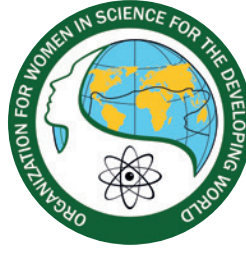


OWSD Annual Report 2024

ORGANIZATION FOR WOMEN IN SCIENCE
FOR THE DEVELOPING WORLD







2023 OWSD Early Career Fellow Eva Dora da Cruz João, researcher at the Manhica Health Research Centre in Mozambique, at the OWSD Early Career Fellowship Orientation Workshop in Trieste, Italy, April 2024. Her project investigates how environmental enteropathy biomarkers affect children's response to the oral Rotarix® vaccine in rural Mozambique, with the goal of improving vaccine efficacy and child health outcomes.

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**ORGANIZATION FOR
WOMEN IN SCIENCE FOR
THE DEVELOPING WORLD (OWSD)
Annual Report 2024**

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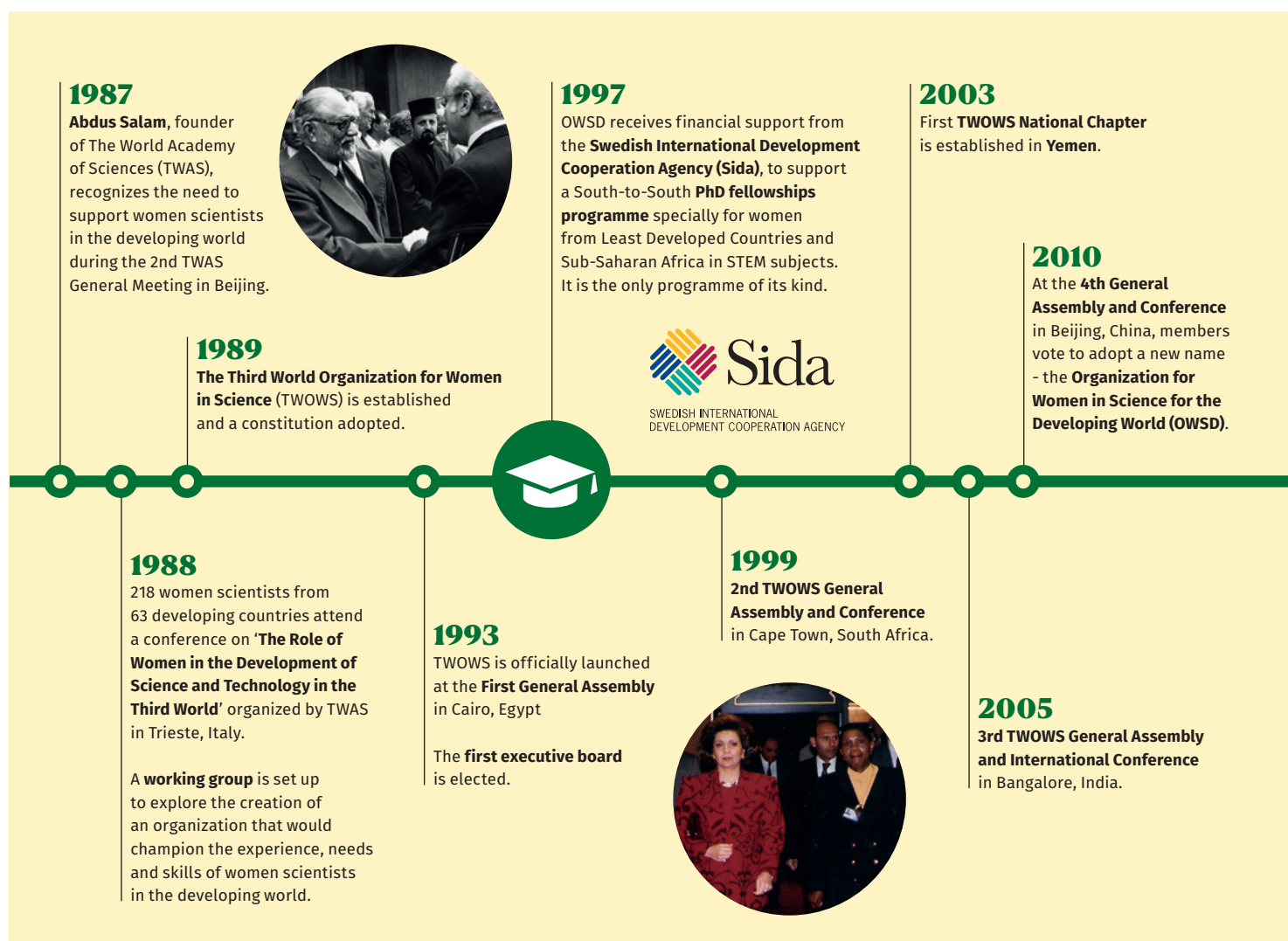
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ABOUT OWSD

The **mission** of the Organization for Women in Science for the Developing World (OWSD) is to promote and strengthen the role of women scientists from the Global South in science and technology. We aspire to achieve this by empowering women through training and networking opportunities, supporting their research and leadership throughout their careers, and advocating for gender equality in science and technology. We envision a future where women scientists are agents of change in their communities, driving progress towards the achievement of the United Nations Sustainable Development Goals.



SUSTAINABLE DEVELOPMENT GOALS



OWSD members' research covers all of the **17 SDGs**. The organization's programmes and strategy are currently focused on **SDG 4** Quality Education, **SDG 5** Gender Equality, **SDG 9** Industry, Innovation and Infrastructure, **SDG 10** Reduced Inequalities and **SDG 17** Partnership for the Goals. In addition in 2024 OWSD awards were focused on **SDG 6** Clean Water and Sanitation.



Women. Science. Development.

2012-16

Sida increases funding to hire a Coordinator and more staff to be based at the **OWSD Secretariat in Trieste**. The number of PhD fellowships is increased, including funds to attend international conferences.

In 2012 the **OWSD annual awards** (funded by the Elsevier Foundation) are re-launched and a special awards ceremony takes place at the annual AAAS meeting in 2013.

THE ELSEVIER
FOUNDATION

2021-2026

Sida and IDRC sign a new 5-year agreement to continue jointly funding OWSD's programmes, including National Chapter support and institutional engagement.

In 2021 **6th OWSD General Assembly and Conference** is held entirely online, hosted by OWSD Secretariat, Trieste, Italy.

2023

OWSD Membership reaches 10,000.

New Masters programme for displaced women scientists (OWSD WISDOM) is established and presented at the Global Refugee Forum in December 2024 in partnership with **UNHCR** and **Hashemite University**, Jordan.



2016

5th General Assembly and International Conference in Kuwait City, Kuwait.



2017-2021

The **Canadian International Development Research Centre (IDRC)** joins forces with Sida to sign a new project agreement, including the **Early Careers Fellowship** programme.

2022

Dominican Republic becomes the **50th OWSD National Chapter**.

The **Aspen Institute Italia**, supports the Early Career fellowships programme.



2024

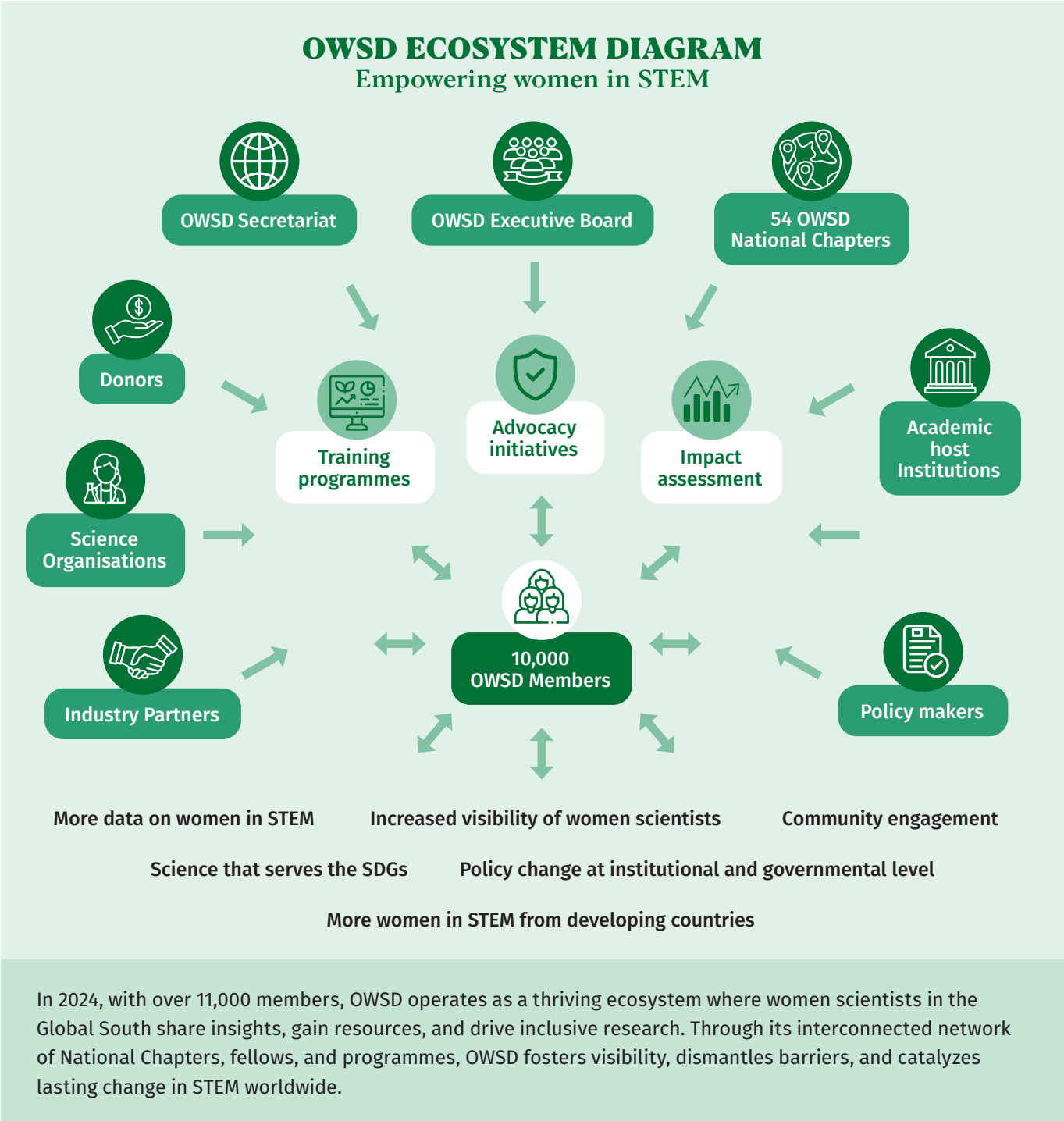
Launched in partnership with **Hashemite University** (Jordan) and **Istanbul Aydin University** (Türkiye), the **WISDOM programme** welcomed its first two cohorts of refugee women scientists.

From individuals to institutions: how OWSD amplifies women scientists’ impact on global development

In 2024, UNESCO issued a “Call to Action: Closing the Gender Gap in Science” highlighting key priorities to empower and

encourage individual girls and women to pursue careers in science, technology, engineering, and mathematics (STEM) by **dismantling the systemic barriers** that persist even when women overcome stereotypes and thrive in STEM. OWSD shows how investing in **individual women scientists**

can trigger broad institutional and societal changes, especially in under-resourced regions. Since 1987, OWSD has provided a range of opportunities—PhD fellowships, master’s scholarships, early-career grants, and awards for scientific excellence as well as nationally available resources



and opportunities—to thousands of women from Scientifically and Technologically Lagging Countries (STLCs). Rather than focusing exclusively on academic credentials, **OWSD invests in researchers who are also committed to transforming their local contexts.** This strategy extends the impact well beyond an individual’s career, as OWSD members regularly become **role models and innovators**, influencing everything from institutional research priorities to national STEM policies. OWSD’s added value lies in **linking individual empowerment with institutional reform.** Through national chapters in 57 countries (and counting), local women scientists have forged enduring **networks for advocacy, mentoring, and fundraising.** The chapters serve as a bridge between individual fellows and broader national priorities. For example, chapter members collaborate with science granting councils to shape research funding criteria in ways that explicitly promote women’s involvement and leadership. More recently, OWSD has pioneered a **“capacity plus” fellowship model**, illustrated by the new master’s scholarship

Why focus on women in STEM?

Women bring critical perspectives based on their roles as caregivers, community leaders, and frontline responders to crises like water scarcity and food insecurity. Historically, research that overlooks women’s experiences can yield dangerous oversights—such as seatbelts not designed to protect pregnant women or heart-attack symptoms measured only for men. By empowering women in STEM, OWSD helps fill these knowledge gaps and ensures that scientific discoveries truly serve everyone.

program for displaced women scientists in Jordan and Turkey. This initiative includes support not only for individual scholars but also for host universities, helping them adapt curricula, build strong mentorship structures, and address gender-specific needs. The goal is to ensure that these institutions become **sustainable hubs of inclusive research**, long after the individual scholarships end.



CLICK OR SCAN

TO DISCOVER MORE ABOUT
OWSD IMPACT



“For me, science is not just about what it can do today, but how it will shape the type of just and prosperous world that I would like our future generations to thrive in.”

Prativa Pandey, 2019 OWSD Early Career Fellow, Nepal

A sustainable vision for women and science

Investing in one woman scientist’s career may seem like a small step when confronting the global gender gap in STEM. Yet experience shows that such investment can spark changes that ripple through universities, national ministries, and entire scientific fields. **OWSD’s multi-layered approach**—fellowships, awards, national chapters, and robust institutional partnerships—proves that **when women scientists thrive, they bring entire communities forward with them.**

As OWSD’s impact studies reveal, supporting talented women in STEM delivers far-reaching returns: **stronger national research agendas, policies that address real-world challenges, and more inclusive educational pathways that inspire girls to “dream big”.** By amplifying individual success into collective change, OWSD demonstrates a practical, scalable solution to the persistent underrepresentation of women in STEM—one that directly contributes to sustainable development, gender equity, and global well-being.

OWSD Structure

The OWSD structure ripples outwards in concentric circles. OWSD **members** establish **National Chapters** and organize events and activities. They disseminate information about OWSD opportunities and share hands-on experience, reaching girls and young women even in the remotest areas of the least-resourced countries. **Alumnae** from OWSD fellowship and awards programmes join National Chapters, share their journeys as PhD fellows, Early Career fellows, or award winners, encourage other members to apply and often assist in the application process. Each chapter has an elected

national executive committee (including a chair, vice-chair, secretary, and treasurer), who serve on a voluntary basis. The chair provides an annual report of activities to the relevant regional representative of the OWSD **Executive Board** (EB), who then reports to the EB annual meeting. The **OWSD Secretariat** sends out annual report templates, gathers and analyzes data, and uses this feedback to adapt OWSD programmes, ensuring their relevance and effectiveness. Serving on the executive committee of a National Chapter provides members with leadership and management experience. Executive committee members

often progress to become elected members of the Global Young Academy or national young academies, paving the way for election to national science academies. Some OWSD national chapter members have gone on to establish national academies in their countries. These environments offer contacts, networks, and opportunities to influence policy at various levels.

Executive Board

The OWSD Executive Board comprises the **President**, four **Vice Presidents** (one from each region: Africa; Asia; Arab countries; Latin America and the Caribbean), and four additional **Regional Members**. These board members serve as focal points for National Chapters, representing OWSD in international, regional, and national frameworks. They strive to enhance the organization’s visibility and representation, ensuring that the voice of OWSD is heard on a global stage. The executive board is elected by the global OWSD membership every four years, and since 2021, elections have been held online. Together, the ecosystem and structure of OWSD create a powerful platform for empowering women in science, driving positive change across the Global South, and fostering a global network of collaboration and support.



CLICK OR SCAN
TO KNOW MORE ABOUT OWSD
EXECUTIVE BOARD MEMBERS

2021-2025 OWSD EXECUTIVE BOARD

AFRICA



Olubukola Oluranti Babalola

**Vice President
for Africa**
Nigeria/South Africa



Fortunate Farirai

**Regional Member
for Africa**
Zimbabwe

ARAB REGION



Huda Basaleem

**Vice President
for the Arab Region**
Yemen



Shymaa Enany

**Regional Member
for the Arab Region**
Egypt

ASIA



Atya Kapley

**Vice President
for Asia**
India



Hasin Anupama Azhari

**Regional Member
for Asia**
Bangladesh

LAC



Kleinsy Bonilla

**Vice President
for LAC**
Guatemala



Patricia Castillo-Briceno

**Regional Member
for LAC**
Ecuador



Jennifer Thomson

President
South Africa

DESCRIPTION OF PROGRAMMES

OWSD offers programmes to support women scientists in developing countries throughout their careers in four key areas: community, mobility, capacity and visibility.

Community: Membership in the international OWSD network and National Chapters ensures access to information on opportunities and skill-building activities as well as direct participation in national events.

Mobility: South-to-South PhD Fellowships (active from 1998-2022) support women scientists from poorly resourced countries to travel to centres of excellence in developing countries to study STEM subjects. Since 2024, the new WISDOM programme provides master's scholarships for displaced women scientists

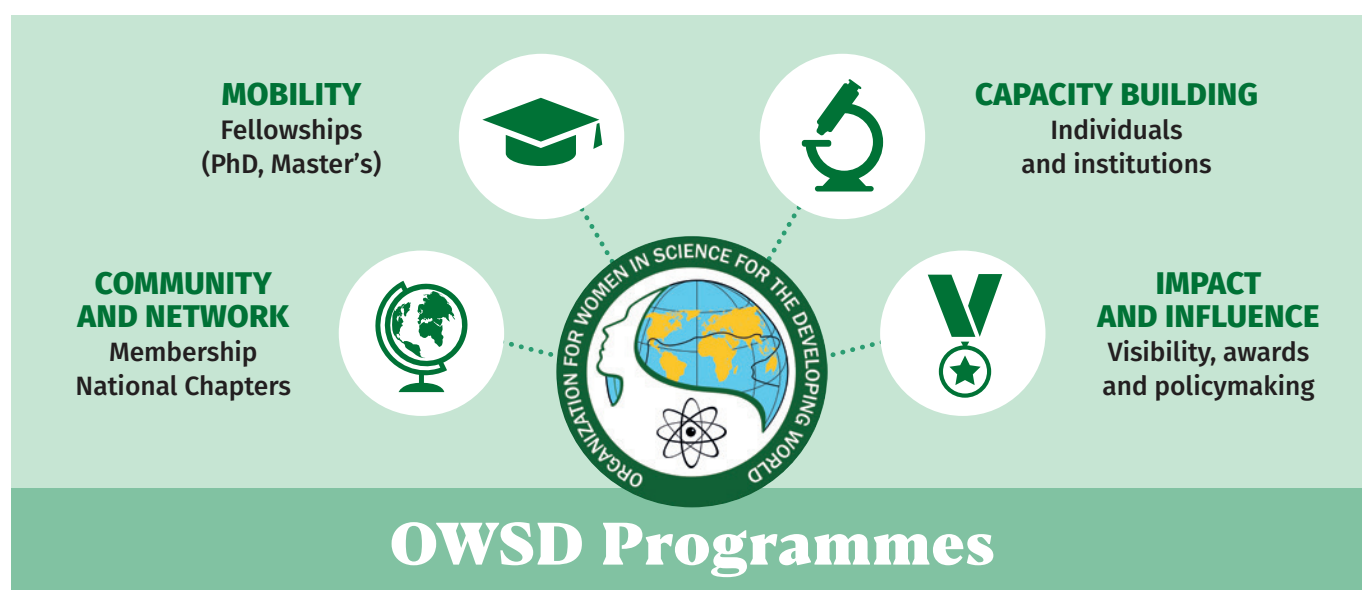
at host institutions in the Global South, offering a capacity-building component that equips the host institutes to better address the academic, social, and protection needs of displaced students.

Capacity: Grants for Early Career stage women scientists support research-related expenses in scientists' home countries with the aim of building international centres of research excellence, located in Science and Technology Lagging Countries (STLCs).

Visibility: Targeted awards recognise and celebrate the

achievements of women scientists from developing countries. OWSD also provides training and opportunities for women scientists from developing countries to showcase their research achievements through various kinds of scientific communications and outreach, including storytelling through film and podcasting. Raising the profile of excellent women scientists helps break down stereotypes and biases and increases the visibility and representation of women in science.

Each of these programmes also comes with a wealth of **training opportunities** which OWSD is developing and providing with key partners in the South. Women scientists attend conferences and seminars, develop skills, receive mentorship, and ultimately become leaders in their field while advocating for the inclusion of women's knowledge and needs in research projects.



2024 HIGHLIGHTS

The year 2024 was both demanding and forward-looking for OWSD, marked by financial constraints but also by meaningful progress in advocacy, programme expansion, and global visibility for women scientists across the Global South.

OWSD is steadily evolving into a leading international voice on the inclusion and retention of women scientists from developing countries in higher education and research. In 2024, the organization continued to position itself as an **influential advocacy and policy actor**, with active participation in high-level international and regional events.

Membership surpassed 10,000, and OWSD National Chapters

expanded to 57 countries—including three newly established chapters—reflecting a growing grassroots movement and an increasing demand for inclusive science worldwide.

One of the year's central milestones was the implementation of the first and second edition of the **Women in Science Displacement Outreach Master's programme (WISDOM)**. Building on the 2023 pilot in

Jordan, WISDOM welcomed its first two cohorts of refugee women scientists and extended its reach to Türkiye in 2024.

More than a scholarship initiative WISDOM reflects OWSD's new approach: investing in host institutions through tailored capacity-building that addresses structural gaps and supports the academic, social, and protection needs of displaced students. Planning is now underway to launch a third cohort in Uganda and this underscores OWSD's agility in responding to humanitarian crises through science.

This shift toward institutional impact was evident across several fronts. A **major survey of OWSD PhD alumnae** provided fresh insights into the long-term outcomes of fellowships, guiding programme adjustments

Early Career fellows from the 2019 and 2020 cohorts attending the **GAMECHANGERS workshop**, hosted by Kathmandu Institute of Applied Science (KIAS) in collaboration with Nepal-based OWSD Early Career fellows, alumnae and members.



IN 2024

1,424

New members
bringing the total
to **10,839**

3

**New National
Chapters**
bringing the total
to **57**



24

WISDOM Masters Fellows
(new programme)



15

Early Career fellows
bringing the total to 124



7

Early Career awardees
bringing the total to 69

and informing new fundraising strategies. In parallel, three National Chapters piloted **data-collection projects** to produce localized, evidence-based recommendations for national and regional science policies.

Even amid funding challenges, OWSD continued to modernize its communication and information management platforms, ensuring stronger engagement with its global network.

Capacity-building efforts reached new levels at the Early Career Fellows workshop, where OWSD introduced **gamification methods to foster leadership, research skills, and policy literacy**—preparing fellows not just as scientists, but as advocates

for systemic change. OWSD's convening role also grew through **regional partnerships**, including a collaboration with the Nepal Leadership Academy and a key



“In 2024, we saw the power of perseverance and purpose. Across regions and disciplines, women scientists rose not only as researchers, but as changemakers—transforming their institutions, communities, and futures. OWSD stands proudly with them, lighting the way toward a world where science includes every voice and serves every need.”

Jennifer Thomson, OWSD President

meeting with National Chapters in Santiago, Chile, strengthening coordination across Latin America and the Caribbean.

Continued engagement with **strategic partners** further amplified OWSD's influence. The organization deepened collaborations with the Italian Embassy to the African Union, UNESCO Chairs in Naples, and the World Women Science Forum in Rome. OWSD also held a prominent presence at the Trieste Next science exposition and engaged in strategic dialogue with representatives from the Friuli-Venezia Giulia Region, reinforcing its role within the broader Trieste Science System.

Visibility remained a central focus throughout 2024. Release of the new OWSD Visions films and a photo storyboard project brought powerful stories of resilience and innovation to the forefront, celebrating the impact of women scientists working in



2022 Early Career Fellows in Trieste, during the Orientation Workshop held in May 2023.

under-resourced contexts and showing how individual ingenuity combined with institutional support can drive meaningful change.

In summary, 2024 marked a pivotal shift for OWSD: from supporting individual scientists through fellowships and awards to a broader, more strategic engagement with the systems

that shape scientific research and inclusion. While funding limitations presented real challenges, OWSD's commitment to transformative, long-term change ensures a strong foundation for 2025 and beyond—**empowering women scientists to lead, innovate, and shape a more inclusive global research landscape.**



OWSD 2023 Early Career Fellow Helena Henry Maziku, Senior Lecturer at the University of Dar es Salaam, leads a workshop during the OWSD Early Career Fellowship Orientation in Trieste, April 2024. Her project harnesses artificial intelligence to assess cybersecurity risks in Tanzania's critical infrastructures—such as energy and health systems—aiming to strengthen resilience and improve access to advanced cybersecurity tools in developing countries.

COMMUNITY: OWSD MEMBERSHIP & NATIONAL CHAPTERS

OWSD's membership is the foundation of the organization, providing a much-needed sense of community for women scientists in the developing world who are often isolated; frequently the only woman in their department (especially in maths, physics or engineering) and sometimes the first female professor in the entire institute!

OWSD full members are women scientists living in developing countries who have a postgraduate degree in science subjects.

Affiliate members are at earlier stages in their careers, with undergraduate degrees only.

Friends of OWSD are women and men from developed and developing countries with at least an undergraduate degree.



Full Member

- Woman with a postgraduate degree in natural or social science subjects
- Living in developing countries

Includes

- Access to OWSD international network, mentoring and opportunities
- Membership of National Chapter
- Right to vote in OWSD General Assemblies



CLICK OR SCAN
TO BECOME A MEMBER



Affiliate Member

- Woman with a bachelor's degree in natural or social science subjects
- Living in developing countries

Includes

- Access to OWSD international network, mentoring and opportunities
- Membership of National Chapter



CLICK OR SCAN
TO BECOME A MEMBER



Friend of OWSD

- Woman or man with a bachelor's degree in any subject
- Living in developing or developed countries
- Committed to promoting the objectives of OWSD
- Can be invited by National Chapters to participate in events



CLICK OR SCAN
TO BECOME A FRIEND

IN 2024

10,839

Total active members

1,424

New members in 2024



>85%

Full members

(women with postgraduate degrees in science from developing countries)



15%

Affiliate members

(women with bachelor's degrees in science from developing countries)



46.7%

Members under 40 years old



113

Countries

in the Developing World from which members originate



75%

Total global coverage

(Members and Friends in 145 countries)



376

Friends of OWSD



OWSD members from Rwanda attended a successful training day on Data Analysis Software and Innovation. Female undergraduates from STEM disciplines were also invited to a Soft Skills training session.

In addition to the sense of community, OWSD membership offers access to a wide range of opportunities, such as training, travel, research visits, and funding, which are announced through international and regional OWSD mailing lists.



CLICK OR SCAN

IF YOU ARE INTERESTED IN CONTACTING ANY OWSD MEMBER

National Chapters

National Chapters are at the heart of OWSD's mission to enhance outcomes for women in science in developing countries. Any developing country with more than 20 members is eligible to apply to the OWSD Secretariat and Executive Board for National Chapter status and in 2024, OWSD proudly welcomed three new chapters: **Iraq in the Arab States, and Costa Rica and Cuba in Latin America and the Caribbean.**

New chapters are increasingly being established in smaller and more unstable countries. This trend demonstrates how OWSD is becoming a capillary network of women scientists across the Global South, extending its reach into diverse and challenging regions.

IN 2024

57

Total National Chapters

3

New National Chapters

2

New National Chapters from Latin America

(Costa Rica, Cuba)

1

New National Chapter from Arab States

(Iraq)



OWSD Benin NC hosted 30 women participants from diverse STEM fields at the International Institute of Tropical Agriculture (ITA-Benin), for a workshop designed to enhance essential skills and professional development for women in science.

However, this poses administrative and financial challenges, and the OWSD Secretariat has worked closely with the TWAS Finance Office throughout 2024, to improve coordination and streamline processes.

This year, there was also significant interest in establishing a new chapter in Ethiopia, along with initiatives to develop Country Networks in the United States and Italy, and these are all expected to come to fruition in 2025.

Following its call for applications in late 2023, the OWSD Secretariat provided a dedicated online workshop to assist National Chapters in strengthening their proposals, which resulted in **20 events** being successfully implemented. Funding per proposal was also doubled in 2024, and additional launch funding was made available to new National Chapters.

From 11 February (International Day of Women and Girls in

Science) to 8 March (International Women's Day), 22 National Chapters delivered activities to celebrate these important dates in the OWSD calendar. Chapters organized a vibrant array of events from seminars and conferences to webinars and science fairs. Many of these were funded through the 2023 call for applications, while others were autonomously organized by National Chapters in partnership with local institutions. This collaborative effort underscores the beauty of OWSD's network of **57 National Chapters worldwide**, each contributing to the advancement of women in science within their respective regions.

National Chapters Activities

In 2024, OWSD National Chapters delivered over 90 events and activities, supporting and engaging their local communities, and advancing women's participation

IN 2024

90+
Activities
organized

34

**Trainings
and Workshops**



10

Webinars

13

Outreach activities



3

**Specialist knowledge
for local communities**

12

**Celebrations
and launches**



3

**Advocacy activities
to influence policy makers**

10

**Conferences
and seminars**



5

Other activities



in STEM. Events included outreach activities, conferences, science talks, training sessions, and workshops. Leading these efforts were chapters such as **Pakistan**, which organized 6 significant activities, ranging from seminars and panels focusing on women in science, to conferences on disease control, and innovative research in remote areas. High profile events in the country included **She Leads in STEAM**, in Peshawar, and **The Impact of Artificial Intelligence in Shaping Women's Future: Contributions, Challenges and Opportunities** conference in Gilgit, which featured insights from experts across diverse fields, and attracted an enthusiastic audience of 350 students.

Similarly, the **OWSD Colombia** chapter organized more than 10 significant activities, delivering conferences on ocean protection and knowledge exchange frameworks for women scientists. The chapter also hosted an event for **International Day for Women and Girls in Science**, at Ean University, Bogota, where it celebrated OWSD Colombia's status as the second-largest chapter in Latin America and the Caribbean, with a growing membership that currently stands at 233.

Other notable activities were organized by **OWSD Rwanda**, which delivered employability workshops, targeting female undergraduates from STEM disciplines, to equip them with critical soft skills which complement their technical expertise. Meanwhile, **OWSD Myanmar** conducted small-scale mushroom cultivation workshops



for individuals in vulnerable communities. Participants received seed bags and technical training to promote the growth of nutrient-rich mushrooms for daily consumption.

OWSD Cameroon celebrated the scientific achievements of women and girls by hosting the **International Day of Girls in STEM**, involving 100 participants, and girls from 8 high schools were recognized for their scientific innovation. Laureates visited laboratories at the **National Advanced School of Engineering of Yaoundé (NASEY)**, and received financial support for their future projects. A further 7 female scientists were rewarded for their scientific excellence at the **International Fair for Young African Researchers (IFYAR)**. These events resulted in OWSD gaining valuable visibility through media coverage on Cameroon

Radio and Television (CRTV).

OWSD Guatemala had a dynamic year, hosting 6 diverse events in 2024 that engaged over a thousand participants and audience members. Highlights included virtual workshops addressing gender-based violence in digital spaces, 2 outreach campaigns, and a digital podcast series showcasing the contributions of Guatemalan women in science and featuring insightful interviews with researchers including OWSD vice-president for Latin America and Caribbean, Kleinsy Bonilla. The breadth and creativity of these initiatives reflect the energy and commitment of the OWSD National Chapters, demonstrating their ability to harness a variety of platforms and technologies to empower, support, and celebrate women scientists in their regions.

National Chapters contribute to Gender in STEM research and outreach initiative

OWSD National Chapters play a central role in driving local engagement and implementing initiatives tailored to regional needs. Leveraging their networks and institutional ties, they are crucial to OWSD's efforts to close gender gaps in STEM and advocate for policy reform. This includes data collection on cultural, social, economic, political, and academic barriers, and collaboration with families and schools to address them.

A key example is the **Gender in STEM research and outreach initiative**, launched in late 2023 in collaboration with three National Chapters, chosen based on strong activity records, communication capacity and national context. Unfortunately, however, Nepal had to withdraw due to governance issues. To support the project, OWSD engaged an

international consultant to develop a flexible, comparative methodology for data collection and mapping. Since then, Bolivia, Rwanda, and Zimbabwe have made substantial progress in gathering and analysing data on women in STEM.

In December 2024, an online meeting brought together representatives from all three chapters to align on goals, methods, and activities, laying the groundwork for comprehensive data gathering, stakeholder mapping, and policy analysis.

This initiative illustrates how National Chapters not only grow OWSD's network but also drive impactful, data-informed action to advance gender equity in STEM.



As part of OWSD's **Gender in STEM Research and Outreach Initiative**, the Rwanda National Chapter hosted a workshop at Kepler College in Kigali, celebrating women's contributions to technology and digital education and launching the STEM Star Program to mentor and empower undergraduate women in STEM fields.



Ménédore Karimumuryando, Chair of the **OWSD Burundi NC** interviewed on national television during the outreach event: Breaking Barriers: Promoting STEM Education for Girls in Fundamental Schools.

OWSD NATIONAL CHAPTERS






OWSD Bolivia awards women scientists at Empowering Voices: Showcasing Bolivian Women in Science seminar, in September.

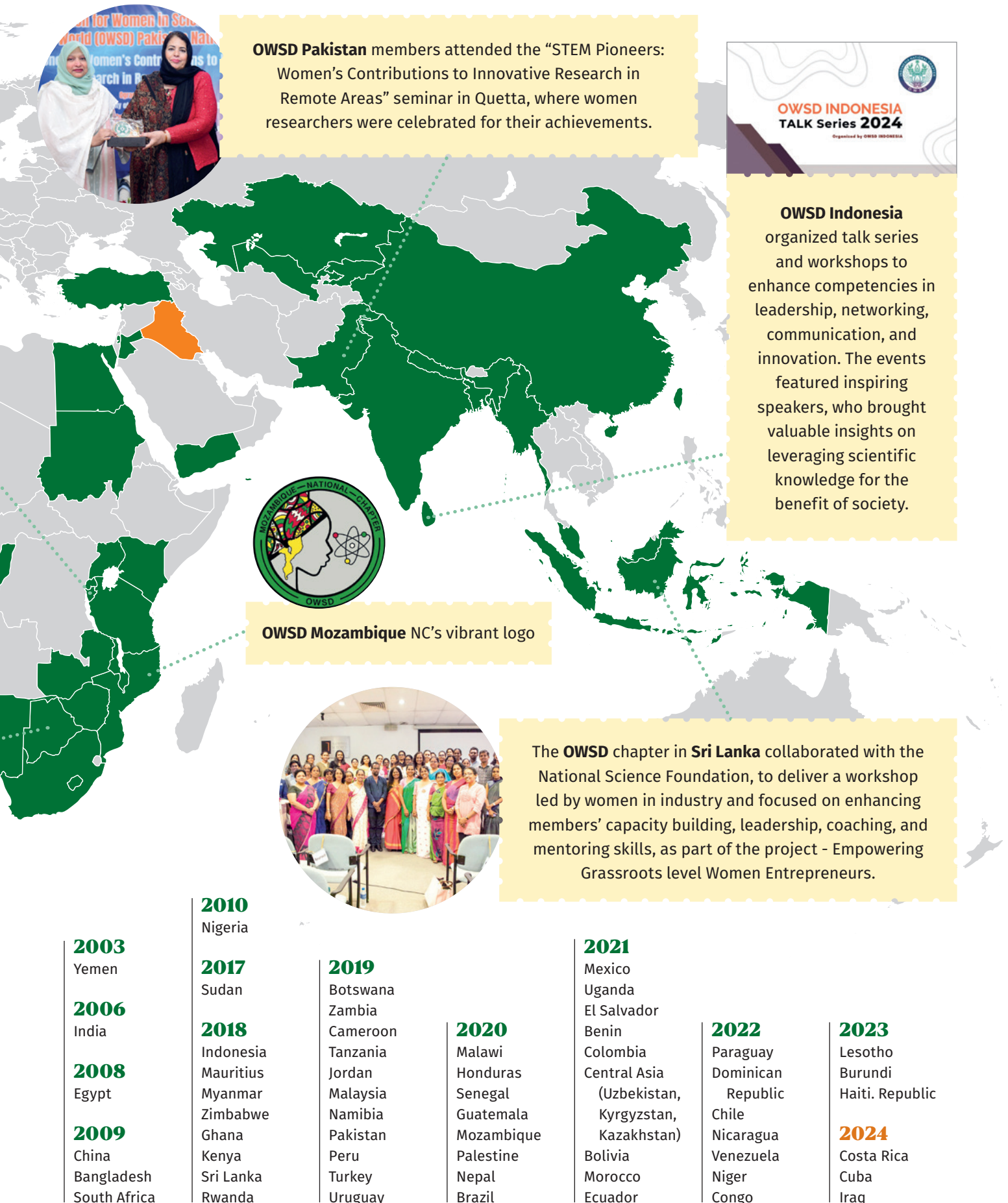


In December 2024, members of **OWSD Chile NC** mentored young innovators whose seawater desalination prototype won a regional award at a National Tv competition.



OWSD Botswana members organized a workshop entitled Promotion of the Gender Equity, Diversity and Inclusivity in Education, Research and Innovation.

-  Countries with National Chapters
-  Countries without National Chapters
-  Countries with National Chapters established in 2024



OWSD's First Regional Meeting of National Chapters in LAC

In April 2024, OWSD's Latin American and Caribbean (LAC) National Chapters held their first regional meeting in **Santiago, Chile**, hosted by the Instituto de Ecología y Biodiversidad (IEB). Leaders from **9 National Chapters** attended **in person** (from Bolivia, Guatemala, Ecuador, Haiti, Mexico, Paraguay, Brazil, Honduras and Chile), while representatives from Uruguay, Peru, Colombia, El Salvador, Venezuela, Nicaragua and Dominican Republic joined **online**. Chapters were able to share key data, activities, and explore synergies across the region. Discussions covered best practices in electing executive committees, especially valuable for newer or less active chapters to clarify administrative and membership procedures. A regional agenda was also developed, focusing on intersectorality, gender gaps in science, science diasporas, and Latin America's global leadership potential.

"Traditionally, LAC countries have advanced their science and technology policies in isolation, which is troublesome," said **Kleinsy Bonilla, OWSD Vice**



Selected **OWSD National Chapters'** representatives from the **LAC Region** at the ISC Global Knowledge Dialogue in Santiago, Chile.

President for the Latin America and Caribbean region. "Despite shared language, culture, and history, further cooperation is needed. The OWSD LAC family exemplifies this by fostering collaborations among members from different national chapters. The increasing collaboration within OWSD LAC is motivating."



OWSD National Chapter's representatives meet both online and in presence for the first OWSD LAC Regional Meeting.

The regional meeting concluded with several key agreements and follow-up actions. These included creating a permanent communication channel to foster interactions and collaborations among OWSD

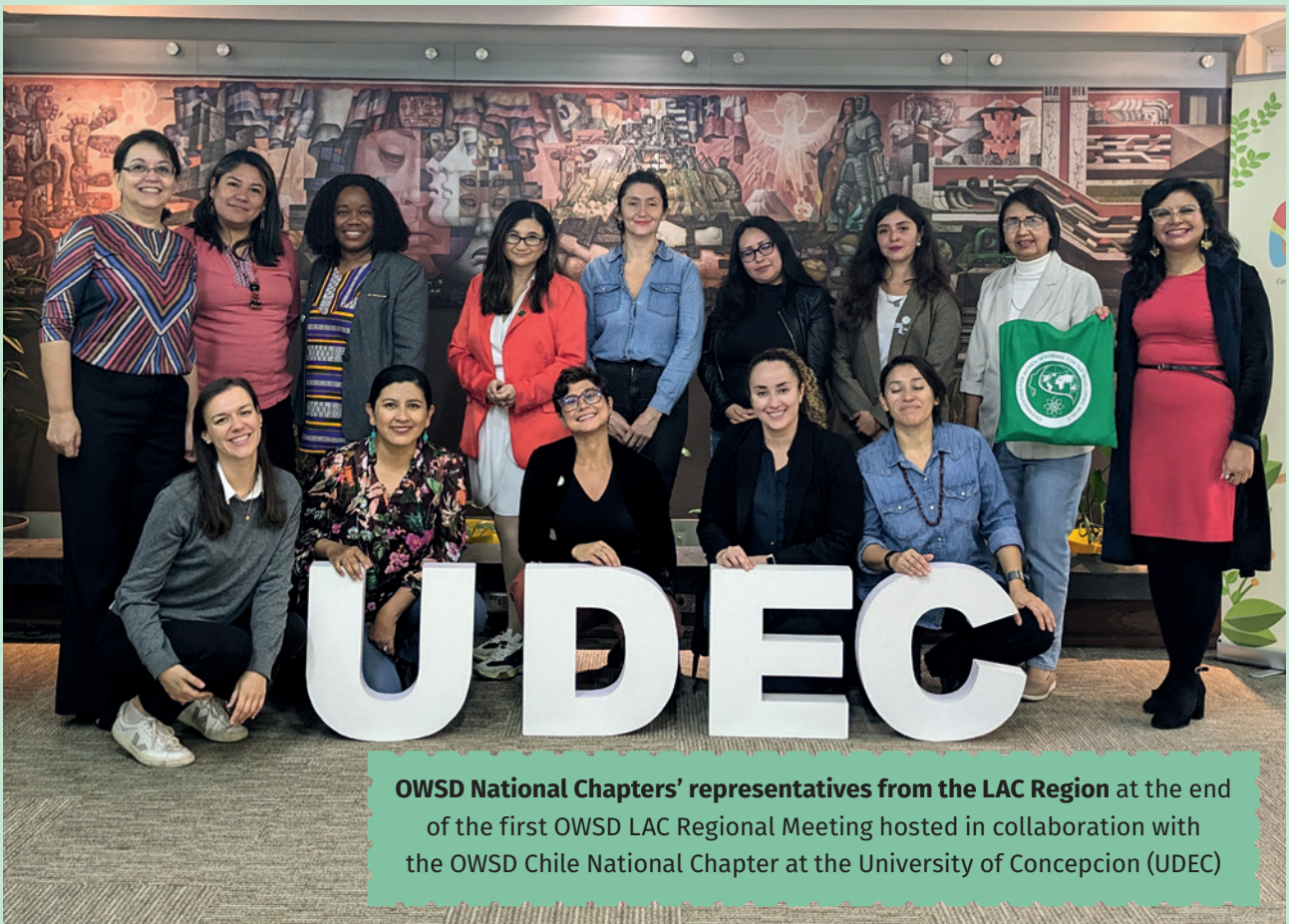
LAC National Chapters and Executive Committees, aiming to establish more National Chapters in LAC and promote a LAC country and National Chapter to host the OWSD General Assembly in 2025.

OWSD in LAC

OWSD has been working hard to improve the number and quality of women scientists in the Latin America & Caribbean (LAC) region. There are **16 National Chapters** already established in LAC and many organizing teams are preparing to establish chapters in their countries. Specific efforts are being devoted to strengthening OWSD communities in Central America, South America and the Caribbean. Since LAC countries first became eligible in 2015, four PhD fellowships have been awarded to women from Bolivia, Honduras, and Nicaragua. Six countries (Argentina, Brazil, Chile, Jamaica, Mexico, and Venezuela) have also hosted PhD fellows from 13 countries worldwide. Four Early Career fellowships

have also been awarded to women in Bolivia and Guatemala.

OWSD Vice President Kleinsy Bonilla, from Guatemala, exemplifies the leadership and vision driving the organization's mission in the region. The establishment of two new National Chapters in Costa Rica and Cuba in 2024 underscores the crucial role in facilitating networking opportunities, providing leadership skills training, and promoting the achievements of women scientists.



OWSD National Chapters' representatives from the LAC Region at the end of the first OWSD LAC Regional Meeting hosted in collaboration with the OWSD Chile National Chapter at the University of Concepcion (UDEEC)

MOBILITY: OWSD PHD FELLOWSHIPS AND OWSD WISDOM

For over 25 years, OWSD has championed South-to-South mobility, supporting women scientists to pursue opportunities abroad. This model has now been expanded to assist refugee scientists who have already been displaced, providing them with support and resources in their host countries across the Global South.

OWSD PhD Fellowships

With 406 graduates and a **retention rate** of nearly 90%, the OWSD PhD Fellowships programme remains one of the most impactful initiatives supporting women scientists from the Global South. Fellows continue to make significant contributions to research, innovation, and

institutional change in their home countries—demonstrating how long-term investment in individuals can catalyze broader systemic progress.

In 2024, 99 fellows remain active in the programme, and OWSD continues to provide tailored support to ensure their success.

“Flexible funding like this truly understands the realities women scientists face.”

Regina Nakiranda, 2021 PhD Fellow, used the support allowance to cover the travel and childcare costs of a family member who helped care for her baby while she completed her PhD. She later secured a postdoctoral fellowship at the Centre of Excellence in Nutrition at North-West University, South Africa.



PhD Fellowship

ELIGIBILITY

- Women in STEM with a master's degree
- Citizens from 66 eligible countries
- Study outside of home country in any developing country in the Global South

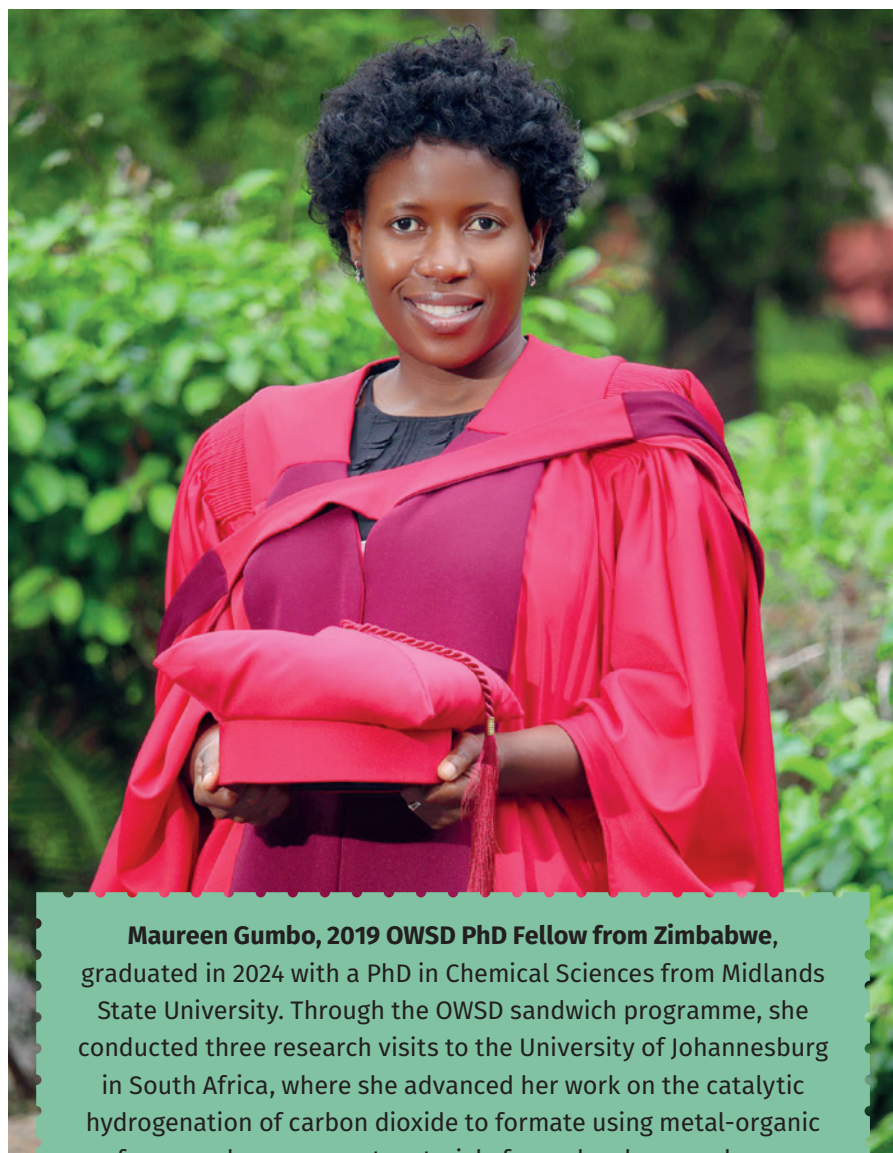
INCLUDES

- Monthly stipend, travel grant, tuition fees, support allowance

FUNDED BY

- Swedish International Development Cooperation Agency (SIDA)

Fourteen fellows received flexible **Support Allowances**, which helped them manage both research and personal needs—ranging from childcare and family travel to publication fees and connectivity costs. Regular engagement with fellows through progress reporting, coordination with host institutions, and communications support ensured that their academic journeys remained on track. While no new PhD fellowship call was issued in 2024 due to funding constraints, the



Maureen Gumbo, 2019 OWSD PhD Fellow from Zimbabwe, graduated in 2024 with a PhD in Chemical Sciences from Midlands State University. Through the OWSD sandwich programme, she conducted three research visits to the University of Johannesburg in South Africa, where she advanced her work on the catalytic hydrogenation of carbon dioxide to formate using metal-organic frameworks as support materials for molecular complexes.

Celebrating OWSD's 2024 PhD Graduates

Every year, we celebrate those OWSD PhD fellows who have recently graduated. These women leave their home countries to carry out either a full-time PhD programme or research visits at institutes abroad, often leaving behind family, friends, and jobs to pursue their passions. From an entomologist characterizing leishmaniasis-carrying sandflies in Sudan, to a food scientist from Ethiopia working to improve the stability of sesame oil, to an earth scientist studying the environmental impact of gold mining in Cameroon, they are already making big changes to a world that needs their vision, their ideas and their talent.



CLICK OR SCAN

TO GET TO KNOW ALL OWSD 2024 GRADUATES

IN 2024

17

New graduates

99

Active fellows

enrolled in ongoing PhD programmes
(64 full-time and 35 sandwich)

406

Total graduates

since the programme began in 1998

576

**Total Fellowships
awarded 1998-2023**

359 full-time and 217 sandwich

42,930

**USD disbursed
in Support Allowance**

programme's legacy and ongoing impact were a central focus. A major evaluation effort culminated in a comprehensive publication highlighting the career trajectories of alumnae, as well as their influence on research priorities, leadership structures, and gender policies in their institutions. These insights are shaping OWSD's future strategy—informing a potential relaunch of the fellowship programme that builds on proven successes while aligning with OWSD's growing focus on institutional transformation.



Pascaline Sanga, 2021 OWSD PhD Fellow from Rwanda, pictured at her graduation ceremony in May 2024, earned her PhD in Chemical Science from the University of Chinese Academy of Sciences (UCAS). Her research focused on developing MXene-functionalized nanomaterials for the removal of toxic pollutants from water, contributing to advances in environmental remediation and analytical chemistry. UCAS, one of OWSD's longest-standing host institutions, has consistently provided exceptional academic support and waived tuition fees for OWSD fellows.

OWSD WISDOM

The OWSD WISDOM (**Women in Science Displacement Outreach Master's**) programme, launched in 2023 and expanded in 2024. WISDOM is OWSD's newest initiative and a timely response to one of the defining global challenges of our era: displacement. Rather than creating new pathways for mobility, WISDOM supports women scientists who are already displaced, having fled conflict or crisis and resettled in countries across the Global South. These women often face a difficult reality: while they may be safe, their education and careers have been put on indefinite hold. WISDOM addresses this gap by offering **fully funded Master's scholarships**, along with a supportive academic

environment that allows them to restart their scientific journeys and build a future. At the heart of WISDOM is a new model of South-South cooperation. OWSD works directly

with selected universities in host countries, such as Jordan and Türkiye, to co-develop a framework that not only supports the scholars but also strengthens the host institutions themselves. Each



10 OWSD Wisdom scholars signing their scholarship agreements at Hashemite University, Jordan

programme iteration includes a Capacity Building component to enhance the institution's ability to respond to gender-specific and protection-related needs, ensuring displaced students are met with inclusive policies, trained staff, and effective support systems. A Student Network Building component further empowers scholars by helping them prepare for life after graduation through mentorship, community engagement, and long-term planning. It also enables them to stay connected with one another, providing a supportive space to navigate challenges, share experiences, exchange knowledge, and foster a sense of belonging throughout their academic and professional journeys. In 2024, OWSD significantly expanded the WISDOM programme, supporting two full cohorts of displaced women scientists. Following the establishment of a partnership with **Hashemite University in Jordan** at the end of 2023, the **first cohort of 10 scholars**—primarily from Syria and Palestine—began their studies in early 2024.



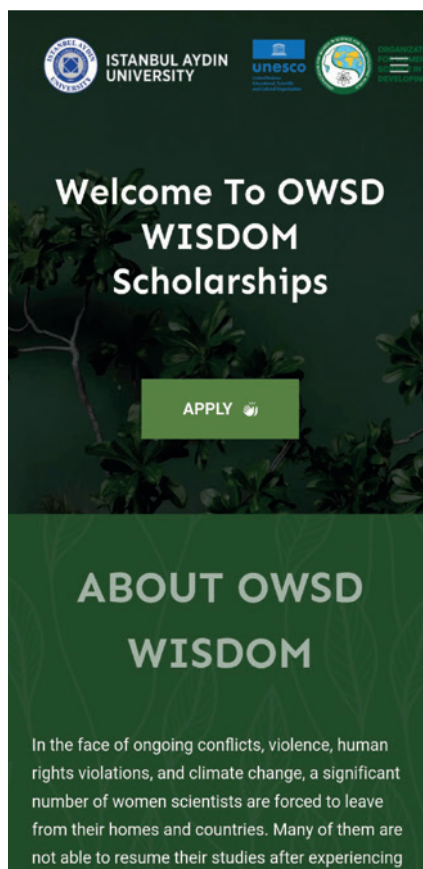
CLICK OR SCAN

TO VISIT THE DEDICATED PAGE ON ISTANBUL AYDIN UNIVERSITY'S WEBSITE SCHOLARS:

That same year, OWSD launched a **second iteration** of the programme at **Istanbul Aydin University** in Türkiye, awarding **14 scholarships** to women from Syria, Afghanistan, and Palestine. With each implementation, the programme has evolved and strengthened, notably through a shift in administrative



OWSD WISDOM Scholar
Noor Abubakr from Syria
is studying her Master's
Degree in Computer
Engineering at Istanbul
Aydin University, Türkiye.



WISDOM Master's Scholarship

ELIGIBILITY

- Women with undergraduate degree in a STEM field from 66 eligible countries
- Displaced, refugee, or asylum-seeking status in designated host countries
- Fulfilment of admission requirements at the host university

INCLUDES

- Monthly stipend, tuition fees, personal allowance, travel allowance, residence documentation costs, health insurance and language and orientation support from the host university
- Capacity building component for host institute tailored to gender and protection needs

FUNDED BY

- Swedish International Development Cooperation Agency (SIDA)

management: host institutions now take the lead in scholar selection and programme delivery, guided by Implementation Partner Agreements approved by UNESCO. This decentralized model enhances contextual responsiveness, fosters institutional ownership, and reinforces OWSD's commitment to South-South collaboration.



CLICK OR SCAN

TO VISIT THE DEDICATED PAGE ON ISTANBUL AYDIN UNIVERSITY'S WEBSITE

IN 2024

129

Eligible applications
received in Jordan

10

Scholarships awarded
at Hashemite University in Jordan

40

Eligible applications
received in Türkiye

14

Scholarships awarded
at Istanbul Aydin University
in Türkiye

24

Total scholarships
18 from Syria, 4 from Palestine,
and 2 from Afghanistan



The involvement of key partners such as the UN High Commissioner for Refugees (UNHCR), the Global Academic Interdisciplinary Network (GAIN), and the DAFI undergraduate scholarship programme has been essential in identifying eligible candidates and aligning the programme with local legal and logistical frameworks.

In late 2024, OWSD initiated a scoping process in Uganda, in collaboration with the UNHCR country office, to explore the

next potential host institute. This marks the beginning of a broader expansion that will allow WISDOM to reach more displaced women scientists—offering them not just scholarships, but structured opportunities to reclaim and grow their careers.

WISDOM recognizes a fundamental truth: **mobility is already happening**. In the face of conflict, climate change, and instability, people—especially women—move. OWSD’s role is to meet them where they are and

create meaningful opportunities for education and leadership. By investing in refugee women scientists and the institutions that host them, OWSD is building resilient bridges between displacement and possibility—turning crisis into opportunity, and mobility into empowerment.

CAPACITY: OWSD EARLY CAREER FELLOWSHIPS

OWSD builds scientific capacity in the Global South by supporting early career women scientists to lead high-impact research in their home institutions. These fellows are creating centres of excellence, mentoring future scientists, and driving institutional change—laying the foundation for stronger, more inclusive research systems.

Since its launch in 2018, the OWSD Early Career Fellowships programme has become a flagship initiative for building research capacity in low- and

middle-income countries. Each fellowship, valued at up to USD 50,000 over three years, enables women scientists to establish robust research activities,

develop laboratories, and build research groups that address critical development challenges. With enhanced components in science communication, advocacy, and policy engagement, the programme supports not only the fellows but also the institutional environments they help transform.

By the end of 2024, 124 fellows had been awarded through the programme: 57 have completed their fellowships, 62 are ongoing, and just 5 have dropped out—an **impressive retention rate** that reflects strong support structures

Early Career Fellowship

ELIGIBILITY

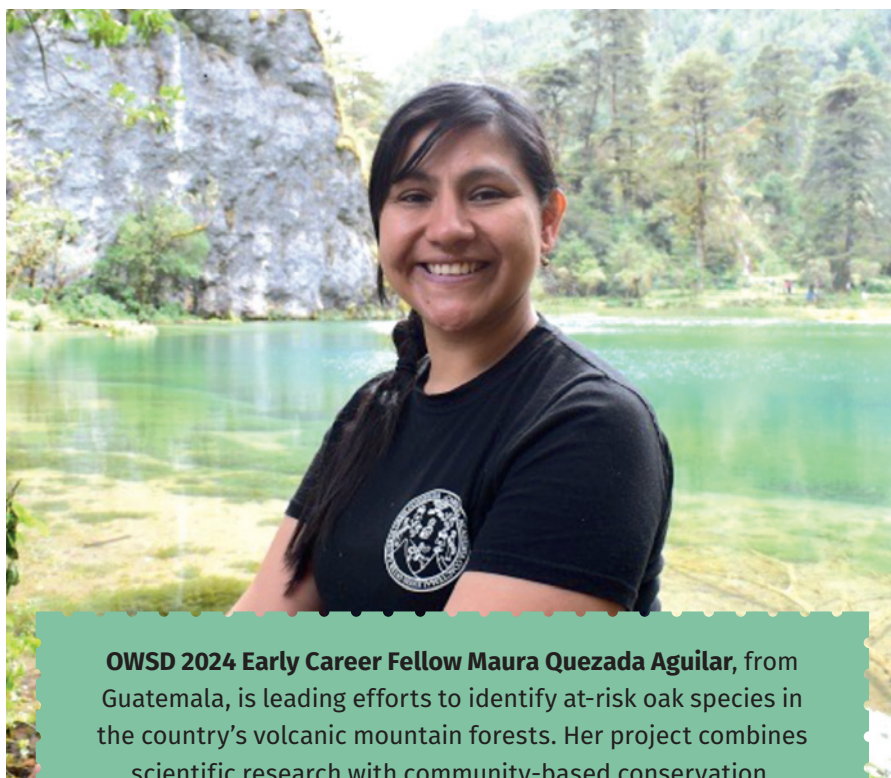
- Women in STEM with a PhD degree
- From 66 eligible countries
- Employed at a university or research institute in any of the 66 eligible countries

INCLUDES

- Up to USD \$50,000 over 3 years for equipment, training, & more

FUNDED BY

- Main donor: Canadian International Development Research Centre (IDRC)
- 1 fellowship is supported by Aspen Institute Italia



OWSD 2024 Early Career Fellow Maura Quezada Aguilar, from Guatemala, is leading efforts to identify at-risk oak species in the country's volcanic mountain forests. Her project combines scientific research with community-based conservation, establishing local nurseries to protect and restore ecologically and economically vital oak populations.

and the programme's prestige. This year, 15 new fellows were selected from 13 countries following a rigorous and inclusive evaluation process. The fellows are working on projects that include using AI to find vulnerabilities in health and energy infrastructures in Tanzania, to helping preserve critical oak forests in Guatemala's mountain ranges, to developing antivenom to combat different kinds of snakebite in Nepal. Despite a shorter call window, 131 applications were received, with 100 deemed eligible. A diverse pool of 35 reviewers from 21 countries contributed to the selection process, ensuring fairness, gender balance, and regional representation. The **link between national chapters and successful applications** remained strong in 2024: 9 of the 13 countries represented by selected fellows currently host OWSD chapters, while others are actively building their local networks. This synergy underscores the strategic role that chapters play in expanding outreach and supporting women scientists to access OWSD opportunities. OWSD continued to refine the programme's internal tools and systems, including the development of simplified monitoring templates to better align fellows' progress reports with OWSD's data systems and performance indicators. These improvements ensure that the impact of the programme can be captured more effectively—both at the individual and institutional levels.



CLICK OR SCAN

TO GET TO KNOW OWSD 2024
EARLY CAREER FELLOWS



2024 Early Career Fellow Cecilia Rolence China from Tanzania delivers a hands-on training session to a leather cluster in Tanzania on how to extract tannins from tree bark. Her project aims to develop eco-friendly tanning agents from agricultural waste—such as cashew shells and banana stems—as sustainable alternatives to harmful chromium-based products in the leather industry.



2024 Early Career Fellow Priscilla Muheki, a physicist from Uganda, is pictured during a research stay at a snowy observatory station. Her project explores the magnetic activity of young, active stars—some with exoplanets—by analyzing XUV-emitting regions using data from the European Southern Observatory. Her work contributes to our understanding of stellar radiation and its impact on planetary atmospheres and the potential for life beyond Earth.



“It was one of the most beautiful experiences of my life to meet all of my fellow women scientists. They are all inspiring women and I hope that the plans we made to collaborate come true!”

Paola Alvizuri Tintaya,
2023 Early Career Fellow from Bolivia

IN 2024

15

EC Fellows selected from

13

Science and Technology Lagging Countries

100

eligible applications



2024 Early Career Fellow Mbolatantely Fahazavana
Rakotondramanana, from Madagascar, works alongside farmers to develop a biofortified lowland rice variety rich in zinc. Her research focuses on improving both the nutritional value and agricultural performance of rice—the country’s staple food.

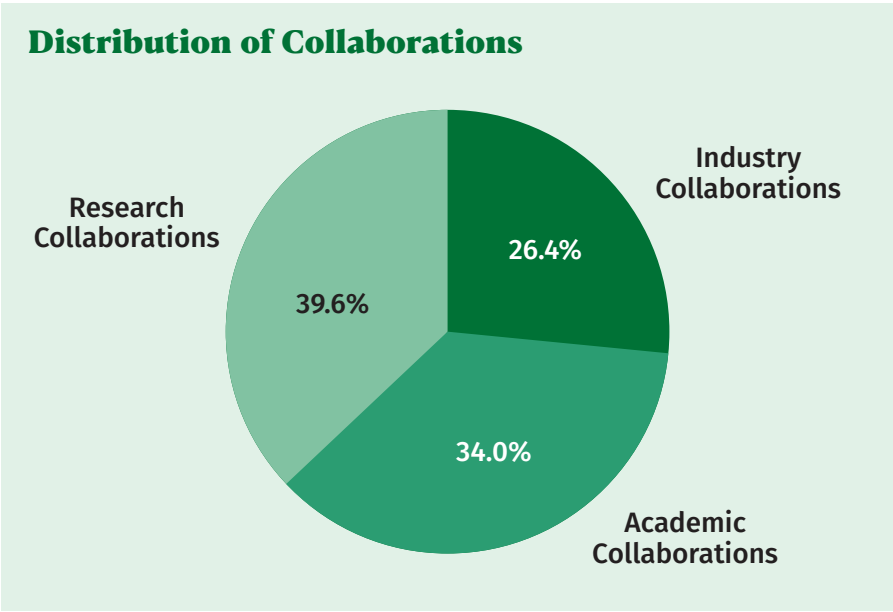
Impact of the OWSD Early Career Fellowships Programme

The OWSD Early Career Fellowships Programme has a **transformative impact** for women scientists in developing countries. The 2024 survey of 40 active fellows, highlights notable advances in fellows’ publications, collaborations, and capacity building and demonstrates the fellowship’s pivotal role in setting up and maintaining crucial research infrastructure. The majority of fellows maintained their research focus in 2024. Almost half used fellowship funds to upgrade research facilities, and 6 new laboratories were created. Funding also supported a wide range of professionals, including research assistants and family care support. These

investments highlight the fellowship’s critical role in enhancing infrastructure and fostering diverse professional support, including women and youth in STEM fields. Fellows were able to increase their global research presence, in 2024, with more than 60% using funds to collaborate with peers, and 21% for scientific visits. Research-focused collaborations were the most frequent, followed by academic and industry partnerships. International mobility was enhanced overall, with nearly two-thirds of fellows reporting a significant boost in their ability to travel and engage in global discussions at conferences and scientific events. Throughout 2024, a total of **280 outreach and communications**

activities were conducted by fellows. These included linking with OWSD members, National Chapters, and science academies; development of communications materials (e.g., flyers, posters); delivering training and mentoring. These efforts reflect fellows' commitment to promoting

scientific knowledge among a broader audience. **Enhanced career advancement** was widely reported: 92% of fellows experienced professional growth, and more than 65% noted increased international visibility. Over half received promotions or expected to be promoted



2024 Early Career Fellow Sunita Ghimire Gautam, from Nepal, is developing locally produced antivenom to treat snakebites—a critical but neglected public health issue in rural communities. Her project aims to create cost-effective, Nepal-specific treatments and diagnostic tools in collaboration with national biotech partners, addressing urgent gaps in snakebite care.

IN 2024

6
new laboratories
set up in 2024

44%
of fellows
used their fellowship funds
either to set up
or upgrade laboratories

280
outreach activities
implemented

315
beneficiaries
of activities

in the future. Additionally, a quarter of respondents reported **influencing policy** in areas such as national climate strategies and intellectual property legislation. This demonstrates that supporting leadership and mentorship initiatives not only underpins fellows' career advancement, but also their institutional and national influence. These findings underscore the critical role of the OWSD Early Career Fellowships programme: empowering women scientists in the developing world to build research infrastructure, lead with confidence, and connect to global scientific networks, and thus drive lasting change in their careers and communities.

IN 2024

88%**of fellows**

reported that the fellowship
was highly beneficial
for their professional growth

81%**of respondents**

have been involved with
the National Chapters

47%**of fellows**

reported a significant impact
of the fellowship on their
ability to travel for research,
while 19% indicated some impact

26%**of fellows**

have proposed or influenced
policy changes

Workshops and training for Early Career Fellows

In 2024, OWSD strengthened its investment in the leadership, communication, and advocacy skills of Early Career Fellows through two dynamic and complementary workshops designed to support both scientific excellence and systemic change.

In April, OWSD held its annual **Orientation Workshop** for the 2023 cohort of Early Career Fellows in Trieste, Italy—home to the OWSD Secretariat and



A group of **OWSD Early Career Fellows** attending the **GAMECHANGERS** workshop in Kathmandu, Nepal.

Responses to survey question:

“Since receiving the OWSD Early Career Fellowships I ...”

Was promoted

41%

Received an increase in salary at my institute

31%

Received more authority and/or responsibilities within my institute

69%

Received more recognition outside of my institute

67%

Was successful in being awarded additional grant funding
or fellowships

46%

the vibrant Trieste Science System. Twenty-three of the 29 fellows attended the week-long event, which combined practical sessions on grant management and scientific leadership with training on intellectual property, technology transfer, and aligning research with the UN Sustainable Development Goals. Experts from the International Centre

for Theoretical Physics (ICTP), International Centre for Genetic Engineering and Biotechnology (ICGEB), and The World Academy of Sciences (TWAS) provided strategic guidance for navigating international research environments, while OWSD staff delivered interactive workshops on science communication and presentation skills.



A key outcome of the workshop was the co-creation of a **gamified advocacy tool**, developed in partnership with RMIT, designed to foster dialogue around the challenges women scientists face and generate actionable policy recommendations. Fellows also took part in leadership training delivered by the Nepal Leadership Academy, gaining practical tools to engage with decision-makers, navigate institutional hierarchies, and communicate research for policy impact. Additional sessions led by international consulting firm MDF focused on advocacy strategies and policymaking processes.

selected participants who had proposed concrete plans to apply workshop outcomes within their institutions. Organized in collaboration with local fellows, OWSD alumnae, and the Kathmandu Institute of Applied Science (KIAS), the event focused on advancing gender-responsive policy change in STEM environments.

The combination of external expertise, peer learning, and context-specific tools proved highly effective. Fellows left the workshop equipped not only with new skills, but with renewed motivation and a shared ambition to drive institutional and national policy change. Several participants proposed the creation of a **global platform for women scientists to influence policy**—an idea OWSD is now exploring further. The GAMECHANGERS model offers a promising, replicable format for future workshops, adaptable across OWSD programmes.

A highlight of the week was a public event at a local cinema—**‘A Future Connected: Scientists of the World’**—where 5-minute videos of the fellows produced during the OWSD Visions project were screened. Two fellows took the stage to share their personal stories, highlighting the power of visibility and public engagement. Fellows also toured key local

research infrastructures including the SciFabLab at ICTP and the Elettra synchrotron.

In May, OWSD launched a second major training initiative: the **GAMECHANGERS workshop** in Kathmandu, Nepal. Tailored for the 2019 and 2020 cohorts of Early Career Fellows, the workshop brought together competitively

From PhD struggles to smart screening: A Bangladeshi engineer tackling autism with AI

When electrical engineer **Tahsina Sanam** returned to Bangladesh in 2020, a personal experience sparked a groundbreaking idea. Her son's school had a program for autistic children, and during daily bus rides she noticed characteristic movements—headbanging, handflapping—often linked to autism spectrum disorder (ASD). Parents told her these signs had gone unnoticed in early childhood, delaying their childrens' diagnosis until around age 10. With only around 10 autism specialists nationwide, many Bangladeshi children miss the critical window for early intervention.

Drawing on her PhD research in wireless signal analysis, Tahsina envisioned a contactless, non-intrusive

“I could be happy that I am an engineer, that’s enough in my country. But I always keep pushing myself, that I should not stop here, that whatever knowledge I have gained, I should deliver it to my country and beyond my country, to the world”.

Tahsina Sanam, 2023 OWSD Early Career Fellow based at Bangladesh University of Engineering and Technology



screening tool using Wi-Fi signals to detect movement patterns associated with ASD. Machine learning algorithms would analyze how these signals interact with the body, identifying subtle motor behaviors typical of ASD in children as young as 2.5. This innovation could bypass the discomfort of wearable devices and point parents towards further diagnostic testing.

Partnering with hospitals, neurologists, and educators, Tahsina is building datasets, training algorithms, and planning nationwide outreach. Her work promises not just earlier diagnoses, but a cultural shift toward awareness and accessible screening. Motivated by love for her son and her country, she aims to transform advanced engineering into a life-changing tool for Bangladesh's most vulnerable children.



CLICK OR SCAN

TO READ THE STORY OF TAHSINA
SANAM

VISIBILITY: OWSD AWARDS

The OWSD-Elsevier Foundation Awards (OWSD-EF) recognize exceptional women each year who have overcome significant social, economic, and cultural barriers to produce internationally competitive research in their early careers.

Awardees benefit from visibility at **high-level conferences and events** within their area of research and are often celebrated

by national media in their home countries and recognized by government officials. Since 2021, the yearly focus of the awards has

OWSD Awards

ELIGIBILITY

- Women in STEM with a PhD degree
- Citizens from 66 Eligible Countries
- Demonstrable impact on the research environment
- Contribution to UN SDGs.

INCLUDES

- USD 5,000 prize
- Attendance at international events and visibility

FUNDED BY

- The Elsevier Foundation



been on research areas related to the United Nations Sustainable Development Goals (SDGs). In 2024, the focus was on **SDG6: Water, sanitation and hygiene**.

2024 Awardees

In March 2024, OWSD announced the five awardees selected in 2023 for their contributions to research that advances UN Sustainable Development Goal 6: Clean water and sanitation. Each awardee was provided with travel grants to attend the **Singapore International Water**

2024 OWSD Awardee Lidia Antonella Rivera Peñalva from Honduras receives her award in Singapore in recognition of over a decade of research dedicated to the conservation and sustainable management of marine social-ecological systems. Her work spans artisanal fisheries, aquaculture, and water quality monitoring across Europe, South America, and Central America, fostering resilient coastal communities and advancing science-based strategies for marine biodiversity conservation.

Week Conference. The winners' research explores a wide range of pioneering ways that the challenge of water quality can be tackled, from using hydrological modelling to bioremediation with bacteria, from creating nanocomposites for heavy metal removal to working with communities to develop sustainable practices. The prize also acknowledges the scientists' commitment to leadership, mentoring and engagement within their communities, including the translation of research into actionable insights for stakeholders.



CLICK OR SCAN

TO KNOW MORE ABOUT THE 2024
OWSD AWARDEES

Each year, OWSD provides opportunities for awardees to showcase their work on global

IN 2024

53

Eligible applications

5

Awardees

32-58

Age range

SDG 6

**Focus on SDG 6,
Water, sanitation
and hygiene**

2024 OWSD AWARDEES



Augustina Clara Alexander

water resources management
and pollution control
Tanzania



Lidia Antonella Rivera Peñalva

sustainable management
of marine social-ecological systems
Honduras



Shirani Manel Kumari Widana Gamage

conservation of surface water
resources and early detection
of cyanobacterial blooms
Sri Lanka



Tasrina Rabia Choudhury

heavy metal contamination and pollution
dynamics in water ecosystems
Bangladesh



Zubeda Ukundimana

innovative solutions for water
and wastewater treatment
Uganda



2024 OWSD Awardees celebrated their awards with other Water First! workshop participants at the Singapore International Water Week Conference (SIWW) in June 2024.

platforms, fostering collaborations and enhancing their professional networks. Notable conferences attended in 2024 include:

- Alexander (Tanzania), Rivera Peñalva (Honduras), Widana Gamage, Choudhury (Bangladesh) and Ukundimana (Uganda): Singapore International Water Week Conference (SIWW) (June 2024)
- Attanayake (Sri Lanka), Crespo Melgar (Bolivia), Dwaib (Palestine), Kayitesi (South Africa), Montenegro-Bethancourt (Guatemala), Tserendorj (Mongolia) and Loko (Benin): 5th Global Food Security Conference in Leuven, Belgium (April 2024).



2024 OWSD Awardee Zubeda Ukundimana from Uganda at the Singapore International Water Week Conference (SIWW). She is a chemical and environmental engineer whose research focuses on developing innovative, low-cost, and sustainable solutions for water and wastewater treatment. She has explored the use of natural adsorbents to improve drinking water access in underserved communities, advanced oxidation processes to remove toxic chemicals from landfill leachate, and waste metal scraps as electrodes for phosphorus removal from municipal sludge. Her work not only addresses pressing environmental challenges but also promotes circular economy approaches by repurposing waste materials for pollution control.

STORYTELLING, PARTNERSHIPS AND ADVOCACY

OWSD recognizes that advancing the role of women scientists from the developing world requires more than providing resources. Training and tools for telling compelling stories can be game changers.

In 2024, OWSD's communications and storytelling team continued to highlight the achievements of women scientists, showcasing their work internationally. These visible role models from under-represented countries inspire the next generation and demonstrate the transformative power of women in STEM. OWSD also advocates for gender-transformative policies, working with academic institutions to support women in research and decision-making roles.

Addressing challenges for women in science using gamification

OWSD's collaboration with the Royal Melbourne Institute of Technology (RMIT), an Australian university with global campuses, began with exploratory discussions on gamification and quickly grew into a formal partnership. RMIT brought expertise in using game design to address real-world challenges, and together with OWSD developed a board game, "Best in Her Field", that simulates



the career journey of women scientists in developing countries. Players are prompted to develop actionable policy solutions as they navigate the game, which features a career path board, scenario cards, and challenges that reflect real-world barriers. The game's parameters were informed by a survey of 10,000+ OWSD members, and followed by successful prototype testing by



"Visibility is the sunlight that allows the OWSD ecosystem to thrive."

Tonya Blowers, OWSD Coordinator

members in May 2024. Plans are now underway to refine the game for broader use by OWSD National Chapters, with a joint OWSD-RMIT publication on the project in progress.

OWSD-NLA partnership delivers comprehensive leadership course

OWSD's partnership with the Nepal Leadership Academy (NLA) played a pivotal role in the May 2024 workshop for Early Career fellows, in Nepal.

What is gamification?

Gamification is the process of applying game-design elements and principles in non-game contexts to engage and motivate people to achieve their goals. It has been increasingly used as a tool for policy-making, as it provides an interactive and engaging way to explore complex issues, brainstorm solutions, and foster collaboration among stakeholders. By simulating real-world scenarios, gamification helps participants to better understand the challenges and opportunities in a particular field and to think collectively to think creatively about potential solutions.



Left, **BEST IN HER FIELD** is the first advocacy game for women scientists. It represents the journey of many women scientists from the developing world, including all the challenges they face while establishing themselves as impactful professionals.

Right, **OWSD Early Career Fellows** test the “Best in Her Field” prototype during the GAMECHANGERS workshop in Kathmandu, offering constructive feedback to help refine the final version.

The game not only simulates the challenges and milestones of a scientific career but also sparks discussion and generates actionable policy ideas.

The workshop featured a comprehensive leadership course, led by Dr. Pukar Malla and his expert team, which comprised three structured modules: Introduction to Adaptive Leadership, Practice of Public Narrative, and Introduction to the LEAD Framework.

The course provided participants with theoretical insights and practical skills needed to navigate challenges in their scientific careers and was tailored to developing countries’ socio-cultural and political contexts. Following the workshop, which received excellent participant evaluations, OWSD and NLA discussed integrating NLA expertise into OWSD’s broader training curriculum, and future training programmes.

This successful collaboration between OWSD and NLA enriched the overall workshop experience and established the foundation for a long-term partnership focused on fostering leadership and transformative change among women scientists.

Initiating and consolidating partnerships with Obreal and IDRC for ongoing programmes and OWSD General Assembly 2025

In 2024, OWSD coordinator, Tonya Blowers, attended an IDRC workshop in Addis Ababa, where selected teams developed book chapters based on UNESCO’s Call to Action for Women in STEM. Blowers developed a chapter aligning OWSD’s work with UNESCO’s first pillar: to ‘dismantle gender biases and stereotypes in science, through



OWSD Early Career Fellows during one of the Leadership sessions held by the Nepal Leadership Academy team during the GAMECHANGERS workshop in Kathmandu

2nd Interregional Dialogue on Education and Development in Latin America, the Caribbean and Africa, organised by Obreal and the African Union in Addis Ababa, Ethiopia, in July 2024.



pathways to link OWSD's mission with high-level interregional dialogues, culminating in the decision to co-host the OWSD General Assembly in Colombia in 2025 alongside Obreal's 3rd Africa-LAC Dialogue.

Ongoing longstanding partnerships

OWSD maintains longstanding partnerships with the **International Science Council (ISC)**, the **Italian government**, and the **Trieste scientific community**, which have significantly enhanced the organization's global reach and impact. In 2024, OWSD collaborated with ISC to support a delegation of members from Latin America and the Caribbean to participate in the Global Knowledge Dialogue in Colombia, building on earlier collaborations in Africa and Asia-Pacific. With the Italian government and institutions, OWSD expanded engagement

the enhanced visibility of female role models'. OWSD and IDRC also explored new fellowship models for women in science, connecting governments, research councils, and national academies. While in Addis Ababa, Blowers also attended events organized by the **African Union and Obreal**, a non-profit association that promotes interregional cooperation and dialogue in the higher education sector, and presented OWSD's work on gender in STEM in Africa. OWSD's engagement with Obreal and IDRC is evolving into a strategic alliance grounded in shared priorities for advancing gender equality in STEM and fostering interregional collaboration. What began as participation in targeted workshops and dialogues has developed into a relationship characterized by mutual recognition of expertise and a commitment to co-developing programmes with long-term impact. With IDRC, OWSD is

exploring innovative programme models that connect government, research councils, national academies, and other stakeholders, creating a coordinated approach to supporting women scientists at the country level. The collaboration with Obreal has opened new



OWSD Newsletter:

<https://lists.ictp.it/mailman/listinfo/owsd-newsletter>



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The Organization for Women in Science for the Developing World (OWSD)



OWSD Instagram:

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OWSD X

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OWSD Facebook:

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OWSD Youtube:

[OWSD Secretariat](https://www.youtube.com/OWSDSecretariat)



OWSD Bluesky

[@owsdsecretariat.bsky.social](https://bsky.app/profile/owsdsecretariat.bsky.social)

IN 2024

14,555

Subscribers
to OWSD mailing lists

LINKEDIN

+ 72%

Followers

INSTAGRAM

+ 18%

Followers

FACEBOOK

+ 13%

Followers

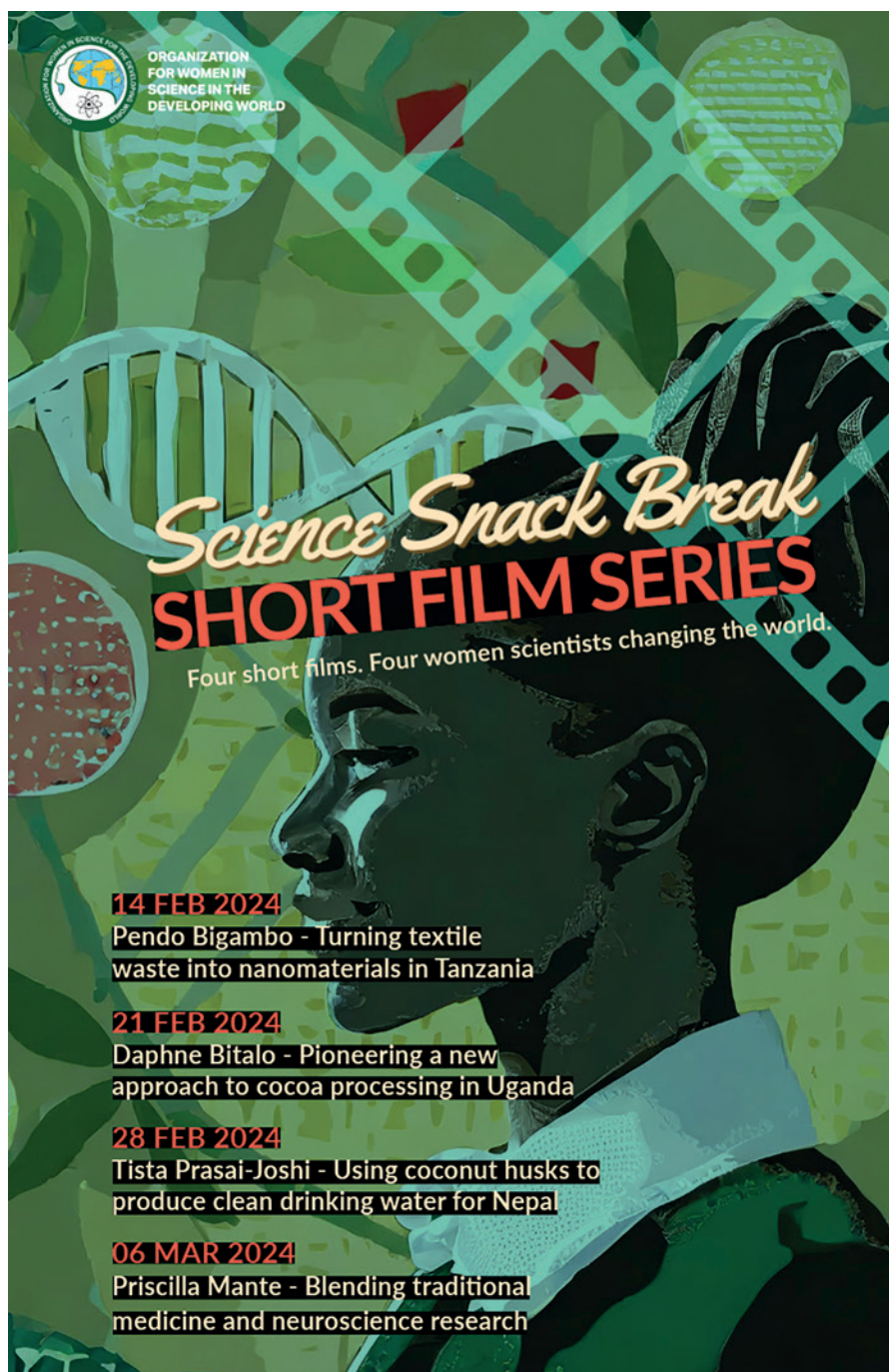
X

+ 9%

Followers

91

**selected opportunities
and announcements**
disseminated over the year



through joint events, diplomatic outreach, and participation in high-level conferences in Africa and Italy, while also strengthening links with Italian scientific attachés and national research bodies. These partnerships have provided valuable platforms for OWSD members to network, share expertise, and advance gender equality in science worldwide.

Storytelling and communications drive OWSD's mission

In 2024, the popularity of OWSD's **social media** channels continued to grow. Follower numbers on Instagram, Facebook, and X displayed notable increases, while LinkedIn experienced a huge, 72% surge. This underscores the potential for

targeted engagement across platforms, particularly on LinkedIn, and affirmed the organization's ability to engage its audience with relevant, high-quality social media content. OWSD also continued to make effective use of its mailing lists to maintain consistent communication with members and stakeholders.

OWSD also produced and released 5 new short videos as part of the successful **OWSD Visions** project. Italian film maker Nicole Leghissa delivered online training in storytelling and filmmaking techniques to OWSD national chapters in Mauritius, Mongolia, Kenya, Paraguay, and Mozambique. Between February and March 2024, OWSD celebrated women in science with a series of four **online screenings titled 'Science Snack Breaks'**. Each of these screenings were followed by a Q&A with the film's director and protagonist, followed by an opportunity for the audience to network with the filmmakers and Early Career Fellows. As well as hosting this online event, OWSD collaborated with a local cinema in Trieste to organize an in-person film screening featuring some of the 24 visiting Early Career Fellows attending the orientation workshop in the city. Students, scientists, and members of the local community gathered for *A Future Connected: Scientists of the World*, which combined video portraits with

live testimonies from three OWSD Fellows.

A curated collection of films from the OWSD Visions series was also adapted for targeted social media campaigns, a strategic initiative that leverages the short social media form and aligns with current engagement trends. The adapted videos will also be integrated into OWSD's 2025 website relaunch.



CLICK OR SCAN

TO WATCH THE OWSD VISIONS SERIES

Events and international influence

In 2024, OWSD members were invited to participate in key international panels and conferences, and make contributions to important dialogues and research on gender in STEM, and the role of women in addressing global challenges. OWSD NC representatives participated in the **Global Knowledge Dialogue for Latin America and the Caribbean (LAC)**, in April. The event



was hosted in Chile by the ISC Regional Focal Point for Latin America and its Liaison Committee, and attended by key decision makers from a variety of scientific unions. OWSD made its mark at the event with impactful

A Future Connected: Scientists of the World event was organized in Trieste during the Early Career Workshop. The fellows' dedication to addressing pressing challenges in their home countries, and their perseverance in achieving high-quality scientific results despite under-resourced environments, proved deeply inspiring—particularly for students from the United World College in Duino, Italy, who were among the audience. A lively Q&A session followed, and attendees were invited to network with the Fellows, fostering connections and further dialogue.





OWSD members pictured together at the **Continental Conference on Transforming STEM in Africa** organized by UNESCO and the African Union in Addis Ababa, December 2024.

In July, OWSD coordinator, Tonya Blowers, attended the **African Union/ Obreal - Education and development in LAC and Africa INTERREGIONAL DIALOGUE: Shared solutions for common challenges in the context of the African Year of Education 2024**. Blowers presented OWSD's work on gender in STEM in Africa and had extensive discussions with potential partners and supporters. OWSD also played a significant role at the **2024 SGCi Annual Forum and Global Research Council Sub-Saharan Africa Regional Meeting**, in November. The 5-day event was held in Botswana, and organised by IDRC. Here, OWSD was able to consolidate its position as a key collaborator for the science councils on gender and science. Later in November, OWSD was invited to the **Continental Conference on Transforming STEM in Africa**, in Addis Ababa, Ethiopia. The conference was organized by UNESCO and the African Union (AU), and OWSD leveraged its expertise in pivotal discussions on advancing gender equality in STEM and building mentoring networks. OWSD also engaged in key discussions with Italian representatives to the AU and the Italian Scientific Attaché to the AU.

In Italy, OWSD presented on a panel at the **Women in Science World Forum** in Rome, and in October 2024 OWSD invited a key research collaborator from Myanmar, Phyu Phyu Than, to talk about the effect of displacement on women scientists, at the **Trieste Next** science exhibition.



Participants in the Trieste Next TWAS round table (from left): Payal Patel, TWAS Associate Programme Officer (moderator); Alessandro Garbellini, Counsellor and Head of the Office for Space, Scientific Multilateral Cooperation and Intellectual Property at the Italian Ministry of Foreign Affairs and International Cooperation (MAECI); Tonya Blowers, OWSD Coordinator; Phyu Phyu Thin Zaw, Lecturer in Health Leadership and Management in Crisis Settings at The University of Hong Kong; and Peter McGrath, Coordinator of IAP and the TWAS Science Diplomacy Unit. (Photo: G. Ortolani/TWAS)

interventions and strategic placements. OWSD's Vice President for the LAC Region, Kleinsy Bonilla, delivered a compelling speech which underscored the organization's commitment to

empowering women in science. OWSD Visions films were also screened during the event, and these further amplified OWSD's visibility and relevance within the scientific community.

OPERATIONAL STRUCTURE AND DONOR COMMITMENT

OWSD is a programme unit of UNESCO, the United Nations Educational, Scientific and Cultural Organization, and is **administered under TWAS**, the World Academy of Sciences. OWSD is governed by an Executive Board elected by OWSD members every four years.

The Secretariat of OWSD is **hosted on the campus of the Abdus Salam International Centre for Theoretical Physics (ICTP)** in Trieste, Italy. OWSD is grateful to the following donors for their generous support of OWSD programmes in 2024:



**Swedish International Development
Cooperation Agency (Sida)**

PhD fellowship programme and Secretariat support



Canada

**International Development Research
Centre (IDRC) - Canada**

Early Career fellowship programme and Secretariat support

**THE ELSEVIER
FOUNDATION**

The Elsevier Foundation

Awards programme

**OWSD additionally thanks the following private donors
who contributed to our programmes in 2024:**

Nelida Rodriguez Osorio, Lisa Dyce

FINANCIAL SUMMARY

Financial income and expenditure for the year 2024 is reported in the tables below.*

INCOME ¹	AMOUNT (USD)
Balance brought forward 01.01.2024	1,910,242.83
International Development Research Centre (IDRC), Canada	1,320,026.79
Swedish International Development Agency (Sida)	804,915.24
Elsevier Foundation, USA	100,000.00
Contributions from OWSD members	772.28
Investment revenue	409,656.00
TOTAL INCOME	4,545,613.14

EXPENDITURE	AMOUNT (USD)	
	APPROVED BUDGET	SPENT
1) Fellowships		
1.1 Masters Fellowships	950,000.00	458,200.00
1.2 Early Career Fellowships	750,000.00	728,757.59
Subtotal for (1)	1,700,000.00	1,186,957.59
2) Workshops, Trainings and Resources		
2.1 Fellows Support Allowance	25,000.00	
2.2 Early Career Orientation Workshops	100,000.00	43,673.72
2.3 Training Programme	185,000.00	18,496.65
2.4 Success Stories for Impact	120,000.00	21,624.62
Subtotal for (2)	430,000.00	83,794.99

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1. All contributions are expressed in US dollars and have been converted using the UN official rate of exchange in effect at the time the contributions were received.

EXPENDITURE	AMOUNT (USD)	
	APPROVED BUDGET	SPENT
3.1) OWSD Membership	522,000.00	108,428.12
3.1.1) Governance	102,000.00	1,592.27
3.1.2) National Chapters	420,000.00	106,835.85
3.2) OWSD Awards Scheme	200,000.00	58,401.72
3.2.1) Awards	50,000.00	25,000.00
3.2.2) Travel of awardees to ceremony	50,000.00	16,938.63
3.2.3) Alumnae support (mentoring, conferences, events)	100,000.00	16,463.09
3.3) Communications, Visibility and Outreach	390,000.00	112,073.47
3.3.1) Fundraising and advocacy	150,000.00	26,254.93
3.3.2) Communications	90,000.00	47,280.99
3.3.3) Global search portal	120,000.00	28,074.39
3.3.4) Staff travel	30,000.00	10,463.16
Subtotal for (3)	1,112,000.00	278,903.31
4.1) Monitoring & Evaluation	180,000.00	46,813.06
4.1.1) Monitoring & Evaluationt	30,000.00	5,431.21
4.1.2) Research and Strategy	100,000.00	39,300.00
4.1.3) Mid-term evaluation	40,000.00	
4.1.4) Database consultant	10,000.00	2,081.85
4.2) Implementation costs	1,365,000.00	788,617.37
4.2.1) Programme support staff	980,000.00	586,476.49
4.2.2) Administrative and finance support staff	260,000.00	160,812.26
4.2.3) Operational expenses (ICTP services and office costs)	125,000.00	41,328.62
Subtotal for (4)	1,545,000.00	835,430.43
Management costs	335,090.00	166,956.06
TOTAL EXPENDITURE	5,122,090.00	2,552,042.38
Savings on prior years' obligations		537,368.47
Excess of income over expenditure		2,530,939.23

RESERVE FUND ²	AMOUNT (USD)
Amount available at the beginning of the period	355,393.19
Transfer from OWSD account	0.00
Savings on End of service entitlements	5,500.00
Reserve Fund balance end of period	360,893.19

2. The purpose of the Reserve Fund is to cover the end of service entitlements of OWSD Staff.

LOOKING FORWARD

Sustainability, innovation, and impact

Sustainability, innovation, and impact

In 2024, OWSD consolidated its response to the funding contractions of 2023, and demonstrated resilience and adaptability by implementing strategic institutional change. These transformations focused on overcoming challenges and building long-term sustainability. Innovation extended to every area of the organization, from communication strategies, to sustainable structures, to current and future objectives, and impact-centred practices.

The turbulent funding conditions also served as a springboard for adopting new tools, technologies and processes, allowing OWSD to increase members' visibility and impact. OWSD also forged new alliances and strengthened existing ones, manifesting the power of collaboration in times of adversity. These partnerships were not merely symbolic but translated into impactful actions, exemplified by the creation of the **WISDOM Master's Scholarship programme for Displaced Women Scientists in STEM**.

OWSD's core programmes remain its foundation. Pioneering initiatives such as the **PhD Fellowships programme**, and the **Early Career Fellowships Programme and Awards**, testify to our unwavering commitment to empower women in science. However, with the PhD Fellowships currently on hold due to funding, OWSD is leveraging its expertise to transform the programme into a more sustainable model, and we are actively seeking institutional support to relaunch the PhD Fellowships programme in the future.

Funding, resilience and a focus on National Chapters

In 2025, OWSD will intensify its focus on long-term viability and financial resilience to ensure the organization can continue its vital mission of supporting women scientists worldwide. Efforts will concentrate on member contributions and attracting new partners via a robust fundraising strategy. Nevertheless, funding challenges are what have sparked new thinking--the National Chapter



initiative, for example, has been highly effective in forging new partnerships and attracting funding towards mapping women in science. Other strategic paths are ongoing, and OWSD has laid the foundation for a resilient future characterized by innovation and collaboration.

OWSD calls on members, supporters, and potential donors to help sustain and expand these vital programmes

Your support is crucial in helping OWSD continue to make lasting impact, and shape the future of women in science. Together, we can ensure women scientists from developing countries have the resources and opportunities they need to thrive, and make a meaningful impact on the quality and relevance of scientific research throughout the world.

Please contact us at owsd@owsd.net with the subject line "OWSD for the future" with your suggestions or pledges to help sustain our mission. Together, we can secure the future of women in science. **#FundTheFutureOWSD**

Women. Science. Development.



The Organization for Women in Science for the Developing World

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