers, including considering implications of gender, and looked at the long-term implications of COVID-19 for Antarctic operations and governance.

International Union for Quaternary Research (INQUA)

inqua.org

Representative and deputy representative

Representative: Dr Lynne Quick; deputy representative: Prof. Dr. Thijs van Kolfschoten.

Relationship between the SCGES representatives and the officers of the union

Prof. Dr. Thijs van Kolfschoten is the President INQUA, and Dr Lynne Quick is a Vice President of INQUA.

Webpages dedicated to gender equality or women in science

INQUA currently has no specific / dedicated webpage to this. However, we do advertise our support of the SCGES on our website: https://inqua.org/about/supported-initiatives.

Existence of a structure for gender equality or women in science inside the union

INQUA has no explicit structures to promote gender equality. However, its Executive Council comprises a majority of female members, with the newest appointments to the council all being women scientists.

Existence of a budget for gender equality or women in science activities

There is no specific, individually ring-fenced budget for gender equality activities, however when evaluating which Quaternary Science projects and initiatives to support and/or fund, the Executive Council favours projects that promote and champion gender equality, together with diversity.

Existence of explicit policies for gender equality

INQUA currently has no specific policies related to gender equality.

Activities to promote gender equality or women in science inside the union

INQUA specifically revised its mission statement to include gender equality:

"Established in 1928, INQUA is the representative body for Quaternary science world-wide. INQUA is dedicated to removing barriers and to fostering diversity and inclusivity by prioritising funding for early career and developing country researchers to enable their participation in the international scientific networks that INQUA supports. INQUA promotes – and operates according to – a philosophy of inclusivity, not discriminating against any individual on the basis of race, colour, religion, gender, gender identity or expression, sexual orientation, genetics or disability."

Research activity about gender equality or women in science

INQUA prioritizes supporting, and advertising, Quaternary Science research initiatives and projects that promote inclusivity, diversity and those that address the gender gap.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

INQUA has not yet engaged in specific activities to disseminate this project.

Specific initiatives related to gender equality or women in science in Covid times No specific initiatives to report.

ivo specific initiatives to report.

International Union of Materials Research Societies (IUMRS)

https://iumrs-ho.org/

Representative and deputy representative

Representative: Professor Joanne Etheridge; deputy representative: Professor Byungha Shin.

Relationship between the SCGES representatives and the officers of the union

Professor Joanne Etheridge is President of the Australian Materials Research Society, an adhering body to the IUMRS. Professor Byungha Shin is Board Member of the Business Division of the Material Research Society of Korea, an adhering body to IUMRS. As such, both Prof. Etheridge and Prof Shin are also members of the General Assembly of IUMRS, the highest governing body of IUMRS. In addition, both Professor Etheridge and Professor Shin are members of the Gender Equity and Diversity Committee of the IUMRS.

Webpages dedicated to gender equality or women in science

The IUMRS has a webpage providing its Gender Equity and Diversity Code of Conduct at: https://iumrs-ho.org/gender-equity-and-diversity-code-of-conduct/.

Existence of a structure for gender equality or women in science inside the union

The IUMRS established a Gender Equity and Diversity Committee in 2021 comprising members of the General Assembly or their delegates, currently: Jim Williams (IUMRS Secretary), Madoka Takai (Japan), Leticia M. Torres Guerra (Mexico), Joanne Etheridge (Australia), Byungha Shin (Korea).

Existence of a budget for gender equality or women in science activities

There is currently no dedicated budget for gender equality activities in the IUMRS, other than for the membership of the SCGES.

Existence of explicit policies for gender equality

The IUMRS Gender Equity and Diversity Committee has developed a "Gender Equity and Diversity Code of Conduct" to cover the IUMRS members, committees, commissions, speakers, award recipients, and IUMRS-sponsored conference and event attendees. This is available on the IUMRS website.

Activities to promote gender equality or women in science inside the union

The IUMRS has not yet introduced any formal activities. This is under consideration by the Gender Equity and Diversity Committee, which was established last year.

Research activity about gender equality or women in science

There are currently no research activities about gender equality in IUMRS.

Specific activities to disseminate the results of the Gender Gap in Science Project and implement its recommendations

There are currently no specific activities. However, the IUMRS, more generally, is currently developing new mechanisms to communicate with its member societies and their membership. It is planned to use these new communication channels to inform the membership about this Project, send links to the booklet and highlight its recommendations and the need to implement them.

Specific initiatives related to gender equality or women in science in Covid times

There are currently no specific initiatives.



Standing Committee for Gender Equality in Science, 2022















INTERNATIONAL UNION OF PURF AND APPLIED CHEMISTRY































Report prepared by Catherine Jami and Carol Woodward, along with representatives from each member union