

# **BRICS** Young Scientists Forum (BRICS-YSF)

South Africa Conclave, 31 July - 03 August 2023



# **BRICS Young Scientists Forum**

Apply for the Annual conclave in South Africa 2023

# DEPARTMENT OF SCIENCE & TECHNOLOGY

(Government of India)

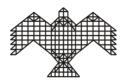
Hosted by the Department of Science and Innovation (DSI), South Africa



Date: 31 July-03 August 2023

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

Venue: Oheberha, Eastern Cape, South Africa



National Institute of Advanced Studies Indian Institute of Science (IISc) Campus, Bangalore, India

#### **About the BRICS-YSF**

The decision to establish the BRICS (Brazil, Russia, India, China and South Africa) Young Scientist Forum (YSF) was taken at the 2<sup>nd</sup> BRICS Science, Technology and Innovation (STI) Ministerial Meeting in Brazil in March 2015. The 1<sup>st</sup> BRICS YSF was held in Bangalore, India in September 2016. At the 4<sup>th</sup> BRICS STI Ministerial Meeting in Jaipur, India in October 2016, the BRICS countries agreed to hold the BRICS YSF on a rotational basis. The 2<sup>nd</sup> BRICS YSF was held in Hangzhou, China in July 2017. The 3<sup>rd</sup> forum was held in Durban, South Africa in June 2018. Moreover, the 4<sup>th</sup> BRICS YSF was held in Rio de Janeiro, Brazil in 2019. The 5<sup>th</sup> forum was held virtually during the COVID 19 pandemic in Chelyabinsk, Russia in September 2020. The 6<sup>th</sup> BRICS YSF was hosted by India in September 2021. The 2022 7<sup>th</sup> 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 15<sup>th</sup> 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<sup>th</sup> 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<sup>th</sup> 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.

## 1. Conference Sub-Themes

The 8<sup>th</sup> 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 modeling 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 localized 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 ever changing 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., AI 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).

# 2. Eligibility

This call is open to early career researchers who are under the age of forty (40) as on 31 July 2023.

- 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.

#### 3. Call for Abstracts:

#### **Abstract Format and Submission (amended for national requirements)**

The abstracts should follow the following format:

- Not be more than 300 words (excluding Title, Author and Institution) in the attached form
- 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:

- o Title, Author(s), Institution(s)
- o Name of first author should be underlined (Please do not underline coauthors)
- o Institutional affiliations, city, province for all authors
- o 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:
  - o Introduction or Objectives
  - o Discussion
  - o Recommendations
  - o Conclusion

#### LAST DATE FOR SUBMISSION: 8 JULY 2023

#### SELECTION PROCESS

The selection of Indian participants for participating in the BRICS-YSF Conclave 2023 shall be made by an Expert Selection Committee to be constituted by DST. The selection shall be based on the assessment of information provided by the applicant in the application form and the reference letter(s). Up to 20 participants will be selected by the Department of Science and Technology (Govt. of India).

#### **Submission process:**

- Send your application as a single PDF file (named with your full name), that includes the main application, resume, reference letter and endrrsement letter (in the same order)
- Endorsement letter has to be issued by the head of Institution. Reference letter can by anyone who know the work.
- Attach the application form and email to Prof D Suba Chandran at <u>bricsysf@nias.res.in</u>, with a cc to <u>subachandran@nias.res.in</u>
- Applications should reach on or before 08 July 2023.

No other form and/or channel of submission of the application shall be entertained. Hardcopies are not required to be submitted.

For more information about the program, please contact:

# **Prof D Suba Chandran**

Professor & Dean National Institute of Advanced Studies (NIAS), Indian Institute of Science Campus Bangalore-560012

Tel: 91-80-22185142

Email: <a href="mailto:subachandran@nias.res.in">subachandran@nias.res.in</a>,

bricsysf@nias.res.in

#### Dr Arindam Bhattacharyya

Scientist-F,

International Cooperation Division,
Department of Science and Technology,
Technology Bhawan, New Mehrauli Road

New Delhi 110016, Phone: 91-11-26590409

Email: a.bhattacharyya@nic.in