**JOINT STATEMENT ON THE 2nd MEETING OF THE BRICS WORKING GROUP ON OCEAN AND POLAR SCIENCE AND TECHNOLOGY**

MOSCOW, AUGUST 1-2, 2019

We, the representatives of Brazil, Russia, India, China and South Africa gathered in Moscow, Russia, on 1-2 August, 2019, to participate in the 2nd Meeting of the BRICS Working Group on Ocean and Polar Science and Technology (hereinafter the WG).

Considering that the coasts of the five BRICS countries are washed by all oceans of the World and the countries are deeply engaged in developing ocean and polar science and technology;

Taking into consideration the pathway for collaboration within BRICS set forth during the 1st Workshop on Operational Oceanography held in China, in 2016, and the 1st Meeting of the BRICS Working Group on Ocean and Polar Science and Technology in Brazil, in 2018;

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

HAVE AGREED ON THE FOLLOWING ACTIONS:

1. To update overarching and cross-cutting themes and establish guidelines for collaborative research and development activities;
2. To discuss the priority topics for the 4th BRICS STI call for proposals and provide recommendations on how to improve the application and selection procedures;
3. To specify cross-cutting activities such as training and development of human capital; best practices in infrastructure utilization; development of standardized methodological approaches; integration of observing and modeling systems; and
4. To reiterate the commitment on the planning of joint research cruises and expeditions in areas of common interest.

At the 2nd meeting of the WG on Ocean and Polar Science and Technology, WE HAVE AGREED ABOUT THE FOLLOWING:

**Overarching and cross-cutting themes**

1. While the deep sea biodiversity; climate variability and predictability; coastal processes and ocean-land interactions; marine pollution (including plastic); and air-sea-ice exchanges as specified at the 1st WG meeting remain the priority topics for collaborative research, the 2nd meeting of the WG on Ocean and Polar Science and Technology outlines the need for closer cooperation in the area of operational and applied oceanography, biogeochemistry and hydrometeorology;
2. The WG also emphasizes cross-cutting topics for collaboration among BRICS countries as enabling priorities for the partnership: technology development; observing systems; data management and sharing; modelling, and data assimilation to improve research methods (interoperability, quality control, data management and sharing), tools and operational practices.

**BRICS STI calls for proposals**

(i) The WG recommends the following priority topics for the 4th BRICS STI call for proposals: 1) operational oceanography; 2) marine pollution; 3) deep sea research; 4) extreme environment research – permafrost, anoxia, hyperhaline water bodies etc. ; 5) impacts of climate variability and climate change on polar environment, 6) coastal processes and ocean-land interactions.

(ii) The WG points on the need to synchronize the national calls in timing, format of the proposals, and application procedures, expand the application period duration and issue early preliminary announcements.

(iii) The WG strongly recommends the funding agencies to take the priority topics into account as one of the criteria in the evaluation process and selection of successful proposals.

**Joint cruises**

1. All BRICS countries (coordinated by Brazil and Russia) will prepare a five-year calendar for suggested joint cruises to be initiated possibly in 2019;
2. Each country designated a focal point, which will be responsible for coordinating the BRICS research cruises, namely: Osmar Moller (Brazil), Peter Zavialov (Russia), Anand Singh (India), Gongke Tan (China), Ashley Naidoo (South Africa).
3. BRICS cruises will be organized on principles such as what sort of equipment and what kind of research and technical staff is needed for each mission, so that the capacities of the parties complement each other for obtaining the best results; and
4. The possibility of side-by-side missions will also be explored.

**Terms of reference**

The WG on Ocean and Polar Science and Technology adopts the Terms of Reference prepared by Russia and collectively amended and edited by the WG (see Annex 1 to this Joint Statement).

**Other issues**

The WG welcomes the offer by Russia to launch a proposal to organize a joint BRICS cruise to the area of Amazon plume in the equatorial Atlantic to investigate the influence of the World’s largest riverine system on the Ocean’s budgets of nutrients and pollutants, as well as its physical and chemical environments; and invitation to other BRICS countries to participate. Brazil will explore the possibility of organizing the local logistics and required juridical procedures.

The WG also welcomes organization of a cruise of a Russian ship to the Southern Ocean south of Africa with participation of scientists from South Africa and other BRICS countries.

The WG welcomes the offer of India to provide 2-3 berths for researchers from BRICS countries on India’s research vessels and on the Antarctic stations in 2020.

Other opportunities for joint field work will also be pursued.

The WG recommends to organize BRICS early career scientists and students exchange programme among research institutes and universities, summer schools, as well as BRICS innovation networking centers and BRICS ocean and polar symposia.

The WG recommends inviting the PIs of the projects supported within BRICS STI Programme in the area of ocean and polar science and technology to the annual WG meetings for wider dissemination and discussion of project results.

The WG recommends the creation of web page as a communication platform for dissemination of information about WG’s activities as well as topical scientific results.

Finally, the WG also gratefully agreed on the kind offer by India to host the 3nd meeting of the WG on Ocean and Polar Science and Technology in 2020, tentatively, in August 2020, in Goa.

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| **Signatures:**Brazil |
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