



Call for applications 2/2024 Women in Blue: training opportunities in ocean science

27 to 31 January 2025 Institute of Marine Science – Italian National Research Council Bologna, Italy

I – Context

- 1. In July 2024, the Board of the International Seabed Authority (ISA) <u>Partnership Fund</u> (ISAPF), endorsed the development and implementation of the project to celebrate the 30th anniversary of ISA **Women in Blue: training opportunities in ocean science** proposed by the Italian National Research Council (CNR).
- 2. Capacity development and technology transfer is a key component of the ISA mandate. The duty of ISA to design and implement mechanisms to build capacity for developing States, in accordance with its mandate under UNCLOS, is recognized in the ISA Strategic Plan. Such mechanisms are designed and implemented to promote and encourage the transfer of technology to developing States (UNCLOS, Articles 144, 273, 274) and ensure the expansion of opportunities for activities in the Area (UNCLOS, Article 148). Strategic Direction 5 (Build capacity for developing States) and Strategic Direction 6 (Ensure fully integrated participation by developing States) of the Strategic Plan are aimed at accomplishing this objective.
- 3. As indicated in the High-Level Action Plan of ISA for 2019–2025 relating to the implementation of the Strategic Plan, one of the specific actions undertaken by the Secretariat in 2020 was to assist developing States, particularly geographically disadvantaged States, least developed countries, landlocked developing countries and small island developing States in identifying their needs (High-level action 5.1.1).
- 4. This was achieved through the adoption of the <u>Capacity Development Strategy</u> by the ISA Assembly in 2022. The ISA Capacity development strategy responds to that request and sets the core elements of capacity development programmes, projects and initiatives at ISA, including in the context of marine scientific research. The <u>ISA Action Plan in support of the United Nations Decade of Ocean Science</u> adopted by the ISA Assembly in December 2020 specifically recognises the priority to strengthen ISA's current efforts and activities to develop its members' capacities in marine scientific research, with particular emphasis on women.

- 5. In this context, in 2021, ISA together with the Office of the High Representative of the United Nations for the Least Developed Countries, Landlocked Developing Countries and Small Island States (UN-OHRLLS) launched the Women in Deep-Sea Research (WIDSR) project, which aims at advancing women empowerment and access to leadership position in deep-sea research for women from developing States, with a particular focus on women scientists from the LDCs, LLDCs and SIDS.
- 6. With a view to support the objectives of the WIDSR project, and building on the letter of cooperation signed in 2023, the CNR proposed to the ISA Partnership Fund Board the development and implementation of the initiative *Women in Blue: training opportunities in ocean science*.

II – Objectives and expected outcomes

7. The ISA Secretariat, in partnership with CNR, and within the framework of the ISA-Egypt Joint training and Research Center is implementing the Women in Blue initiative. The training develops in two phases.

Phase 1

The first phase of the training consists in the participation to the winter school on Marine Geology titled "Deep Sea Frontiers" (the course structure is contained in Appendix 1) that the Institute of Marine Sciences (ISMAR), one of the leading branches of CNR, is organizing from 27 to 31 January 2025 in Bologna (Italy), under the patronage of the most important Italian scientific societies and IODP-Italy.

This advanced course offers an in-depth exploration of geological processes in the deep ocean, covering the entire life cycle of the oceanic lithosphere. Topics will include a thorough examination of abyssal regions, exploration of mid-ocean ridges, sediment analysis, and the study of marine biogeology in extreme environments. The school program will also emphasize the use of cutting-edge exploration technologies, offering participants hands-on experience with state-of-the-art tools and methodologies.

Phase 2

Upon successful completion of the winter school, trainees will have the opportunity to participate in a research cruise onboard Gaia Blu, the research vessel owned and managed by CNR. The cruise is scheduled to take place between March 2025 and early 2026 for one week on a date to be identified based on the cruise calendar of the Gaia Blu vessel. The cruise will be an opportunity to apply several methodologies and skills acquired during the school.

- 8. It is anticipated that through this initiative, participants will be provided with the opportunity to:
 - a) Have increased access and knowledge of methodologies related to the study and practice of the deep-sea;
 - b) Enhance research skills and better understanding of the unique features of the deepsea;

- c) Broaden scientific horizons and gain a foundation for addressing the multifaceted issues related to the ocean's depths;
- d) Familiarize with advanced technologies, equipment and infrastructures related to deep-sea research through hands-on training;
- e) Take advance of opportunities provided by ISA for women scientists from LDC, LLDCs and SIDS in emerging deep-seabed related sectors;
- f) Have access to practical enabling conditions to break down cultural and gender barriers in deep-sea-related research and related careers;
- g) Establish a community of practice for women scientists in deep-sea research; and
- h) Increase their career opportunities in deep-sea research also from networking opportunities with experts in the field, fostering future collaborations in the realm of marine science.
- 9. The first phase of the training will take place in Bologna (Italy), at the seat of the Institute of Marine Science of CNR, from 27 to 31 January 2025 and will be open to 10 participants selected based on the criteria identified below.
- 10. The second phase of the training will take place onboard the research vessel *Gaia Blu*, for approximately one week at a date to be determined between 2025 and early 2026.
- 11. The ISA Secretariat will cover the costs pertaining to the attendance to both phases (which include a return air ticket in economic class and a daily subsistence allowance as calculated by the International Civil Service Commission).
- 12. Each participant is fully responsible for arranging, at their own expense, such life, health and other forms of insurance covering the period of their participation as they consider appropriate. ISA does not provide or arrange life or health insurance coverage for selected participants. Selected participants will be responsible for assuming all costs related to required inoculations and medical treatment.

III - Eligibility

13. The ISA Secretariat is inviting applications from women from developing countries with the following profile:

Profile category	Description	
Agency/Institution	Public and private research organizations and foundations, competent ministries, environmental agencies	
Role/Position	Junior or mid career professionals	
Area of Expertise	Earth Sciences, Marine Sciences, Oceanography, Marine	
	Policy with a strong will to expand into scientific disciplines	
Experience level	Graduate students, PhD students, early-career researchers,	
	civil servants	

- 14. Applicants shall have a proficient knowledge of the English language.
- 15. By applying to this initiative, participants confirm their availability and commitment (should they be selected) to take part <u>in both phases</u> of the initiative and make themselves available to participate in the cruise at the time determined by ISA and CNR in accordance with the cruise schedule of the *Gaia Blu*.

IV – Application process

16. The following application documents shall be submitted to <u>isapf@isa.org.jm</u> by interested applicants **no later than 3 November 2024**:

	Application document	Requirement
1	Annex A	Applicants must fill out all information requested in Annex A attached to the present call.
2	Motivation letter	 Maximum 1 page, typed in Times New Roman, 12-point letters Written in English
3	Nomination letter	From governmental agency or institution
4	Proof of language proficiency	If English is not the applicant's mother tongue or the language of teaching and learning at undergraduate level, applicants must submit with their registration an internationally recognized English language proficiency test. Acceptable tests include International English Language Testing System (IELTS, band 6.0 or above), Test of English as a Foreign Language (TOEFL – internet-based test score 80+ and paper-based test score 550+), Cambridge examinations (level CPE/C2).
5	Copy of Identification Document	Provided that the applicant already has a passport, a scanned copy of the passport's data page shall be attached. In case the applicants do not yet have a passport, they shall attach a scanned copy of their national ID card - that page must be uploaded which contains both the personal data and the photograph of the applicant

- 17. It is the responsibility of the applicant to ensure that their application reach the ISA Secretariat on the indicated date. Incomplete applications will not be taken into consideration.
- 18. Received applications will be evaluated by a Selection Committee against the eligibility criteria.
- 19. ISA is only able to accommodate the participation of maximum 10 participants. To this end, only one representative per country will be selected. Precedence will be given to (a) applicants from LDCs, LLDCs and SIDS; (b) applicants from countries currently engaged in activities in the Area; (c) scientists or professionals in the realm of marine sciences in possession of offshore certificates, such as STCW.
- 20. Successful candidates will be notified by the ISA Secretariat by 15 November 2024.

IV – Contact details

21. For enquiries on applications, please contact <u>isapf@isa.org.jm</u>





ANNEX A – APPLICATION FORM

 $Date \hbox{:}\ Click\ \mbox{or}\ tap\ \mbox{here}\ to\ \mbox{enter}$

text.

1. Full name:		
Click or tap here to enter text.		
2. Legal address: Click or tap here to enter text.		
3. E-mail address: Click or tap here to enter text.		
4. Affiliation: Click or tap here to enter text.		
5. Role/Position: Click or tap here to enter text.		
6. Provide detail of education background:		
Click or tap here to enter text.		
7. Provide detail on the area of expertise: Click or tap here to enter text.		
ottak of tap fiere to effici text.		
8. Confirm that the application comprises:		
☐ Motivation letter		
☐ Proof of language proficiency		
☐ Copy of identification document		
9. Provide any additional information considered key in meeting/exceeding the		
requirements:		
Click or tap here to enter text.		
10. Are there any indicting circumstances of which the ISA should be aware?		
Click or tap here to enter text.		

DECLARATION

By submitting this application, I confirm that I am able to commit to the terms and conditions set out in the Call for application.

I acknowledge that the personal information supplied to ISA is done voluntarily to facilitate the processing of this application. I furthermore acknowledge that the information provided by me, is to the best of my knowledge both true and correct, and any incorrect or inaccurate information or documentation submitted may adversely affect the processes my application.

11. Date and Signature:

Click or tap here to enter text.







MARINE GEOLOGY

Advanced School

Deep Sea Frontiers

PROGRAM

Day 1: INTRODUCTION TO MARINE GEOLOGY

Morning: registration, introduction to the school

08:00-09:00 Welcome and Registration

09:00-09:30 Introduction to the School and Agenda

METHODOLOGIES FOR THE EXPLORATION OF THE DEEP-SEA

Morning: Exploring the Subseafloor

10:00–11:30 Age Determinations: Rock and sediment dating techniques

11:30-13:00 Biostratigraphy

Afternoon: Exploring the Subseafloor

14:00–16:00 Seismic Reflection and Refraction: Data acquisition & processing

16:30–18:00 Heat Flow, Gravity and Magnetics: Data acquisition & processing

18:00–20:00 Icebreaker Activities

Day 2: METHODOLOGIES FOR THE EXPLORATION OF THE DEEP-SEA (CONTINUED)

Morning: Exploring the Seafloor

08:30–10-30 Seafloor Mapping: Data acquisition & processing

11:00–13:00 ROVs, AUVs, and Manned Submersibles

Afternoon: Deep Sea Exploration in Practise

14:00–14:30 A Gateway to Ocean Exploration: ECORD/IODP-Italia

14:30–15:15 Featured Lesson: Tyrrhenian Sea IODP Leg 402 - Preliminary Results

15:15–16:00 Featured Lesson: Eastern Fram Strait IODP Leg 403- Preliminary Results

16:30–18:30 Seafloor Dynamics: Insights from Multibeam & Seismic Data Analysis

Day 3: GEOLOGY OF THE DEEP SEA

Morning: Plate Tectonics: How the Earth Works

08:30–10:30 Plate Tectonics and Seafloor Spreading

11:00-13:00 Mid-ocean ridges, Faulting, Detachment faults & Hydrothermal activity

· Afternoon: Transfer and Storage of Matter, Chemicals and Energy

14:00–16:00 Deep-Marine Sedimentary Processes & Systems

16:30–18:30 Ground Truthing: Analysis & Interpretation of Deep-sea Cores

Day 4: GEOLOGY OF THE DEEP SEA (CONTINUED)

• Morning: Geochemical Processes in Seafloor Environments

08:30–10:30 Major, Trace and Isotopes Geochemistry of Oceanic Lithosphere 11:00–13:00 Geochemistry of Sediments

Afternoon: Geochemical Processes in Seafloor Environments

14:00–16:00 Fluid Circulation: Seawater Interactions with Rocks and Sediments 16:30–18:30 Geochemistry & Geodynamics in Practice: Implications in Reconstructions

Day 5: IMPORTANCE & INTERDISCIPLINARY CONNECTIONS OF MARINE GEOLOGY

Morning: Marine Geology and Life

08:30–09:30 Sapropels: Climate, Oceanography and Paleoenvironment
 09:30–10:30 Geochemical Proxies for Paleoclimate Reconstructions
 11:00–12:00 Marine Geology and Biosphere
 12:00–13:00 From Rocks to Rotation Poles: Insights from Paleomagnetism

Afternoon: Hazards and Resources

14:00–15:30 Geological Hazards in the Deep Sea

16:00–17:00 Deep Sea Resources

17:00-17:30 Closing Remarks