

**PUCP
MUN²⁰₁₉**

UNESCO - ESCOLAR

**PROMOTION
OF WOMEN
IN SCIENCE**



SINGLE DELEGATION

1. PERSONAL INTRODUCTION

Dear delegates,

Welcome to PUCPMUN 2019 !

My name is Xiomara Basurco Del Castillo, I am 18 years old and I study Law at Universidad Peruana de Ciencias Aplicadas. I started doing MUN in 2016, my experience has led me to realize the importance of promoting this activity in our world because of the incredible number of benefits and opportunities it offers. I have had the pleasure of being chairman's on several occasions, both in schools and universities, and I always took pleasant moments and good experiences. Undoubtedly, this committee will be one more to remember. That is why it is an honor to announce that this year I have the privilege of being its director on the UNESCO committee. The topic for this edition is one of the most important we considered because is well known that women roles and the importance of them are being defended nowadays, in contrast of the past, when women had not value for the humanity. Thanks to persistence and struggles, we have been able to develop and leave behind the gender gap in many aspects. However, there is still much to be done, so I hope that during these days I can observe how conscious each of you is in this situation. I finish this little text by expressing how much I hope we can interact and have fun in this mun.

Wishes you successes,

Xiomara Basurco.

Dear Delegates,

Hello and welcome to the United Nations Educational, Scientific and Cultural Organization!

My name is Valeria Correa Fernández-Prada and I am thrilled to be your assistant director. Over the course of the PUCPMUN days, you will be discussing a incredibly complex and important topic that involves consideration of women and human rights. Considering the inequality and opportunities in our current world, particularly towards women in science.

For a little bit about myself, I am a third year at UPC in Management and International Business. In school, I participated for first time in a Model of United Nations, and nowadays I am part of the delegation of my university for second consecutive year. I have most recently participated at the HNMUN 2019 in Boston representing Pakistan.

The promotion of women in science has become an important topic, knowing the increase of the participation of women in many fields, taking into consideration the current world and the many advances in the search for gender equality. I hope to present you with interesting challenges and I have faith that this committee will take on these challenges with creative and innovation. I look forward to exploring these important topic together!

Sincerely,

Valeria Correa

Dear delegates

My name is Mauricio Jarufe and I am totally honoured to be your moderator at UNESCO in this conference. My history with MUN begins in 2016, when I first participated in Limun. Since then, I have been part of several conferences in both Arequipa and Lima, acquiring different accolades as Best Delegate, Outstanding Delegate or Best Delegation. In addition to this, I have joined several academic teams in conferences, assuming different roles in committees; for instance, I was the General Secretary of MOGAP 2018, a regional model with more than a 100 students participating. On the other hand, I have developed a unique taste in debate, in both the World Schools format and the British Parliamentary one. I was part of the Peruvian Association of Debate, with whom I participated at the Harvard Invitational 2018. Nowadays, I am an active member at Sociedad de Debate PUCP, with whom I won the TOÑO 2019.

I believe this committee will be a once in a lifetime opportunity to discuss an extremely relevant topic, which will probably define the course of scientific and cultural endeavours in the years to come. Advocating for gender parity should be a must

2. TOPIC INTRODUCTION

Science and gender equality are vital for sustainable development. However, women and girls continued to be excluded from participating fully in science: less than 30% of researchers worldwide are women.

Addressing some of the greatest challenges of the Agenda for Sustainable Development, from improving health to combating climate change, will be based on taking advantage of all the talent. That means getting more women to work in these fields. Diversity in research expands the group of talented researchers, bringing new perspectives, talent and creativity. That is why the United Nations is promoting global efforts to inspire and involve women and girls in science. For example, through the STEM project and gender advancement (SAGA), UNESCO aims to contribute to improving the situation of women and reducing the gender gap in the fields of science, technology, engineering and mathematics (STEM) in all countries at all levels. of education and research.

In order to promote access and full and equal participation in science for women and girls, the International Day of Women and Girls in Science, which is celebrated every year on February 11, was adopted by the Assembly. General of the United Nations. This Day is a reminder that women and girls play a fundamental role in science and technology communities and that their participation must be strengthened. The celebration is led by UNESCO and UN-Women, in collaboration with institutions and civil society partners that promote access and participation of women and girls in science.

3. DEFINITION OF THE TOPIC

UNESCO's Natural Sciences Sector works towards providing strong role models for women and girls in science throughout the world, building capacities of women in STEM, as well as supporting and promoting the contributions of women to scientific knowledge generation and dissemination to advance sustainable development. For instance, since its creation in 1998, the UNESCO-L'Oréal For Women in Science (FWIS) partnership continues to be an outstanding vehicle to celebrate role models from all over the world and to support and inspire women and girls to engage in and pursue scientific careers, while networks such as the Organization for Women in Science for the Developing World (OWSD) serve to strengthen dialogue and lessons learned among women in science.

The STEM and Gender Advancement project (SAGA) also aims to contribute to reducing the gender gap in STEM fields in all countries at all levels of education and research, by determining, measuring and assessing sex-disaggregated data, as well as undertaking an inventory of policy instruments that affect gender equality in STEM, in order to generate new and improve indicators to support future evidence-based policy making.

Gender in science, innovation, technology and engineering (GenderInSITE) is an international initiative to promote the role of women in science, innovation, technology and engineering, and to demonstrate how applying a gender lens to SITE can provide deeper insights, more effective programmes and more sustainable outcomes in the context of development.

In addition, the Sector works to promote women's participation in high-level processes shaping the science agenda and science policies, thus ensuring that the unique perspectives of women scientists and women knowledge holders are incorporated into solutions to the various challenges – such as climate change, biodiversity loss, freshwater management, health of the oceans, developing green industries and societies – of advancing sustainable and equitable development.

Finally, the Sector aims to mainstream gender in all its activities, working groups, committees and programmes.

4. THE CURRENT SITUATION

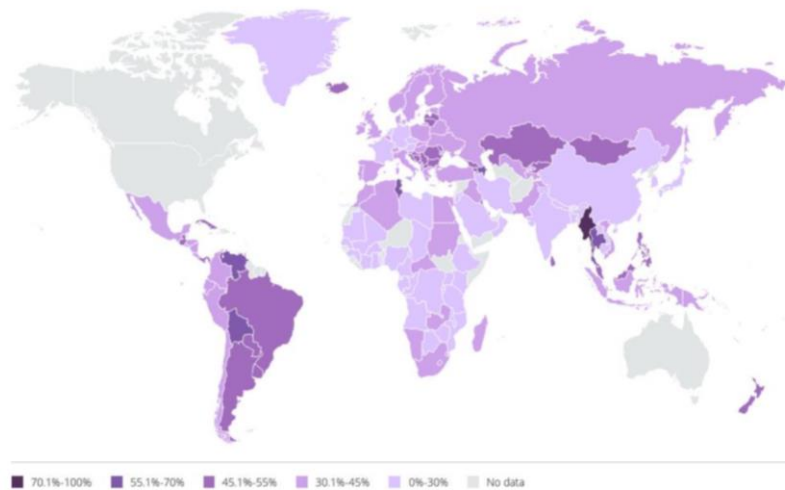
A woman pharmaceutical chemist wins the Nobel Prize for research on anti-malarial compounds that improve the health of millions. Women and girls in STEM are creators, entrepreneurs, innovators and leaders. They're tackling some of the most pressing global challenges head-on, but, across the field, their participation remains relatively low. Why?

In recent years, the number of women involved in science has significantly increased. However, although there are encouraging signs, women are still under-represented in science. For this reason, UNESCO's Natural Sciences Sector works towards providing strong role models for women and girls in science throughout the world, building capacities of women in STEM, as well as supporting and promoting the contributions of women to scientific knowledge generation and dissemination to advance sustainable development. Socioeconomic factors and gender-based discrimination still prevent girls and women from accessing equal opportunities to complete and benefit from an education of their choice.

Just 30% of the world's researchers are women. While a growing number of women are enrolling in university, many opt out at the highest levels required for a research career. But a closer look at the data reveals some surprising exceptions. For example, in Bolivia, women account for 63% researchers, compared to France with a rate of 26% or Ethiopia at 8%.

Figure 1. The gender gap in science

Women as a share of total researchers, 2016 or latest year available



Notes: Data in this map are based on headcounts (HC), except for Congo, India and Israel which are based on full-time equivalents (FTE). Data for China are based on total R&D personnel instead of researchers. Data for Brazil are based on estimations.

Source: UNESCO Institute for Statistics, June 2018.

By the other hand, the vast majority of data are presented in headcounts (HC), which are the total number of persons employed in R&D. This includes staff employed both full-time and part-time. The regional averages for the share of female researchers (based on available data only) for 2015 are:

- 28.8% for World
- 39.8% for Arab States
- 39.5% for Central and Eastern Europe
- 48.1% for Central Asia
- 23.4% for East Asia and the Pacific
- 45.4% for Latin America and the Caribbean
- 32.3% for North America and Western Europe
- 18.5% for South and West Asia
- 31.3% for Sub-Saharan Africa

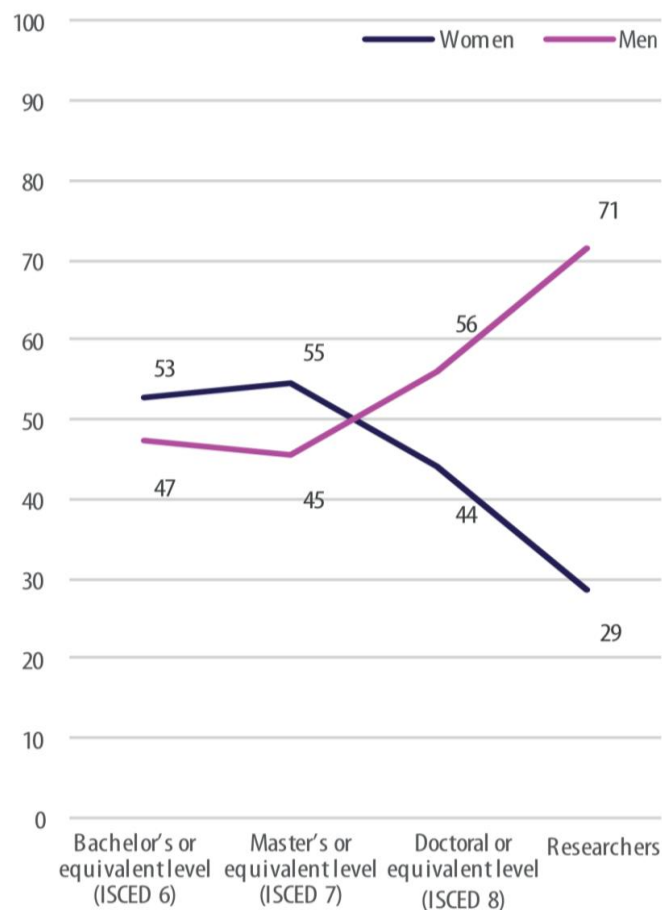
Gender equality in STEM is not only a matter of fairness, or a basic human right. In fact, the untapped potential of brilliant girls and women who might be interested in STEM but choose not to pursue degrees or careers in these fields because of the various obstacles they may face, represents an important lost opportunity, both for women themselves as well as for the society as a whole. Gender equality should therefore be considered as a crucial means to promote scientific and technological excellence.

On the whole, women constitute a minority in the research world. They also tend to have more limited access to funding than men and to be less represented in prestigious universities and among senior faculty, which puts them at a further disadvantage in high-impact publishing.

The regions with the highest shares of women researchers are Southeast Europe (49%), the Caribbean, Central Asia and Latin America (44%). Sub-Saharan Africa counts 30% women and South Asia 17%. Southeast Asia presents a contrasting picture, with women representing 52% of researchers in the Philippines and Thailand, for instance, but only 14% in Japan and 18% in the Republic of Korea.

In addition, eighty per cent of engineering and 60% of physical science Bachelor's degrees in the US were awarded to men in 1999–2000. At the Ph.D. level 84% of engineering degrees and 75% of the physical science degrees went to men. Even in biology, where 58% of the Bachelor's degrees were awarded to women, 56% of the Ph.D.s went to men.

Figure 3. Proportion of women and men graduates in tertiary education by programme level and those employed as researchers, 2014



Source: UNESCO Institute for Statistics (UIS)

In order to promote the equality, the United Nations is driving global efforts to inspire and engage women and girls in science. For instance, through the STEM and Gender Advancement (SAGA) project, UNESCO aims to contribute to improving the situation of women and reducing the gender gap in science, technology, engineering and mathematics (STEM) fields in all countries at all levels of education and research. Although, the World Meteorological

Organisation (WMO) encourages more women to become meteorologists, hydrologists, climate scientists and oceanographers and nurtures leadership talent through dedicated training workshops and conferences.

Each year, the For Women in Science Programme highlights scientific excellence and encourages talent through:

- The L'Oréal-UNESCO For Women in Science Awards, given each year to five outstanding women scientists – one per continent – for the contributions of their research, the strength of their commitments and their impact on society.
- The UNESCO-L'Oréal International Rising Talents. Granted annually 15 promising young women scientists, at the doctoral or post-doctoral level, they encourage international scientific cooperation and the development of cross-cultural networks.
- The L'Oréal National Fellowships with the support of the UNESCO National Commissions, which anchor the For Women in Science programmes in countries around the world, while respecting their particularities and specific needs.

In its aim to promote and encourage women throughout their scientific careers, the For Women in Science partnership has also developed a global network of International, Regional and National Fellowship programmes aimed at supporting young women who represent the future of science. To date, Fellowships have been granted to more than 3,100 women in over 115 countries, permitting them to pursue their research in institutions at home or abroad. The programme has become a benchmark of scientific excellence on an international scale. It brings visibility to outstanding women scientists and thus provides strong role models to girls and young women considering science careers.

5. PAST ACTIONS

In 1995 at the World Conference on Women and, again, in 1999 at the World Conference on Science for the Twenty-first Century: a New Commitment, the United Nations called for sex-disaggregated data in all areas of development, including in science and technology. For instance, since its creation in 1998, the UNESCO-L'Oréal For Women in Science partnership continues to be an outstanding vehicle to celebrate role models from all over the world and to support and inspire women and girls to engage in and pursue scientific careers, while networks such as the Organization for Women in Science for the Developing World serve to strengthen dialogue and lessons learned among women in science.

In order to achieve full and equal access to and participation in science for women and girls, and further achieve gender equality and the empowerment of women and girls, the United Nations General Assembly adopted resolution A/RES/70/212 declaring 11 February as the International Day of Women and Girls in Science.

A number of countries have put policies in place to foster gender equality. Three examples are Germany, where the coalition agreement of 2013 introduced a 30% quota for women on

company boards of directors, Japan, where the selection criteria for most large university grants now take into account the proportion of women among teaching staff and researchers, and the Republic of Congo, which established a Ministry for the Promotion of Women and Integration of Women in National Development in 2012.

Canada: Chairs for Women in Science and Engineering in Canada

This programme has been in place since 1996, the goal of this programme is to increase the participation of women in science and engineering and to provide role models for women active in and considering careers in these fields. The actions taken by these programme was: Encourage female students in elementary and secondary schools to considers careers in science and engineering, increase the enrolment of women in undergraduate and graduate programmes in science in all Canadian universities and colleges, increase the profile retention rate of women in science positions.

Germany: Coaching and mentoring programmes in Germany

To promote career strategies for women in Germany academia in 2001, the Centre of Excellence of Women and Science (CEWS) started the programme “Anstoß zum Aufstieg”, supported by the Federal Ministry of Education and Research and sponsored via a public-private partnership by the L'Oréal Group, Germany. The programme dealt with the specific aspects of the working situation of women scientist at universities, the aim being to optimise their career planning, their networking and their individual strategies in the application procedure and appointment negotiations.

The Dutch Aspatian Programme

This programme was started in 1999, which aim is intended to encourage the promotion of female scientists to higher university positions where women are strongly underrepresented at present. For female scientists who were evaluated as very good or excellent after the selection interview for Vidi or Vici but were not awarded a grant, universities may also receive a grant under certain conditions if they promote these candidates to either an associate or full professorship. The Aspatia programme was established by the Ministry of Education, Culture and Science, the Association of Universities in the Netherlands and NWO.

Kenya: Empowering girls through mentoring in STEM for informed career choices

Since 2014, annual Scientific Camps of Excellence for Mentoring Girls in Science, Technology, Engineering, and Mathematics (STEM) are organized by the UNESCO Nairobi Office, together with the Government of Kenya, the National Commission for Science, Technology and Innovation, and the University of Nairobi organize annual Scientific Camps of Excellence for Mentoring Girls in Science, Technology, Engineering, and Mathematics (STEM). These one week long camps involve career choice discussions, life skills mentoring, experience-sharing with STEM university students, science experiments, and industry visits. By mid-2015, more than 400 high school girls, from all over the country, had the opportunity to participate in the project.

In addition, UNESCO assists through the SAGA project Member States around the world by:

- building capacity for the collection of data on gender in STI;
- improving the measurement and evaluation of the situation of women and girls in STI;
- identifying gaps in the policy mix and improving national STI policies related to gender

In order to strengthen and focus UNESCO's work in support of gender equality in STI, The STEM and Gender Advancement (SAGA) project was launched in 2015. SAGA's main objective is to offer governments and policymakers a variety of tools to help reduce the current global gender gap in STI fields existing at all levels of education and research. By reaching this objective, the SAGA project will contribute to increase the visibility, participation and recognition of women's contributions in STEM.

6. COUNTRIES INVOLVED / BLOC POSITIONS

European Union:

The EU has established several initiatives

The US and main allies

Arab Countries

Latin America

Eurasian allies (Russia, China, etc.)

Africa

Other states

7. QUESTIONS ALL RESOLUTIONS MUST ANSWER(QARMAS)

1: Women's contributions to the current scientific improvements. To what extent were they significant? Which factors promoted this situation?

2: The presence of women in scientific innovation industries in developed countries. Has gender parity been achieved? Which factors have contributed to this?

3: The presence of women in scientific innovation industries in underdeveloped (third world) countries. How abundant it is? Which factors hinder its development?

4: Imposed measures to promote female presence in scientific industries. Is it legit to establish a gender quota or to forbid the hiring of male workers?

5: What are the main features that distinguish the women's presence in science from their participation in other industries?

6: Which objectives should be taken into consideration for the upcoming decades of female participation in science?

7: What should be the main role of UNESCO in this situation and which measures should this organization endorse?