# STANDING COMMITTEE FOR GENDER EQUALITY IN SCIENCE



# THIRD ANNUAL REPORT

2022-2023

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

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# **SCGES PARTNERS**

Association for Computing Machinery\* (ACM)

International Astronomical Union\* (IAU)

International Council for Industrial and Applied Mathematics\* (ICIAM)

International Federation of Societies for Microscopy (IFSM)

International Geographical Union (IGU)

International Mathematical Union\* (IMU)

International Union for Quaternary Research (INQUA)

International Political Science Association (IPSA)

International Union of Biochemistry and Molecular Biology (IUBMB)

International Union of Biological Sciences\* (IUBS)

International Union of Crystallography (IUCr)

International Union of Geological Sciences (IUGS)

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

International Union of Immunological Societies (IUIS)

International Union of Materials Research Societies (IUMRS)

International Union of Pure and Applied Chemistry\* (IUPAC)

International Union of Pure and Applied Physics\* (IUPAP)

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

International Union of Psychological Science (IUPsyS)

International Union of Soil Sciences (IUSS)

Scientific Committee on Antarctic Research (SCAR)

International Speleological Union\*\* (UIS)

World Anthropological Union\*\* (WAU)

<sup>\*</sup> Founding partner

<sup>\*\*</sup> Partners that have just joined SCGES have not contributed to the present report.

### 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 23 partners, most 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, is evidence of its current work on this endeavor. It contains brief reports from 20 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 2023, SCGES has held its first in-person meeting in Paris, where its plans and strategies have been discussed intensively. It has also continued its <u>series of webinars</u> 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. Last but not least, it has undertaken to collect data relevant to gender balance among its partner organisations.

SCGES membership among international scientific unions has more than doubled in three years. One of our priorities is to further increase the number of partner unions, so as to join forces across disciplines to promote gender equality in science.

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## 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 ACM, IAU, ICIAM, IMU, IUBS, IUHPST, IUPAC, IUPAP, and the project <u>GenderInSITE</u> (2016-2021). Over the three years since the first meeting of SCGES in September 2020, these partners have been joined by fifteen international scientific unions that are all members of ISC: IFSM, IGU, INQUA, IPSA, IUBMB, IUCr, IUGS, IUIS, IUMRS, IUPESM, IUPSyS, IUSS, SCAR, UIS and WAU.

As the following reports, compiled by the 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 <u>recommendations</u> 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, webinar, 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 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 20 to 23.

On 13-14 February 2023, SCGES held its first in-person meeting in Paris, thanks to support from ISC. This enabled us to hold a webinar that formed part of the <u>Global Women's Breakfast</u>, and to carry out in depth discussions on our aims and strategy.

SCGES was also present at the <u>Mid-Term ISC Members Meeting</u> (Paris, 10-12 May 2023), where two of its members spoke at the panel on "Inclusion and Participation of Women in Science."

SCGES has undertaken to collect data relating to gender balance from its partners. The first results are presented at the end of this report report.

#### The SCGES Webinar Series

The webinar series started in 2022 is continuing. The five webinars organized in 2022-2023 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. We will continue to take part in the Global Women Breakfast (<u>GWB</u>), scheduled on February 27 for 2024. 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 nine events so far. This year's webinars are listed below.

# Webinar 5, Oct. 26, 2022, "Moving Ahead on Gender Equality: A Chemistry Perspective"

Abstract: The International Union of Pure and Applied Chemistry is the global organization that provides objective scientific expertise and develops the essential tools for the application and communication of chemical knowledge for the benefit of humankind and the world. In 2019 IUPAC entered its second century, providing an opportunity to launch initiatives to create a more diverse and inclusive community. This webinar offers an overview, some insights and progress on this journey, with a focus on gender issues. In this webinar, organized by IUPAC, three speakers presented the issue of quotas in the sciences from differing perspectives then participated in a moderated discussion.

The moderator was Mark Cesa (President of IUPAC 2014-2015). Presentations included:

- "Building A Global Network," Laura McConnell (Bayer Corp.)
- "Expanding the Role of Women in IUPAC," Mary Garson, (The University of Queensland, Australia)
- "Nurturing a more inclusive STEM Community," Mei-Hung Chiu, (National Taiwan Normal University)

The recording is available at: <a href="https://www.youtube.com/watch?v=pljlAJYuJyA&t=2830s">https://www.youtube.com/watch?v=pljlAJYuJyA&t=2830s</a> As of Oct. 24, this recording has had 379 views.

# Webinar 6, Dec. 16, 2022, "(In-)visibility of women in science: historical perspectives"

Abstract: Today the visibility of women in science is far from matching the numbers of women actually engaged in scientific work. This situation is the outcome of a long history: there were indeed women engaged in science in the past, and despite their historical invisibility, historians of science have developed strategies to make them visible. Moreover, the research strategies developed to study these women of science of the past provide inspiration for endeavors to increase the visibility of women of science of the present, and to increase the number of women in science in the future.

Organized by the International Union of History and Philosophy of Science (IUHPST).

The moderator was Catherine Jami (CNRS). Presentations included:

- "Tomorrow Began Yesterday: Why History Matters," Patricia Fara (University of Cambridge)
- "Navigating Gendered Barriers to Scientific Knowledge Through Spousal Cooperation: Mrs and Mr Mary Somerville," Brigitte Stenhouse (University of Toronto & The Open University)
- "Visibility of Women in Science, for an Anti-oppressive World," Indianara Lima Silva (State University of Feira de Santana)

The recording is available at:

 $\frac{https://www.youtube.com/watch?v=NI6IgK9bbgk\&list=PLJk0bSC4uh0XGIKOmEloNLeHvuZG~Gdm8\&index=6.$ 

As of Oct. 24, this recording has had 522 views.

# Webinar 7, Feb. 14, 2023, "How to Evaluate and Reduce the Gender Gap in Science?"

Abstract: The interdisciplinary and international Gender Gap in Science project ended in 2019. It is timely to reflect on its results, follow up, and outcomes and to learn about alternative approaches. This hybrid webinar was organized by the Standing Committee for Gender Equality in Science for the Global Women's Breakfast.

The webinar was moderated by Mei-Hung Chiu (National Taiwan Normal University), and presentations included:

- "The Gender Gap in Science Project and its Outcomes," Marie-Françoise Roy (Université Rennes)
- "What interventions for more women in science? Tools, knowledge and know-how for the creation and evaluation of public policies," Guillaume Hollard (Ecole Polytechnique)
- "The global survey of scientists: focus on Africa, Latin-America, Mathematics and Physics," Sophie Dabo (Université de Lille), Rachel Ivie (American Institute of Physics)
- "New results for the gender gap in publication patterns," Helena Mihaljevic (HTW Berlin)

The recording is available at:

https://www.youtube.com/watch?v=8gkN-

<u>UcSuJ0&list=PLJk0bSC4uh0XGIKOmEloNLeHvuZG\_Gdm8&index=7&t=17s</u>.

As of Oct. 24, this recording has had 468 views.

# Webinar 8, June 28, 2023, "Developing and Enacting Codes of Conduct in Professional Unions"

Abstract: More and more academic, research, and industrial institutions are enacting codes of conduct. These codes clarify an organization's mission, values, and principles and can serve as both internal guidelines and external statements of values and commitments. Several international unions have recently developed such codes of conduct, and many more are interested in doing so. This webinar will discuss the motivations, challenges, and successes for codes of conduct within professional unions. Speakers representing four unions who have recently enacted such codes will present their organizations' experiences followed by open discussion at the end of the session. This webinar was organized by the SCGES.

The webinar was moderated by Carol Woodward (ICIAM), and speakers included:

- Lenka Lhotska, International Union for Physical and Engineering Sciences in Medicine (IUPESM)
- Sven Lidin, International Union of Crystallography (IUCr)
- Gillian Butcher, International Union of Pure and Applied Physics (IUPAP)

#### The recording is available at:

 $\frac{https://www.youtube.com/watch?v=0sB\_xOJyMO0\&list=PLJk0bSC4uh0XGIKOmEloNLeHvuZG~Gdm8\&index=8\&t=2s.}{}$ 

As of Oct. 24, this recording has had 235 views.

# Webinar 9, July 20, 2023, "Gender equality and beyond in the polar sciences"

Abstract: Women's involvement in Antarctic science has grown in recent decades, with women now playing leading and influential roles in Antarctic research at all levels. Nonetheless, significant barriers to gender equality still exist. Recognizing this, as well as barriers faced by people of all historically excluded backgrounds, the Scientific Committee on Antarctic Research (SCAR) established an Equality, Diversity and Inclusion (EDI) Action Group (AG) in 2021. This webinar, organized by SCAR, provides insights into the barriers faced by women and other marginalized groups from four different perspectives within polar research. Afterwards the speakers and five more members from the SCAR EDI AG will be there for an open discussion.

#### Speakers:

- Pilvi Muschitiello, SCAR EDI Action Group and DiPSI, British Antarctic Survey: "Equity, Diversity and Inclusion in international organizations insights from SCAR"
- Angus Aldis, Accessibility in Polar Research: "Polar Challenges: Access Polar and the need for Disabled Inclusion and Representation in Polar Research"
- Kimberley Aiken, University of Tasmania: "Nurturing the I in Diversity"
- Anne Treasure, South African Polar Research Infrastructure: "Gender equality and beyond in the polar sciences A South African Perspective"

#### Panelists:

- Renuka Badhe, European Polar Board; Women in Polar Science
- Adriana Gulisano, Chief Officer SCAR EDI Action Group
- Morgan Seag, Leadership Steering Group Member, SCAR EDI AG
- Jilda Caccavo, Deputy Chief Officer SCAR EDI Action Group
- Inga Beck, SCAR

#### The recording is available at:

https://www.youtube.com/watch?v=TUk3CiU\_l2w&list=PLJk0bSC4uh0XGIKOmEloNLeHvuZG Gdm8&index=9

As of Oct. 24, this recording has had 652 views.

# COLLECTING DATA ON GENDER BALANCE IN PARTNER UNIONS

Following the in-person meeting held by SCGES in February 2023, it was decided that partner unions should systematically collect data so as to monitor the gender gap in each discipline. As a first step in that direction, representatives of partner unions were asked to answer a questionnaire on several ways in which gender balance can be measured. Questions concerned:

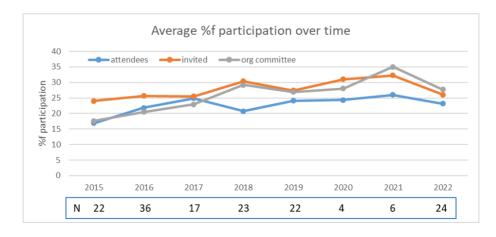
- 1. Congresses and conferences organized by or within unions: percentage of women among plenary speakers, organizing committees, and participants.
- 2. Prizes and awards: proportion of women among laureates.
- 3. Governance: proportion of women among officers, council members, and members of committees.
- 4. Journals: proportion of women among editors, associate editors and contributors.
- 5. Proportion of women in the discipline.

The answers have been systematically converted into percentages in the three tables below as a tool for comparison between unions, even when the figures given comprise only one or two digits.

## 1. Congresses and conferences

The answers from the 11 unions that have replied to this section of the questionnaire are summarized in Table 1 below. Although it is easy to count the percentage of women among plenary speakers and on organizing committees, the majority of unions do not know the gender balance among participants.

IUPAP's Gender Champions have been collecting data on gender balance in sponsored conferences since 2015; the results are summarized in the following graph and comments:



The graph displays the percentages of women participating in IUPAP sponsored conferences, where N is the number of conferences sponsored that year.

While this is an average, the data is also considered per conference and per Commission. There are some Commissions where the percentage of women participating is consistently high. The challenge is to improve the participation of women where it is consistently low.

Other unions do not all to compile statistics systematically. Whereas figures concerning plenary speakers and organizing committees can be gathered retrospectively, the percentage of women among participants in congresses and conferences sponsored by unions can only be known if they are collected when participants register.

 Table 1
 Gender Balance in Congresses and Conferences

	Year, Meeting(s)	Speakers		Organizing Committees	Participants
ICIAM	2019	Plenary: 7F/27	26% F	5F/20 25%	F
ICIAM	2023	Plenary: 9F/27	33% F	8F/22 36%	F
IGU	2022	8F/17	47% F	LOC: 11F/24 46% Co-chairing team: 1F/4 25%	
IMU	2022 Congress	Plenary: 5F/23	22% F	Programme Committee: 3F/12 25%	Percentage not known for Congress participants. GA delegates: 28% F
IUBMB	11 meetings and 1 Congress during last 5 years	Plenary: 45% to over 50%	F	Around 50%	45% to 50% F
IUBS	2023 General Assembly	Plenary: 3F/7	43% F		
IUCr	2023 Congress	Plenary: 1F/3 Keynote: 13F/29	33% F 45% F	18F/40 45%	F 550F/1578 34% F
	2019 Congress	Plenary: 2F/3 Invited: 10/22	67% F 45% F	LOC*: 5W/14 (male chair) 35% IPC*: 13 F/28 (female chair) 46%	
IUHPST	2021 Congress	Plenary: 3F/8	37% F	LOC: 8F/19 (male chair) IPC: 15F/31 (female chair;)	58.6% M; 3.69% PND** 37.77% F
	2023 Congress	Plenary: 2F/3 Invited: 9F/20	33% F 45% F	LOC: 7F/24 (female chair) 35% IPC: 11F/26 (female chair) 42%	
IUIS	2023	Plenary: 5F/10	50% F	3 F/10 30%	F 60% F
IUPAP	2022 Congress			International Organising Committe 213F/886 24%	
IUSS	2022 Congress				38 % M; 44% do not say 28% F
	2018 Congress	Plenary: 3F/8	37% F	3F/8 37% I	
SCAR	2020 Congress	Keynote: 3F/4	75% F	9F/12 75% I	45.5% M; 0.5% other; 1.5% PND**
*1001	2022 Congress	Keynote: 2F/2	100% F	10F/17 59% F	752 participants giving their gender: 58 % F 40 % M, 3 % others.

<sup>\*</sup> LOC: Local Organising Committee; IPC: International Programme Committee

#### 2. Prizes and awards

Similar to the situation with conferences and congresses, figures concerning prize and medal winners appear to have been compiled mostly in retrospect for the present survey; the results for the 11 unions who have replied are compiled in Table 2. This does not mean that the issue of gender balance was not taken into account when awarding the prizes. However, only three partner unions (ICIAM, IUBMB and SCAR) could provide the percentage of women among nominees. This data is certainly worth collecting systematically. Although it has not provided such data on its prizes and awards, IUPAP recommends that its Commissions should take steps to ensure diversity among the prize-winners; such steps include the collection of gendered statistics for nominations, short-lists and awards.<sup>1</sup>

<sup>\*\*</sup>PND: prefer not to disclose

<sup>&</sup>lt;sup>1</sup> https://iupap.org/awards/

Prizes and awards are seldom shared. Only IUHPST and SCAR reported that one of the several prizes they have awarded were shared (between a man and a woman for IUHPST, between two women for SCAR).

Only one union, IUIS, has a prize reserved for women, the IUIS-Menarini Prize for Outstanding Women in Immunology, which includes a cash prize of USD 40,000.

Table 2 Gender Balance in Prizes and Awards

	Year/Category	Num	ber of Awards	Nomin	nations
ICIAM	2022	1F/5	20% F		
ICIANI	2023	1F/6	17% F	16F/53	30% F
IGU	Planet and Humanity Medal (2021-2022)	1F/2	50% F		
	Lauréat d'Honneur (past 5 years)	4F/12	33% F		
	Distinguished Practice Award (since 2020)	1F/4	25% F		
	Early Career Award (since 2020)	3F/5	60% F		
IMU	Fields Medal 2022	1F/4	25% F		
IIVIU	Other Prizes	0F/4	0% F		
IUBMB	Last 5 years	20F/34	59% F		50% F
IUBS	2018-2023	2F/4	50% F		
IUCr	2023	0F/3	0% F		
	Essay Prize (2017-2023)	2F/5	40% F		
IUHPST	DHST Dissertation Prize &	8F/13	62% F		
	Hon. Mention (2019-2023)	4F/8	50% F		
	Global leadership & service	1F/7	14% F		
IUMRS	Sômiya (last 7 years)	0	0% F		
		1F/7	14% F		
TOMAS	Material Frontiers	1F/12	8% F		
		7F/24	29% F		
	MRS-S Young Researcher	0	0% F		
IUPAP	Data not yet collected				
IUPsyS	2016	1F/5	20% F		
	2020	2F/5	40% F		
	2018-2022	5F/11	45% F		
SCAR	2022				
	2012-2020			_	16% F

#### 3. Union Governance

All the 15 unions who replied provided figures for their Executive Body and/or Council (as relevant); see Table 3. On the other hand, only four of these (ICIAM, IMU, IUBS and IUPHST) provided information on the gender balance in their various committees. It is interesting to note that for all the unions that are able to provide an estimate of the percentage of women in their scientific community, the percentage of women is on the whole higher in governance that it is in the corresponding community. Here again, due to the small number of people on executive committees and councils (from 4 to 15 persons), one should not overinterpret the percentages. Collecting data systematically for the years ahead will enable us to better monitor the situation.

Executive Body Council Committees Scientists in the Community 21% in EU and USA IAU 7F/12 58% F Below 20% in Africa, Asia, Middle East, Oceania, and South America. ICIAM 3F/5 60% F 8F/25 32% F IGU 4F/12 67% F About 30% F 44% F IMU 4F/10 40% F (percentage among authors of publications, (Excluding CWM & C. Diversity) based on Gender Gap in Science Project results) **IUBMB** 3F/8 37% F 50% F 50% F IUBS 1F/4 25% F 38% F **IUCr** 4F/10 40% F 44% F 1F/4 25% F (Union) 50% F 3F/6 IUHPST 2F/633% F (DLMPST) 5F/15 33% F Among Commission Chairs 3F/7 43% F (DHST) 6F/13 46% F 5F/10 60% F IUIS 50% F 50% F **IUMRS** 3F/10 30% F 20% F 2014: IUPAC 2023: 34% F 20% F **IUPAP** 6F/16 37% F 44% F (rough estimate) **IUPsyS** 3F/4 75% F 5F/10 50% F IUSS 4F/14 29% F 35% F SCAR 40% F 58% F

Table 3 Gender Balance in Governance

#### 4. Journals published by partner unions

Most partners (ICIAM, IAU, IUSS, IUPAC, IUPAP, IUMRS, IUHPST, IUBS, IMU, SCAR) do not publish journals in their field. Some others unions did not answer the question. For the few unions that did, the proportion of women among authors is most of the time unknown. Two unions (IGU, IUPsyS) indicate they will think about how to collect the data.

Among the unions who do publish journals:

**IGU** does not have a journal, but does have a database containing over 100 references to geographical journals. Many IGU commissions have a journal. At present, there is no information on gender equality in these journals.

**IUBMB** The percentage of women among editors-in-chief, associated editors and authors is estimated at 25%.

**IUCr** publishes 10 journals. Starting from a rather skewed gender balance, they are now approaching a relatively well-balanced position. The total number of editors and co-editors is around 200 with roughly 25% women among them.

IUIS No women among editors-in-chief; 25% women among associated editors.

**IUPsyS** The union publishes the International Journal of Psychology (ICP). Current editor-inchief is female. Prior to this the previous editor-in-chief was male and the one before that was female. One associate editor out of three is female.

#### 5. Percentage of women in the scientific community

Most unions do not have information about the proportion of women in their scientific community. It is the case for ICIAM, IGU, IUBS, IUMRS, IUSS, IUBMB, IUCr, IUHPST, IUIS, IUPAC, IUPSyS, SCAR. IUSS, IUPESM and IUGS. Several unions indicate that they plan to launch an action to obtain an estimate of this percentage.

A few unions have provided some information (see also Table 3):

IAU 21% in western countries (EU and USA); below 20% in Africa, Asia, Middle East, Oceania, and Southern America.

**IMU** The percentage of women mathematicians worldwide is not known. The only thing we know is that about 30 % of authors of mathematical papers were women in 2019, based on the results of the Gender Gap in Science Project (Mihaljevic & Santamaria, 2021 & 2022).

IUIS The estimate is 60 % women.

**IUPAP** At a rough estimate, taking the average numbers reported by many western countries for academics and researchers, women make up about 20% of the physics workforce. International Conference on Women in Physics every three years receives reports from each (most) participating countries/regions with often statistics at some level, ranging from numbers in a faculty to national data from undergraduate to professor.

#### 6. Concluding remarks

Beside gathering information, the aim of the questionnaire was to prompt unions to systematically collect data on the involvement of women and their activities in several key areas. We are preparing recommendations on this matter for unions.

Here, two points are worth highlighting: firstly, although one would not necessarily recommend that the percentage of women in governance, journal editorship, or recipients of awards should necessarily correlate with the percentage of women in the discipline represented by unions, the data collected would take their full meaning if they can be compared to the percentage of women in the discipline. For example, it would be important and meaningful to compare the percentage of women in a given discipline with the number of participants in the congresses organized by the union that represents that discipline. But assessing the percentage of women in a discipline can prove difficult, as can the count of scientists in that discipline. It would be interesting to consider the possible strategies for different unions before any count is undertaken.

Secondly, gendered data collection, like any data collection, is subject to the consent of the members of scientific communities. For example, participants in a congress can be asked to declare their gender when registering. Here the issue is twofold. On the one hand, a number of colleagues do not see the point in providing this information, and are sometimes reluctant to do so: the first reaction to such a question is often "What difference does it make?" It appears that at least some concise explanation on why this information is requested for them is helpful in this respect. On the other hand, the categories that are comprised under 'gender' are not subject to a universal consensus. This must be taken into account when preparing surveys, as SCGES did when preparing the questionnaire sent to its partners. We then included the following note at the front of the questionnaire:

In some countries, it is now understood that 'gender' comprises more than the two categories male-female; there one expects to be given a choice when answering a question about one's gender. Whereas most of us share this understanding of gender, we are also aware that in some other countries, declaring oneself to belong to a gender other than male or female puts one at risk of suffering discrimination. Experience has taught us that colleagues from these countries may simply decline to answer a questionnaire which leaves open such a risk. We have phrased the questions below in a way that takes this point into account, but we are aware that this phrasing may not be regarded as sufficiently inclusive by some. We do not wish to give offense to anyone and have chosen what we feel may be the lesser of two evils.

SCGES sees pursuing the systematic gathering and compiling of data on gender balance in its partner unions as one of the tasks it should pursue as part of its aim to promote gender equality in science.

#### **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 and Jodi Tims, ACM-W Past Chair, are not ACM officers.

#### 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 \$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 (<a href="https://www.acm.org/code-of-ethics">https://www.acm.org/code-of-ethics</a>) 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 connection to computing/computer science, awarding approximately \$35,000 USD annually to undergraduate and graduate students.

The 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.

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. 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 webinars/talks. 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 web sites.

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

ACM-W continue many projects during the COVID pandemic to ensure women in computing could still experience the support of the organization. Post Covid celebrations of women in computing are held in hybrid format in many cases.

The ACM-W webinar series, Celebrating Technology Leaders continued in 2022. The webinars focus on a different area each time. This provides variety in role models for young women in computing.

The he ACM-W Europe continued to host their flagship event An ACM Celebration of Women in Computing: womENcourage<sup>TM</sup> in Trondheim. Greater fundraising enabled a high number of scholarships to be awarded to students. In India, the Grad Cohort continue to support the transition of students from academia into employment. In Africa the AfricaCWIC was held virtually enabling attendance from across the continent. These are simply examples of the regional events which continued to occur, growing from strength to strength. This is important given the troubling times experienced in many regions at the current time.

# **International Astronomical Union (IAU)**

https://www.iau.org/

#### Representative and deputy representative

Chair, Mamta Pommier Co-chair, Priya Hasan

#### Relationship between the SCGES representatives and the officers of the union

The Chair and Co-chair of the IAU Women in Astronomy Working Group (IAU WiA WG) are the representatives for SCGES.

#### Webpages dedicated to gender equality or women in science

IAU WIA WG website:

https://www.iau.org/science/scientific\_bodies/working\_groups/122/womeninastronomy/ Website with detailed WG activities- https://sites.google.com/view/iau-women-in-astronomy/home?pli=1

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

The IAU 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 percentages of women in astronomy ages 30-40 is higher (30%) than in the membership generally.

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

The IAU has a number of activities that exist 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 affected 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 and at several international conferences.

# **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. The SCGES representative attends the ICIAM Officers' meeting bimonthly where she discusses SCGES activities and gender equality issues with the SCGES Officers. In addition, the Representative and Deputy Representative report activities to the Officers via email.

#### 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 recent news articles on the topic. The goal is to grow the content of this page to reflect activities of member societies.

In addition, ICIAM created 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 currently has no explicit structures to promote gender equality. However, a proposal is currently pending to the ICIAM Board, and encouraged by the ICIAM Officers, to create an ICIAM Committee on Gender Equality which would help promote gender equality within ICIAM.

#### 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 By-Laws 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 a canvassing committee for its prizes to "identify qualified candidates, representing ICIAM's diversity (gender, background and geography), for the six 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

ICIAM has supported the work of Woodward in her responsibilities to SCGES as she has become Vice Chair and Webinar Coordinator. In addition, ICIAM supported Woodward's travel so she could meet with the ICIAM Officers and Board in person at their 2022 annual meeting.

ICIAM published three short news articles about the activities of the SCGES in its Dianoia quarterly newsletter: "News From the Standing Committee on Gender Equality in Science," <a href="https://iciam.org/news/22/10/14/news-standing-committee-gender-equality-science">https://iciam.org/news/22/10/14/news-standing-committee-gender-equality-science</a>; "Second Annual Report Issued by SCGES," <a href="https://iciam.org/node/643/archive#node-650">https://iciam.org/node/643/archive#node-650</a>; "Gender Equality Committee Hosts Global Women's Breakfast Event on Gender Gap Project," <a href="https://iciam.org/node/643/archive#node-651">https://iciam.org/node/643/archive#node-651</a>.

ICIAM continued updates to its web page that promotes activities in support of gender equality in applied mathematics. The page is on the ICIAM web site under the News tab.

During its 2023 Congress, held every four years, ICIAM had programming in support of gender equality. One of the congress lead-off public lectures was given by the Chair of the Society for Industrial and Applied Mathematics (SIAM) Diversity Advisory Committee, Padhu Seshaiyer (George Mason University, USA), who spoke on "Understanding the Dimensions of Justice, Equity, Diversity and Inclusion (JEDI) across the globe in Applied Mathematics Research and Education." Also during the 2023 Congress, two lectures were given as honors only given to women. First, the Olga Taussky-Todd Lecture is given by a woman upon whom the honor "is conferred for her outstanding contributions in applied mathematics and/or scientific computation." The lecture, sponsored by ICIAM, is given every 4 years, and this year it was given by Ilse Ipsen of North Carolina State University, USA. In addition, the Sonia Kovalevsky Lecture was also given. This lecture is an honor given "to highlight significant contributions of women to applied or computational mathematics." The lecture, sponsored by SIAM and the Associatin for Women in Mathematics, is given each year, and this year it was given by Annalisa Buffa, École Polytechnique Fédérale de Lausanne.

Woodward, and Yan, working with Maria Esteban (CNRS and Univ. Paris-Dauphine), organized a mini-symposium, held during the 2023 Congress, on "Gender Equality in Mathematics: A Global Perspective." The speakers were:

- Maria Esteban, CNRS and University Paris-Dauphine, "Lessons on the global mathematical community from the Gender Gap global Survey"
- Sophie Dabo, University of Lille and INRIA, "The African perspective about the Gender Gap in Science"
- Motoko Kotani, Tohoku University, "Japan's aspects in gender issues"
- Yukari Ito, The University of Tokyo, "What we can do with Asia-Oceania Women in Mathematics (AOWM)"
- Carola-Bibiane Schonlieb (online), University of Cambridge, "Women and Science in Europe"
- Talitha Washington (online), Clark Atlanta University, "Challenges for US Women in math and the activities of the AWM"
- Carol Woodward, Lawrence Livermore National Laboratory, "The Standing Committee for Gender Equality in Science"
- Panel Discussion with the session speakers

#### Research activity about gender equality or women in science

ICIAM and IMU cofunded a study on the results of the Global Survey run during the Gender Gap project, specifically for Mathematics and Applied Mathematics. The work involved redoing the statistical analysis of all answers and interpreting them. An article on the results is being finalized right now and will be submitted for publication this fall. This article will be accompanied by a website that will include visualizations of the results.

# **International Federation of Societies for Microscopy (IFSM)**

#### https://ifsm.info

#### Representative and deputy representative

Representative: Virginie Serin, Deputy representative: Eva Olson

#### Relationship between the SCGES representatives and the officers of the union

Executive committee of IFSM (International Federation of Societies for Microscopy). Virginie Serin, member, and Eva Olsson, General Secretary.

#### Webpages dedicated to gender equality or women in science

The new web site for IFSM has been developed. A section is to be dedicated to women in science.

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

As a result of the IFSM joining SCGES there is a regular report on activities to promote gender equality. The plan is to identify the actions to give priority within IFSM.

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

There is no budget allocated. Instead, we work with the microscopy meeting organisers to include activities in the meetings and allocate budgets for the work.

## 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 (YSA), 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. The IMC20 was organized this year in Busan, Korea, https://www.imc20.kr.

The YSA gathers 50 young scientists in their early career. The 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 the 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. This year we invited Catherine Jami (chair of SCGES) who gave a highly appreciated talk entitled "Overview of the nations of the IFSM YSA – an overview of the nations, affiliations and topics of this community".

# **International Geographical Union (IGU)**

https://igu-online.org/

#### Representative and Deputy representative

Nathalie Lemarchand and Anindita Datta

#### Relationship between the SCGES representatives and the officers of the union

Nathalie Lemarchand is First Vice-President of IGU; Anindita Datta is Chair of IGU's Gender and Geography Commission.

#### Webpages dedicated to gender equality or women in science

IGU's Gender and Geography Commission webpage: https://igugender.wixsite.com/igugender

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

IGU's Gender and Geography Commission

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

Every IGU commission can have a small annual budget. The IGU's Gender and Geography Commission supports the mobility of young researchers to take part in these activities, and is also very active in supporting the mobility of young women geographers. In 2023 this IGU Commission has allocated USD2000 for the research related mobility of two women ECR. See <a href="https://igugender.wixsite.com/igugender/igu-gender-grant-award-winners">https://igugender.wixsite.com/igugender/igu-gender-grant-award-winners</a> for details.

#### Existence of explicit policies for gender equality

The IGU EC decided at its last meeting (March 2023) to add a paragraph to the model agreement with the organizers of IGU scientific activities to encourage "organizers to promote gender equality in committees (organizing, scientific), as well as in the choice of speakers." A further step would be to have at least half of the travel grants to attend IGU congresses allocated to women geographers.

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

The union's activities are structured around thematic committees and working groups. Gender parity is encouraged in each committee and working group. Special attention is also paid to supporting young researchers in order to promote gender equality. It also aims to achieve parity within its own structure.

- Specific areas of the discipline continue to be male dominated hence as a group we aim to put in place policies to increase the participation of women geographers in these areas
- The Commission on Gender already has a mentorship programme to encourage ECR from less represented regions and communities:
   <a href="https://igugender.wixsite.com/igugender/janmonkmentorshipprogramme">https://igugender.wixsite.com/igugender/janmonkmentorshipprogramme</a>. We hope to induct more physical geographers to participate as mentors to encourage more women to train in these male dominated fields.

#### Research activity about gender equality or women in science

Members of the IGU Commission on Gender and Geography and its Steering Committee members are constantly engaging with the question of gender equality through their publications and projects. Please see <a href="https://igugender.wixsite.com/igugender/publications">https://igugender.wixsite.com/igugender/publications</a> for a comprehensive list of publications. The Commission on Gender also supports an independent initiative "Mapping Inspirational Women in Geography" producing dynamic maps to show the contributions of women to the discipline.

(See <a href="https://mappinginspirationalwomen.wordpress.com/">https://mappinginspirationalwomen.wordpress.com/</a> for details)

## **International Mathematical Union (IMU)**

https://www.mathunion.org

#### Representative and deputy representative

Marie-Françoise Roy, Carolina Araujo

#### Relationship between the SCGES representatives and the officers of the union

The representative Marie-Francoise Roy and deputy representative Carolina Araujo are former chair and current 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 Hiraku Nakajima, 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 IMU webpage <a href="https://www.mathunion.org/cwm">https://www.mathunion.org/cwm</a>. CWM website reports on CWM initiatives but has also pages describing the activities for women in mathematics around the globe, and various useful resources. The IMU archivist is working part time for 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 and 2022. It has 10 members (currently 8 women and 2 men) covering all continents of the globe. CWM has established the scheme of CWM ambassadors, with over 150 special correspondents worldwide, each of whom has the job of disseminating information such as CWM funding calls in her geographical or mathematical neighbourhood, and also of keeping CWM informed about activities or initiatives to be announced on this website. 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 (around 20K euros per year). This budget makes it possible to help various initiatives for women in mathematics mainly in developing countries and to support partly the World Meeting for Women in Mathematics (WM)<sup>2</sup> which is taking place every four year since 2018 as a satellite event of the International Congress of Mathematicians (ICM). The next (WM)<sup>2</sup> will take place in Philadelphia in 2026.

#### Existence of explicit policies for gender equality

IMU was an active founding member of SCGES and contributed 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 on the page <a href="https://www.mathunion.org/imu-awards/imu-awards-prizes-and-special-lecture">https://www.mathunion.org/imu-awards/imu-awards-prizes-and-special-lecture</a> which had a link to the longer text <a href="https://www.mathunion.org/fileadmin/IMU/IMU\_bias.pdf">https://www.mathunion.org/fileadmin/IMU/IMU\_bias.pdf</a>. This text was

written independently of CWM and was never approved by a vote inside IMU but appears on 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%.

In terms of 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 current EC reaches a reasonable gender balance with 4 women, on 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

Such a research activity does not appear as really relevant in our discipline, except of course for research on the history of mathematics. Indeed, mathematics is universal.

IMU and ICIAM supported a statistical research project to exploit the results of the Global Survey of Scientists [1] in Mathematics and Applied Mathematics, and in Africa which will result in two papers.

- [1] R. Ivie and S. White, *Measuring and analyzing the gender gap in science through the global survey of scientists*. In In Gender Gap in Mathematical, Computing and Natural Sciences: How to Measure It, How to Reduce It?, International Mathematical Union, Berlin, 2021. https://zenodo.org/record/3882609 (retrieved June 13, 2023), pp. 39-81.
- [2] Sophie Dabo, Maria Esteban, Colette Guillopé and Marie-Françoise Roy, Aspects of the gender gap in Mathematics (in preparation).
- [3] Sophie Dabo, Maria Esteban, Colette Guillopé and Marie-Françoise Roy, *An analysis of the gender gap among African scientists* (in preparation).

# **International Political Science Association (IPSA)**

https://www.ipsa.org/

#### Representative

Kim Fontaine-Skronski

#### Relationship between the SCGES representatives and the officers of the union

Kim Fontaine-Skronski is Executive Director of the International Political Science Association (IPSA) and ex-officio member of the Executive Committee

#### Webpages dedicated to gender equality or women in science

https://www.ipsa.org/publications/ipsa-gender-diversity-monitoring-report

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

By embedding such principles in its foundational documents (Rules and Procedures, Constitution, HR Policy, Award Guidelines), IPSA not only promotes gender equality but also positions itself as a leader in fostering diversity within the scientific community. Such initiatives signify IPSA's dedication to creating an inclusive environment where every individual, regardless of gender or background, is valued and provided equal opportunities.

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

Currently, there is no specific budget allocated for gender equality or women in science activities.

#### Existence of explicit policies for gender equality

To reinforce its commitment towards gender equality and diversity, IPSA has incorporated specific clauses in its Constitution, Rules and Procedures as well as other internal policies. These clauses emphasize the importance of respecting gender and diversity in all aspects of the association's activities (including panel composition, plenary speakers, award recipients, Executive Committee members).

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

IPSA has been publishing gender monitoring reports since 2011, with the most recent report in 2022 explicitly covering both gender and diversity. In these reports, IPSA looks at the situation of member associations and, in the same spirit, turns its gaze inward to consider issues related to the representation of its diverse membership within the IPSA Council, Executive Committee, and all IPSA activities such as the World Congress, awards, Summer Schools, journal editors, etc.

Based on the results of the Gender and Diversity Survey conducted by IPSA in 2017, a Gender and Diversity Action Plan was adopted by the Association. This plan was intended to reflect IPSA's commitment to a more inclusive political science profession, and to sharing information and knowledge on gender and diversity issues. It sets out 5 actions, both symbolic and substantive, for IPSA to undertake. All have since been implemented.

## Research activity about gender equality or women in science

IPSA has two Research Committees dedicated to conducting research on gender and equality: IPSA Research Committee 07 (RC07) – Women and Politics in the Global South IPSA Research Committee 19 (RC19) – Gender Politics and Policy

# International Union of Biochemistry and Molecular Biology (IUBMB)

https://iubmb.org/

#### Representative and deputy representative

Alexandra Newton, IUBMB Representative, Ilona Concha Grabinger, IUBMB Deputy Representative

#### 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

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

#### 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. For example, our leadership

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. <a href="https://thebumblingbiochemist.com/lets-talk-science/women-in-science/">https://thebumblingbiochemist.com/lets-talk-science/women-in-science/</a>

#### 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.

## **International Union of Biological Sciences (IUBS)**

https://iubs.org

#### Representative and deputy representative

Representative: Nathalie Fomproix

Deputy representatives: Sarita Maree and Guy Smagghe

#### Relationship between the SCGES representatives and the officers of the union

Nathalie Fomproix is the Executive Director of IUBS.

Guy Smagghe is a member of the IUBS Executive Committee.

Both have regular contacts and meetings with the IUBS officers.

#### Webpages dedicated to gender equality or women in science

On IUBS website:

- a page is dedicated to the <u>former inter union project</u>: https://iubs.org/iubs-activities/a-global-approach-to-the-gender-gap-in-mathematical-and-natural-sciences/
- a page presents the <u>SCGES</u>: <u>https://iubs.org/iubs-activities/new-initiatives/standing-committee-on-gender-equality-in-science/</u>
- a page is dealing with the <u>IUBS Committee for the promotion of Equal Opportunities</u> that is also involved in gender equality: https://iubs.org/iubs-activities/new-initiatives/iubs-working-group-on-gender-equality/

#### 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, IUBS representative and officer of the SCGES
- Sarita Maree, former IUBS Executive Committee Member, IUBS deputy representative of the SCGES
- Annelies Pierrot-Bults, former IUBS Treasurer
- Guy Smagghe, IUBS Executive Committee Member, IUBS deputy representative of the SCGES
- Lucilla Spini, bio-anthropologist

The group has changed its name in 2022 and it called now the IUBS Committee for the Promotion of Equal Opportunities.

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

The IUBS budget dedicated to the gender equality is divided in 2 parts: first the annual contribution to the SCGES, then a budget for the Committee for the Promotion of Equal Opportunities depending on the organize meetings, conferences and webinars to be organized.

#### 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

IUBS sponsorship of scientific programmes, conferences, and young scientist's grants is approved when active involvement of women in these activities is demonstrated (see above).

A report of the SCGES meeting taking place in Paris on 13 & 14 February 2023 was distributed to IUBS Executive Committee.

IUBS organized a session on "Gender Equality" during its General Assembly on 12 March 2023

Title: "The gender gap in Japan"

Speaker: Dr. Motoko Kotani, Vice-President of ISC, Japan

Abstract: Japan is quite behind in the gender related issue, although much effort has been put to improve the situation. Statistic data, analysis, projects, educations in research institutions are introduced. The established Asia-Oceania women in mathematics will be touched upon.

Title: "Towards equality, diversity and inclusion in the biological sciences: Reflections on current challenges, solutions and opportunities in the scientific landscape across Africa" Speaker: Dr. Sarita Maree, member of IUBS WG on Gender Equality and EC member of IUBS, South Africa

#### Title: "The GenderGap impediment: it is time for serious action"

Speaker: Dr. John Buckeridge, founding member of IUBS WG on Gender Equality and Past-President of IUBS, Australia

#### **Round-table discussion**

with all participants on site and remotely

- Topics:
- -International Women's Day: #EmbraceEquity": Equality <> Equity?
- -Women require special facilities during fieldwork; broad recognition of the problem.
- -Establish exciting career pathways for women who may well wish to take time off to have children. Many women had kids in period of PhD. In fact, it is the best period to have kids. Later as postdoc the contracts are shorter. Also, men can take up paternity leave, as women take maternity leave.
- -Increasing the percentage of women in leadership!
- -Cultural background is very important, for instance in determining girls in STEM. To stimulate more girls, school and family education are important!

## Research activity about gender equality or women in science

There is no research activity about gender equality or women in science in IUBS; future research will be designed in the context of the framework of the committee, namely the promotion of equal opportunities in order to further diversity, inclusion and diversity in IUBS.

# **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: <a href="https://www.iucr.org/\_data/assets/pdf\_file/0020/142058/IUCr-Gender-Equity-Committee-TOR-20Nov2018.pdf">https://www.iucr.org/\_data/assets/pdf\_file/0020/142058/IUCr-Gender-Equity-Committee-TOR-20Nov2018.pdf</a>)

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

 $\frac{https://www.iucr.org/\_\_data/assets/pdf\_file/0007/147922/IUCr-Gender-Equity-and-Diversity-Statement.pdf}{}$ 

#### 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,

 $\underline{www.iucr.org/\_data/assets/pdf\_file/0007/154690/ToolkitConferenceInclusivity\_March2022.}\\ \underline{pdf}$ 

#### Research activity about gender equality or women in science

Data collected since 2011 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.

## **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.

#### Webpages dedicated to gender equality or women in science

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 78<sup>th</sup> IUGS EC meeting held in Belfast, UK, a momentous decision was made by the IUGS EC to establish a dedicated Commission on Geoethics. Among its main objectives, this Commission is poised to address matters of diversity, equity, and inclusion within the IUGS scientific community.

In light of this ambition, the Commission's Governing Board has taken an instrumental step by instituting a specialized Task Group, which is designed to seamlessly continue the endeavours initiated by the previous IUGS Task Force dedicated to these vital issues.

The so renewed task group is committed to orchestrating efforts that ensure a balanced composition within IUGS constituent groups. This pertains to fostering balance across various dimensions such as gender representation, geographical origins, disciplinary orientations, career stages, and more.

The Task Group's responsibilities will also include to safeguard the established equilibrium over time. Notably, this commitment will extend to all activities, initiatives, and scientific events organized by IUGS, ensuring they align with the principles of equity that have been outlined. Additionally, the Task Group is poised to play a supportive role in the endeavours of the IUGS within the Standing Committee on Gender Equality in Science (SCGES).

Through these measures, the IUGS is advancing its mission of upholding ethical standards, diversity, and fairness within the geoscience community and beyond.

For further insight into the IUGS Task Group on Diversity, Equity, and Inclusion (TGDEI), please refer to the following link: <a href="https://www.geoethics.org/iugs-cg">https://www.geoethics.org/iugs-cg</a>

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

Given the recent establishment of the TGDEI, a specific budget to facilitate its activities has not yet been earmarked. Nevertheless, recognizing the significance of the ongoing initiatives focused on these critical matters, deliberations regarding the provision of dedicated financial resources for the task group will be a focal point of forthcoming IUGS EC meetings.

Highlighting the gravity of these activities, the organization is committed to examining avenues for sustainable financial backing. The intent is to ensure that the TGDEI is equipped with the necessary resources to effectively carry out its mission of promoting diversity, equity, and inclusion within the IUGS scientific community.

Furthermore, 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 is being investigated. Based on what will emerge, the TGDEI will 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

The IUGS is actively engaged in spotlighting accomplished women within the geosciences field worldwide. This effort comes to life through a series of videos and interviews that are featured and accessible on the organization's official website. These materials showcase inspiring women who have made significant contributions to various aspects of geosciences, representing different expertise and career stages. You can explore these engaging resources here: https://iugs60.org/iugs-women-in-geoscience-event/

Initiatives within the IUGS, executed through the TGDEI (Task Group on Diversity, Equity, and Inclusion), are being planning, to foster awareness within the geoscience community about crucial matters like diversity, equity, and inclusion. With a special emphasis on promoting gender equality, this endeavour seeks to bring about positive change. The members of the TGDEI are experts well-versed in these domains within the geosciences realm. Their proficiency uniquely equips them to propose actionable policies and identify valuable tools that can effectively guide the IUGS's initiatives in these areas.

Furthermore, the TGDEI is actively exploring avenues to facilitate productive dialogue and collaboration. This includes the contemplation of arranging meetings with representatives from other scientific organizations. By facilitating these exchanges, the TGDEI aims to foster a vibrant sharing of ideas, enabling constructive discussions around strategies to enhance diversity, equity, and inclusion across the scientific community.

Through these concerted efforts, the IUGS is making significant steps in amplifying underrepresented voices, promoting equitable practices, and building an inclusive geoscience community for the present and future.

#### Research activity about gender equality or women in science

The IUGS is actively engaged in advancing gender equality through targeted initiatives. Specifically, our efforts are centred around the integration of the gender dimension into research content within the field of geosciences. In pursuit of this goal, we recognize the significance of up-to-date information. Hence, we are currently in the process of refreshing the data on gender diversity within the IUGS constituent groups. This endeavour is aimed at ensuring the accuracy and relevance of our approach, as the findings from our prior survey conducted by the IUGS Secretariat in 2020-2021 may no longer reflect the current landscape.

By meticulously examining the list of official participants across all IUGS constituent groups, we are conducting a comprehensive gender analysis. This analysis will be conducted both at the country level and within individual constituent groups. Through this endeavour, we intend to gain valuable insights into the existing gender distribution, shedding light on potential disparities.

The outcomes of this analysis will play a pivotal role in identifying barriers and challenges that hinder gender equality. Subsequently, we aim to propose effective strategies to address these issues. Our commitment extends beyond internal improvements; we are dedicated to fostering an environment of collaboration and shared learning. By engaging with other scientific organizations, we seek to exchange insights, experiences, and information, collectively progressing towards the elimination of gender imbalances and the cultivation of inclusivity

within these constituent groups. Through these ongoing efforts, we aspire to bridge the existing gender gaps and create a more equitable and balanced landscape within the IUGS.

As detailed in this report, due to the recent initiation of activities by the task group focusing on diversity, equity, and inclusion, the IUGS is presently unable to furnish updated responses to the queries presented in the following questionnaire. Nonetheless, the IUGS commits to delivering this information promptly as soon as the ongoing investigations permit its provision.

# 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); Hanne Andersen is a member of the DLMPST Council (2019-2023).

#### Webpages dedicated to gender equality or women in science

Website of the DHST Commission on Women and Gender in Science: https://agnodike.org/

#### 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's statutes now specify that it has Gender and Diversity Champion, which has yet to be appointed.

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

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

#### Existence of explicit policies for gender equality

In 2023, the statutes of IUHPST have been updated so as to mention that the Board of the Union "appoints a Gender and Diversity Champion, who shall work to promote equality, diversity and inclusion, and oversee the implementation of best practices in the Union." The Gender and Diversity Champion will be appointed shortly.

The DHST General Assembly of 2021 approved a Gender and Diversity Champion. During its December 2022 council meeting, the DHST council nominated Janet Browne (president-elect of DHST) as its gender and diversity champion and she accepted.

The Memorandum of Understanding for the forthcoming ICHST 2025 Congress (Dunedin, New-Zealand), has concrete mechanisms in place to enforce the Respectful Behavior Policy. Amongst others things, in the registration form, it will be possible to register under any kind of gender (binary and non-binary) including "I do not wish to say". Moreover, upon registration, participants will be required to abide by the Respectful Behavior Policy of the DHST during the congress.

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

DHST promotes the SCGES webinars through its mailing lists. Moreover, the Commission on Women and Gender in Science, Technology and Medicine (see below) regularly organizes events such as conferences and symposia, amongst others, during the ICHST main congress.

#### Research activity about gender equality or women in science

The DHST Commission on Women and Gender in Science, Technology and Medicine actively works on this topic. It organized a conference on "Gender and Intersectionality in Science, Technology, and Medicine: Historical Perspectives", University of Granada, Spain, 2–3 June 2023.

# **International Union of Immunological Societies (IUIS)**

https://iuis.org

#### Representative and deputy representative

Prof. Dr. Paola Castagnoli (representative)

Prof. Dr. Hannes Stockinger (deputy representative)

#### Relationship between the SCGES representatives and the officers of the union

The SCGES representatives serve as the in-person chairperson and deputy chairperson of the Gender and Equality Committee (GEC) within IUIS. They function autonomously and maintain full independence from the IUIS Executive Board.

#### Webpages dedicated to gender equality or women in science

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

https://iuis.org/women-speakers-databases/

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

Yes, the 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 each year 2 students to attend the Basic Immunology Course and Advanced Immunology Course of the American Association of Immunologists.

IUIS-GEC proudly established the "Menarini Prize for Outstanding Woman Immunologist" thanks to the forward-looking vision and generous support of the Menarini Group, an Italian-based pharmaceutical company. The US\$40,000 prize will be awarded for the first time at the 18<sup>th</sup> 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.

#### Research activity about gender equality or women in science

The IUIS-GEC has initiated the Competition-4-Ideas Award, aimed at fostering gender equality, particularly in career development support and equitable access to funding and resources on both national and international scales. The IUIS-GEC has allocated a total of US\$10,000 for this endeavor, with the condition that only GECs affiliated with national societies or regional federations dedicated to advancing gender equality are eligible to submit proposals. Thus, one of the aims of this initiative was also to stimulate national societies to establish GECs.

We are delighted to announce the following rankings:

- 1st Place: The GEC of the Italian Society of Immunology, awarded US\$3,000 for its idea, "Expanding the Reach of the Ricercata Initiative to Support Women Scientists in Re-Entering Their Scientific Careers After Maternity Leave".
- 2nd Place (tied): The GECs of the European Federation of Immunological Societies and the Kenyan Society of Immunology, both receiving US\$2,500 each for their ideas "Desensitization by Exposure\* Persistent Gender Biases Despite the Increasingly Female Immunological Research Field" and "Strengthening Immunology Research in Kenya through Equitable and Inclusive Participation", respectively.
- 3<sup>rd</sup> Place: The GEC of the Iranian Society of Immunology, granted US\$2,000 for its proposal aimed at "Improving Gender Equality in Iran."

The winning GECs will be honored with the awards during the International Congress of Immunology 2023 in Cape Town, specifically at the research symposium "SEXX Matters Symposium" organized by the IUIS-GEC.

## **International Union of Materials Research Societies (IUMRS)**

https://iumrs-ho.org/

#### Representative and deputy representatives

Representative: Prof Joanne Etheridge, Monash University, Australia

Deputy Representatives: Prof Byungha Shin, KAIST, Korea, and Prof R. Martins, New

University of Lisboa, Portugal

#### Relationship between the SCGES representatives and the officers of the union

Prof Joanne Etheridge is a member of IUMRS and the immediate past president of Australian Materials Research Society.

Prof Byungha Shin, is the running treasurer of International Union of Materials Research Societies and a member of Board of Directors of Materials Research Society of Korea Prof R. Martins, New University of Lisboa, Portugal, former IUMRS president and member of the executive committee

#### Webpages dedicated to gender equality or women in science

https://iumrs.org/gender-equity-and-diversity-code-of-conduct/

Plus ad-hoc postings of SCGES seminars and other relevant information, as it arises.

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

Under construction by IUMRS gender committee. No formal structure.

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

No existence of a devoted budget for this within IUMRS. All propositions must be discussed in the general assembly and approved by the executive committee.

#### Existence of explicit policies for gender equality

https://iumrs.org/gender-equity-and-diversity-code-of-conduct/

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

Any activity or action taken or supported by IUMRS will require the involvement of both genders, as chairs, while promoting equity among all. Moreover, it stimulates the presence of at least 30% of gender balance in all conference plenary talks labeled by IUMRS and committees, whatever its focus and nature.

#### Research activity about gender equality or women in science

An action under activity of the IUMRS gender committee

# **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 is an elected member of Bureau and Executive Committee, IUPAC

Deputy Representative: Mark Cesa is Former President of IUPAC, Titular member of Standing Committee of Ethics, Diversity, Equity and Inclusion (CEDEI), and Treasurer of SCGES. IUPAC was one of the founding partners of SCGES and is currently a member of ISC.

#### Webpages dedicated to gender equality or women in science

UPAC Global Women's Breakfast https://iupac.org/gwb/ IUPAC Distinguished Women in Chemistry or Chemical Engineering Please see the website at <a href="https://iupac.org/what-we-do/awards/iupac-distinguished-women">https://iupac.org/what-we-do/awards/iupac-distinguished-women</a>

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

IUPAC Council approves 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.

Aims and activity reports of IUPAC's CEDEI can be found at https://iupac.org/body/060/

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

Budget for sponsoring GWB event project

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

The gender gap in chemistry- Building on the ISC gender gap project (Project #. 2020-016-3-020)

#### Existence of explicit policies for gender equality

IUPAC has a specific policy against sexual harassment, issued 8 April 2021.

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

The next IUPAC Global Women Breakfast will be held on 27 February, 2024 (#GWB2024). Held in conjunction with the U.N. Day of Women and Girls in Science, the goal of the GWB series is to establish an active network of people of all genders to overcome the barriers to gender equality in science. Over the last five years, more than 1500 GWB events have been held in 100 countries. We invite you to add your event to the global map. The theme of #GWB2024 is "Catalyzing Diversity in Science". Groups from all types of science organizations from high schools, to science societies, universities, companies, governments and non-governmental organizations are invited to host events. Event leaders are encouraged to reach out and collaborate with organizations in different sectors and to include scientists from multiple disciplines. Please see the info at https://iupac.org/gwb/.

#### **IUPAC Distinguished Women in Chemistry or Chemical Engineering**

To celebrate the International Day of Women and Girls in Science this February 11, IUPAC is pleased to announce the awardees of the IUPAC 2023 Distinguished Women in Chemistry or Chemical Engineering. Please see the awardees at <a href="https://iupac.org/iupac-2023-distinguished-women/">https://iupac.org/iupac-2023-distinguished-women/</a>

The <u>Awards Program</u>, initiated as part of the 2011 International Year of Chemistry celebrations, was created to acknowledge and promote the work of women chemists/chemical engineers worldwide. Each year since 2011, the award has gained more attention in the global community. These 12 awardees have been selected based on excellence in basic or applied research, distinguished accomplishments in teaching or education, or demonstrated leadership or managerial excellence in the chemical sciences. The Awards Committee has been particularly interested in nominees with a history of leadership and/or community service during their careers. The awards presentation will be made during the IUPAC World Chemistry Congress to be held in August 2023.

#### Research activity about gender equality or women in science

Two manuscripts on global survey of gender gap were submitted to journals, one is the analysis of global survey in chemistry and the other is the analysis the good practices in chemistry on websites.

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

Research work on global survey and good practice in chemistry was presented on the following occasions

- ACS Fall 2023 meeting WCC Symposium: Advancing Gender Equity in Science, San Francisco, CA, August 13-14, 2023
- 9<sup>th</sup> International Conference for Network of Inter-Asian Chemistry Educators (NICE), Kuching, Malaysia, 28-30 July, 2023.
- IUPAC|CHAINS 2023 IUPAC General Assembly and World Chemistry Congress, the Hague, the Netherlands, 18-25 August, 2023

# **International Union of Pure and Applied Physics (IUPAP)**

https://iupap.org/

#### Representative and deputy representative

Representative is Dr Gillian Butcher and Deputy is Dr Rudzani Nemutudi

#### Relationship between the SCGES representatives and the officers of the union

Both representatives are Vice Presidents and are on the Executive Council as Vice President at Large: Gender Champion and Associate Secretary General respectively.

#### 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:

- Waterloo Charter for Gender Inclusion and Diversity in Physics: 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 purpose. 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 liaisons members is a challenge. The Waterloo Charter aims to promote gender equity to members.

Research activity about gender equality or women in science Nothing at this time

# **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

N/A

#### 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

Based on the positive feedback from the audience of the special symposia organized by WiMPBME at the World Congress in Medical Physics and Biomedical Engineering (Singapore <a href="https://wc2022.org/">https://wc2022.org/</a>) we started discussions about preparation of special symposia for the IUPESM World Congress 2025. WiMPBME plans to focus on up-to-date topics related to topic of gender equity in STEM fields (continuation of discussion at the WC2022) and new topics

related to sex and gender related data in biomedical research and their importance for development of unbiased software tools applicable to diagnostic and therapeutic purposes. Between the World Congresses the WiMPBME, WiMBE and WiMP organize special sessions in IFMBE and IOMP conferences. In 2023, WiMBE organized a special session at the MEDICON 2023 conference: IFMBE Special session: WiMBE - Empowering Women in Biomedical Engineering Entrepreneurship.

# 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.

A new manuscript is under preparation.

Discussions on new surveys are ongoing.

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

#### 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. Currently a manuscript on qualitative analysis of the results is under preparation.

#### **Planed activities in SCGES**

A webinar (autumn 2023) with proposed topics: the glass ceiling issue and difficulties women are facing in research and engineering profession; mentoring; good practice examples and success stories.

# **International Union of Psychological Science (IUPsyS)**

https://www.iupsys.net/

#### Representative and deputy representative

Professor Pam Maras (Representative) Dr Ava Thompson (Deputy Representative)

#### Relationship between the SCGES representatives and the officers of the union

Pam Maras – Past-President Ava Thompson – Secretary-General

#### Webpages dedicated to gender equality or women in science

None specifically

- 1. All SCGES Events (i.e. Webinars) are advertised on our home page.
- 2. IUPsyS subscribes to and adheres to the ISC statement on circulation of scientists <a href="https://www.iupsys.net/events/congress/free-circulation-of-scientists.html">https://www.iupsys.net/events/congress/free-circulation-of-scientists.html</a>, 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 informs all activity.

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

Our statement above informs all activity. In addition, the terms of reference for a Working Group on Equality in Science have been agreed. Recruitment to membership of this group is now being undertaken drawn from both the executive committee and the broader national and regional membership.

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

None specifically – budgeting in IUPsyS is for all activity must conform to equality statement above. Once operational, relevant funds may be provided for activity identified by the Working Group for Equality and Science as long as it meets Union requirements for funding.

#### Existence of explicit policies for gender equality

None specifically –all activity must conform to equality statement above. In the coming year we expect the Working Group for Equality in Science to consider the development of relevant specific policy.

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

All activity complies with our equality statement, including at our quadrennial International Congress of Psychology (ICP) which will next take place in 2024 in Prague (ICP 2024 <a href="https://icp2024.com/">https://icp2024.com/</a>).

We anticipate activity arising out of the work of the Working Group on Equality in Science will include Webinars and a survey of membership.

All material from SCGES is disseminated widely to our National Members, Regional Members and Affiliates

#### Research activity about gender equality or women in science

IUPsyS does not conduct research; however, gender, and related issues, is a main focus in psychology research and our International Journal of Psychology (IJP) regularly publishes work on this.

As noted above, IUPsyS expects to survey our membership in the coming year.

## **International Union of Soil Sciences (IUSS)**

#### www.iuss.org

#### Representative and deputy representative

Representative: Laura Bertha Reyes Sánchez

Deputy representative: Lúcia Anjos

#### Relationship between the SCGES representatives and the officers of the union

Laura Bertha Reyes Sánchez is the current IUSS Past President 2023-2024. Lúcia Anjos is President of the Brazilian Soil Science Society.

#### Webpages dedicated to gender equality or women in science.

The IUSS does not have a webpage dedicated to gender equality. The IUSS has in their website a IUSS Notice of non-discrimination and DEI Policy: <a href="https://www.iuss.org/about-the-iuss/iuss-notice-of-non-discrimination-and-dei-policy/">https://www.iuss.org/about-the-iuss/iuss-notice-of-non-discrimination-and-dei-policy/</a>

# Existence of a structure for gender equality or women in science inside the union No.

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

Yes, 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 has a diversity, equity, and inclusion policy approved by our Council as part of the IUSS Strategic Plan 22021-2030.

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

- During the IUSS Centennial Celebration "Equity, diversity, and inclusivity in soil sciences" is a whole section.
- IUSS supported the Women's Global Breakfast in February 2023 and supported the organization of related events within its National Societies.
- For the IUSS Centenary in May 2024 six Sessions on Equity, diversity, and inclusivity in soil sciences are scheduled.

#### Research activity about gender equality or women in science

- \* Díaz-Raviña & Carucho, 2022. A Brief Analysis of the Contribution of Women to Soil Science. *Spanish Journal of Soil Science*. Published by Frontiers.
- \* Fiantis *et al.* 2022. The increasing role of Indonesian women in soil science: *Current & future challenges. Soil Security* 6
- \* Reyes-Sánchez, L. B and Irazoque, A. 2022. Reevaluating Diversity and the History of Women in Soil Science: A necessary step for a real change. *Span. J. Soil Sci.* 12: 10401. doi:10.3389/sjss.2022.10401

### Scientific Committee on Antarctic Research (SCAR)

www.scar.org

#### Representative and deputy representative

Representative: Renuka Badhe

Deputy Representative: 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 (LSG) of the SCAR Equality, Diversity and Inclusion Action Group (EDI AG), and have been nominated to serve as the SCAR EDI AG Contact points for the SCGES. 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: <a href="https://www.scar.org/antarctic-women/">https://www.scar.org/antarctic-women/</a> SCAR's EDI AG: <a href="https://www.scar.org/capacity-building/edi/home/">https://www.scar.org/capacity-building/edi/home/</a>

#### 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 SCAR EDI AG membership is currently at 150. SCAR EDI AG members are members of the SCAR community who have expressed an interest in being on the EDI AG mailing list and participating in select AG activities. The SCAR EDI AG is led by a Leadership Steering Group (LSG), which itself is led by a Chief Officer, a Deputy Chief Officer and a Secretary. The LSG, Chief Officers, and Secretary meet regularly (at least every other month) and carry out the AG's main activities.

SCAR also has actively supported events on gender equity through its Capacity Building, Education, & Training Advisory Group since 2016. Since before 2016, SCAR also has supported other organisations working on gender equity in polar research, such as Women in Polar Science (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\$10,000 per year).

#### Existence of explicit policies for gender equality

The SCAR EDI Action Group is working on policy recommendations for overall EDI issues within SCAR, including gender equality. The group has drafted a SCAR Code of Conduct (CoC), which is being reviewed and shared beyond the AG, including with EDI professionals. The CoC includes a glossary to help establish common understanding of the concepts and terms used. The CoC also includes a draft SCAR EDI statement, which will be further developed through community engagement activities. These documents will be reviewed regularly. The AG further is in the process of establishing a related reporting process.

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

Work is underway to prepare EDI-related events for the 2024 SCAR OSC, which will include the promotion of gender equality, including and beyond women in science, inside the union. This will build upon previous OSC activities since 2016. At the 2022 SCAR 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; 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. A paper is being drafted summarizing outcomes from the workshop and sessions, aiming for publication in 2024.

In July 2023, SCAR organized a webinar ("Gender equality and beyond in the polar sciences") as part of the SCGES webinar series, which highlighted a variety of challenges and opportunities related to gender equality and women in science within the overarching frame of EDI in polar research. Campaigns such as the "Women and Girls in Science Day" proposed by the United Nations also are supported by Antarctic-specific activities led by the AG.

SCAR strongly encourages the nomination of women in its Fellowships, Medals, and other awards, and has worked to increase the representation of women among recipients: for example, by amending the nominations process for SCAR Medals to improve the representation of women, which in 2022 resulted in an increase in the percentage of women receiving SCAR Medals (next Medals to be awarded in 2024).

#### Research activity about gender equality or women in science

In 2022, the SCAR EDI AG led the creation of a demographic survey for the SCAR community to be rolled out as part of the SCAR OSC 2022. The AG worked with the SCAR Secretariat and local organisers to develop and implement the survey as part of the OSC registration process. The initial survey was filled out by over 700 participants and covered questions concerning career stage, age, gender, nationality and race/ethnicity, as well as research background and participation level (presenter, co-author, etc.). All questions were voluntary and further responses were gathered in a post-conference poll. The AG will use this information both to gauge diversity and inclusion as it relates to the OSC, including as related to gender, and to further refine survey methodology for future SCAR meetings. A report about the first outcomes of the survey is under preparation.

In early 2022, SCAR hired a consultant to analyze data related to SCAR funding and recognition schemes through an EDI (including gender) lens. Completed data analysis will be shared with the research community by SCAR's EDI AG through a peer-reviewed publication. Discussions have begun about continuing this research post-2022 with updated data.

Between 2021-22, a SCAR Fellow led an international collaboration focused on gender equality, which resulted in a peer-reviewed publication that is now in press.

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



Standing Committee for Gender Equality in Science, 2023















INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY































Report prepared by Catherine Jami, Sven Lidin, Marie-Françoise Roy and Carol Woodward along with representatives of partner unions