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**JOINT STATEMENT**

**of the 6th Meeting of the BRICS Working Group on Ocean and Polar Science and Technology**

According to the BRICS STI Calendar of activities for 2023-2024 approved by the BRICS STI Ministers at the 11th Ministerial Meeting held on the 4th of August, 2023 in Qheberha, South Africa;

Taking into consideration the pathway for collaboration within BRICS as set forth during the 1st Workshop on Operational Oceanography held in China in 2016, and the 1st, 2nd, 3rd, 4th, and 5th Meetings of the BRICS Working Group on Ocean and Polar Science and Technology (hereinafter, the WG) held in Brazil, Russia, India (online), China (online), and South Africa in 2018, 2019, 2020, 2021, and 2023, respectively;

We, the representatives of Brazil, Russia, India, China, South Africa, Iran, United Arab Emirates (UAE) gathered in Murmansk, Russia, on 13-15 June, 2024, to participate in the 6th Meeting of the BRICS Working Group on Ocean and Polar Science and Technology in a face-to-face format (with some delegates also participating on-line). The meeting was organized by the Ministry of Science and Higher Education of the Russian Federation with support from the Government of the Murmansk Region and the Shirshov Institute of Oceanology of the Russian Academy of Sciences.

Having overviewed and discussed previous and current research and collaborative activities in the field of ocean and polar sciences carried out by each BRICS country, as well as the bilateral and multilateral cooperation activities between the BRICS countries,

**THE WG CONSENSUALLY AGREED ON THE FOLLOWING**:

- Reiterate its commitment to promoting cooperation between the BRICS member countries in the field of ocean and polar science and technologies through joint activities of governments, universities, research institutions, and industries, as relevant, in order to generate new knowledge, train human resources, develop new technologies and applications, and improve public understanding and awareness of ocean and polar science agenda;

- Cordially welcome the representatives of the new BRICS member states and express confidence that the involvement of the respective expert communities and new regional and global perspectives to BRICS cooperation on ocean and polar science and technology will create significant added values and foster colaborative activities of the WG.

Based on the achievements reported and considerations discussed during the 6th Meeting of the BRICS Working Group on Ocean and Polar Science and Technology, the WG has updated the priority topics and lines of cooperative research and exchanges of expertise, as well as the plans of collective actions and joint projects as briefly described below.

The meeting participants agreed on the following **JOINT ACTIONS**:

- To actualize and expand priority cooperation themes for future collaborative research and development activities;

- As established at previous WG meetings, to continue working on tailoring an insightful, concise and sound **ROADMAP** document for the Working Group actions, and prepare the skeleton draft of the ROADMAP by the end of 2024. The updated list of experts involved from each country is attached to this Joint Statement;

- To develop joint capacity building strategies, including training and education, best practices and harmonized methodological approaches in the field of ocean and polar sciences and technologies;

- To update plans of joint research cruises and field expeditions in regions of common interests, including the proposals of the new member states;

- To foster joint activities of BRICS countries in fulfilling the objectives of the United Nations Decade of Ocean Sciences for Sustainable Development and beyond;

- To call on national ministries, academies and funding agencies for the need of high-level BRICS programs making possible and supporting multi-annual joint projects on regular basis.

China informed the WG about the establishment of the "BRICS International Research Center for Deep Sea Resources", led by the Second Institute of Oceanography, China, in line with the Joint Statement of the 4th WG Meeting. The WG takes note of this development.

The WG agreed that, in aspiration of the upcoming **ROADMAP** of the cooperative activities, the following **OVERARCHING TOPICS** determine the priority directions for joint efforts:

1) State-of-the-art modeling and observation and data assimilation technologies for ocean and climate prediction and disaster prevention;

2) Marine ecosystem health and biodiversity research;

3) Polar and high-latitude processes research;

4) Global deep ocean processes and hadal trench research;

5) Estuarine and coastal processes.

The updated **SPECIFIC PRIORITY LINES OF RESEARCH** include:

- Novel numerical models, data assimilation schemes, and comprehensive observation systems;

- Operational oceanography for disaster prevention and mitigation;

- Science basis for sustainable use of ocean resources and ecosystem services;

- Regional studies on biodiversity and ecosystem resilience;

- In-depth studies of basic processes governing the state and evolution of marine environments;

- Studies of marine pollution, its sources and transport mechanisms, including the emerging pollutants;

- Exploration and sampling of the environment in high-latitude and polar regions;

- Exploration of the environment of abyssal plains and hadal trenches, including hydrothermal vents and the associated biological communities;

- Studies focused on coastal ecosystems response to climate change and anthropogenic impacts;

- Studies of processes in semi-enclosed, marginal, and inland seas, including those of interest for the new member states, and their response to the global change and anthropogenic stressors.

The WG is committed to developing **COOPERATIVE JOINT RESEARCH PROJECTS**, on both multi-lateral and bi-lateral basis, including (but not limited to) those within the BRICS STI (Science, Technology, and Innovations) framework. The WG is particularly interested in participating at the call for FLAGSHIP PROPOSALS expected to open in the near future, and is prepared to submit 1) a comprehensive project focused on novel numerical and observational tools aimed at accurate and timely seamless forecast of ocean environment and 2) a BRICS HOV-based joint expedition project focused on holistic studies of interactions between biological, geological, and physical environmental systems in polar ocean and hadal trenches.

The WG takes note of the **JOINT RESEARCH CRUISES** successfully accomplished to date and intends to intensify cooperation in this area, including marine, polar, and coastal expeditions. The WG encourages all parties involved to invite experts and students from partner BRICS countries to join their field cruises whenever feasible and reasonable. The plans for joint field research in the near future include, but are not limited to:

1) Joint Brazil-Russia expedition to the Patos lagoon, the biggest chocked lagoon of the World Ocean (June-July 2024);

2) Joint China-Russia Dive expedition to the Kamchatka and Aleutian trench in the Northern Pacific (June-Aug 2024);

3) In a longer-term perspective, international cooperation cruises to the polar regions, focused on the fall-winter ecological processes and carbon burial in the Southern Ocean (2025-2028) and the recording the environment and ecosystem changes in the central Arctic Ocean (2024-2028).

China will host the Second BRICS Marine Sustainable Development Symposium in November 2024, led by the BRICS Marine Sustainable Development Research Center, Third Institute of Oceanography, Ministry of Natural Resources, to increase cooperation and joint capacity building. The WG welcomes all parties involved to invite experts and students from partner BRICS countries to join the symposium.

The Working Group on Ocean and Polar Science and Technology expresses gratitude to the Organizers of the 6th Meeting and the Government of the Murmansk Region for hosting the event and providing excellent logistic support.

Finally, the WG gratefully agreed on the kind offer by Brazil to host the next 7th meeting of the WG on Ocean and Polar Science and Technology in 2025. The WG also welcomes the request of the UAE to host the following 8th meeting in 2026.

**Signatures:**

**Brazil**

**Russia**

**India**

**China**

**South Africa**

**Iran**

**UAE**