

8th BRICS Young Scientist Forum Announcement and Call for Abstracts

Hosted by the Department of Science and Innovation (DSI), South Africa

Date: 31 July-3 August 2023

Theme: Building BRICS and Africa Partnership for Mutually Accelerated Growth, Sustainable Development and Inclusive Multilateralism

Venue: Qheberha, Eastern Cape, South Africa





1. Background

The decision to establish the BRICS (Brazil, Russia, India, China and South Africa) Young Scientist Forum (YSF) was taken at the 2nd BRICS Science, Technology and Innovation (STI) Ministerial Meeting in Brazil in March 2015. The 1st BRICS YSF was held in Bangalore, India in September 2016. At the 4th BRICS STI Ministerial Meeting in Jaipur, India in October 2016, the BRICS countries agreed to hold the BRICS YSF on a rotational basis. The 2nd BRICS YSF was held in Hangzhou, China in July 2017. The 3rd forum was held in Durban, South Africa in June 2018. Moreover, the 4th BRICS YSF was held in Rio de Janeiro, Brazil in 2019. The 5th forum was held virtually during the COVID 19 pandemic in Chelyabinsk, Russia in September 2020. The 6th BRICS YSF was hosted virtually by India in September 2021. The 2022 7th BRICS YSF (in a hybrid format) was hosted in August in Xiamen, China.

South Africa assumed the BRICS rotational Presidency on 1 January 2023 and will host the 15th BRICS Summit in August 2023. In line with the established tradition of previous BRICS Summits, South Africa will host a wide range of BRICS activities leading up to and following the Summit, including the BRICS STI Ministerial Meeting and the BRICS Academies of Sciences meetings.

As part of its BRICS STI activities, South Africa will host the 8^{th} BRICS YSF in line with the decision taken at the BRICS STI Ministerial Meeting held in October 2016, in Jaipur. The main goals of the 8^{th} BRICS YSF are:

- To provide a platform for talented BRICS young scientists and researchers to exchange perspectives on transformative change and forge sustainable research partnerships, links and networks;
- To promote youth driven creative solutions to the most pressing socio-economic problems in their societies;
- To promote scientific cooperation/science diplomacy dialogues amongst the BRICS emerging researchers and countries beyond the summit; and
- To promote the interconnectedness of society through research and innovation for inclusive and sustainable development.

2. Conference Sub-Themes

The 8th BRICS YSF under the theme "BRICS and Africa Partnership for Mutually Accelerated Growth, Sustainable Development and Inclusive Multilateralism" will highlight the strategic importance of science, technology, and innovation (STI) as key drivers to attain environmental sustainability, solutions to societal challenges and youths' transition to leadership. The thematic discussions will focus on the below sub-themes and specifically address the related issues as follows:

• Climate change and environmental sustainability:

The specific sub-themes are: (i) Monitoring and modelling earth systems, (ii) Preparedness for extreme environmental events, (iii) Developing technologies for reducing carbon footprint in energy and transport systems, (iv) organic or inorganic waste management to produce new products as demonstration of circular economy.

• The future of education, mindset, and skillset:

The specific sub-themes are: (i) Applications for emerging and converging technologies (e.g., integration of multiple technologies within applications, nanotechnology, biotechnology, new applications of "old" technologies/old technology for a new purpose [e.g.; photosensitive film discovered in 1880s now used for data storage applications), (ii) Emerging educational tools to overcome localised socio-economic barriers (e.g., remote learning, artificial intelligence-based tools [e.g. ChatGPT, ChatSonic], learning analytics, robotics support) (iii)



entrepreneurial mindset to navigate the everchanging future (e.g., emerging commercial markets, the evolution of trade platforms, emerging blockchain opportunities)

• The future of society:

The specific sub-themes are: (i) smart society through Artificial Intelligence (e.g., Al applications in public services such as resource allocation, transport, housing, and electricity) (ii) science, technology and innovation to address security issues, e.g., implementation of new STI outputs/approaches in primary health care, food production, emergency/disaster preparedness and cyber security); (iii) interconnectedness of society (science diplomacy role, social upliftment through community of practice, society and culture)

3. Eligibility

This call is open to early career researchers who are under the age of forty (40)

Not have attended a previous BRICS Young Scientist Forum

Be in possession of at least a Master's degree

Have research interests in the thematic areas listed

Commit to be present for the duration of the conference

Submit an abstract that will be the basis for a presentation at the conference

Note: In addition to the abstract, do submit a short motivation (1 page at most). The chosen presenters are asked to not simply focus on their research or thesis but should engage with the topic and answer its requirements. Presentations that provide possible recommendations are preferable and address the BRICS countries. The meeting format is a Forum which is a discussion group, where ideas related to a subject 'under discussion' can be raised and evaluated on a (more-or-less) equal and informal basis.

4. Call for Abstracts

Abstract Format and Submission (amended for national requirements)

The abstracts should follow the following format:

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	Abstr	act must not be more than 300 words (excluding Title, Author and Institution)
	in the	e attached form
	Abstract must be written in English	
	Abstract title must be in boldface, capital letters (lowercase) and centered	
	Abstract font must be Century Gothic 11 with A4 set up margins	
	Abstract must include the following information:	
	0	Title, Author(s), Institution(s)
	0	Name of first author should be underlined (Please do not underline co-
		authors)
	0	Institutional affiliations, city, province for all authors
	0	The superscript numbering must be in front of each initial and surname of
		each author

- Where appropriate, the text may be structured using the following headings:
 - Introduction or Objectives
 - Discussion
 - Recommendations
 - Conclusion

