



THE ELSEVIER FOUNDATION

Eligibility and Evaluation Criteria

OWSD-Elsevier Foundation Awards for Early Career Women Scientists in the Developing World

2021 – Physical Sciences: chemistry, mathematics and physics

Eligibility

Applicants must be women scientists in the Early Career stage (**within ten years of earning their PhD degree**), who have **lived and worked for at least 5 of the last 15 years** in one of the [66 scientifically and technologically lagging countries \(STLCs\)](#) listed here:

Africa region: Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Dem. Rep. Congo, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

Arab region: Djibouti, Palestine (West Bank & Gaza Strip), Sudan, Syrian Arab Republic, Yemen

Asia & Pacific region: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Dem Rep, Mongolia, Myanmar, Nepal, Solomon Islands, Sri Lanka, Tajikistan, Timor-Leste, Tuvalu, Vanuatu

Latin America & Caribbean region: Bolivia, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Paraguay

Please note:

- The 5 years of residence in the eligible country do not have to be consecutive.
- Applicants can be citizens of any country, provided that they fulfil the above residence requirement.

The 2021 Awards for Physical Sciences are offered in the fields of Chemistry, Mathematics and Physics. Any combination of these fields (i.e. interdisciplinary) is acceptable.

The following list is not exhaustive and is intended to be indicative for the OWSD-Elsevier Foundation Awards in Physical Sciences. If you have doubts about the eligibility of your research area, please contact owsd@owsd.net.

Eligible fields for 2021 OWSD – Elsevier Foundation Awards

<i>Chemistry</i>	Analytical chemistry, inorganic chemistry, organic chemistry, physical chemistry, environmental chemistry, food chemistry, sanitary chemistry, chemical theory, physical chemistry/chemical physics Synthetic chemistry and materials: materials synthesis, structure-properties relations, functional and advanced materials, molecular architecture
<i>Mathematics</i>	Applied mathematics, pure mathematics, mathematical foundations of computer science, mathematical physics and statistics, operations research analysis
<i>Physics</i>	Electromagnetics physics, electronics physics, heat physics, light physics, mechanics physics, nuclear physics, sound physics Condensed matter and statistical physics: structure, electronic properties, fluids, nanosciences, biological physics Fundamental constituents of matter: particle, nuclear, plasma, atomic, molecular, gas, and optical physics High energy cosmology and astro-particles physics Astronomy and meteorology Applied physics Oceanography, geology and hydrology

Evaluation

Above all, the Selection Panel is looking for candidates who have made **significant contributions to their field of expertise**.

Assessment is based on the applicant's achievements in her scientific field, with additional attention paid to evidence of leadership skills, initiative and innovation, as well as to the candidate's involvement in capacity building, outreach and civic contribution.

1. Scientific merit

This will include an assessment of:

- the quality of the applicant's publications. The applicant is invited to select their top 3 publications and these will be evaluated. A longer list of publications can also be submitted, at the applicant's discretion;
- awards, grants and/or prizes received;
- collaborations with other scientists on research papers and projects;
- current research and/or scientific activities;
- participation as invited speaker or chair at scientific or academic events.

Maximum marks for scientific merit are 50 (i.e. 50% of total marks).

2. Leadership, initiative and innovation

Evidence of these skills includes involvement in the organization of workshops, conferences or other academic events. Membership of academies, societies and other organizations is very relevant, especially if the applicant is a member of the Board or Executive Committee, or head of a team or association. Membership of an OWSD national chapter's executive committee (and the relevant duties carried out) can also be included here. The applicant's links with industry (e.g. registered patents) will also be highly valued.

Maximum marks for leadership, initiative and innovation are 15.

3. Capacity building

Evidence of capacity building includes running active MSc or PhD training programmes; involvement in developing or providing resources for students and young researchers; participation in mentoring or supervision activities. Involvement in relevant activities of OWSD national chapters can also be included here.

Maximum marks for capacity building are 15.

4. Outreach and civic contribution

Here the Selection Panel will be looking for the applicant's engagement with local communities; involvement in volunteering initiatives, as well as participation in public talks for non-scientific audiences and visits to schools. Involvement in relevant activities of OWSD national chapters can also be included here.

Maximum marks for outreach and civic contribution are 15.

5. Challenging circumstances bonus

A full bonus of 5 points will be awarded to women scientists from or working in high risk or very adverse environments (e.g. countries in conflict, sites of natural disaster).

Bonus for challenging circumstances is 5.

Summary:

Scientific merit	50
Leadership, initiative and innovation	15
Capacity building factors	15
Outreach and civic contribution	15
Challenging circumstances bonus	5
Total	100

For more detailed guidelines and a sample application please go [here](#).

Selection

Each year, there is a total of five awards: the highest ranking candidate from each of the four regions (see above) plus an additional “floating” award to a second candidate from any of these regions.

The competition will be judged by a distinguished panel of specialists in the appropriate fields and who are aware of the challenges facing women scientists in developing countries. Traditionally, the selection committee has met in person at the OWSD Secretariat based in Trieste, Italy and we have been able to draw on a broad range of expertise from this 'City of Science', including the International Centre for Theoretical Physics (ICTP), the University of Trieste, Elettra Sincrotrone, The International School for Advanced Sciences (SISSA) and the International Center for Genetic Engineering and Biotechnology (ICGEB). Now that we face special conditions this year (owing to the COVID 19 pandemic) in person meetings are limited and we are drawing on a broader pool of experts based also in the developing world. The Selection Panel is chaired by the OWSD Coordinator with full administrative support from the OWSD Secretariat.

Please note: preference will be given to those candidates not currently (or within the last three years) in receipt of TWAS or OWSD awards, fellowships or grants. If in doubt about your situation, please contact owsd@owsd.net.

Winners will be informed of their selection by 31 December 2020.