



Department of Science
and Technology



Shanghai Cooperation
Organisation

2nd SCO-YOUNG SCIENTISTS CONCLAVE
10-14 October 2022
Hybrid mode / In-Person

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) Bengaluru

I. Background

With its intrinsic ability for unconventional and lateral thinking, its dynamism, and its idealism, the youth of a nation represents not only its future, but also its potential for bringing about game-changing innovations in every sphere of life. A uniquely large youth population is well-known core strength of SCO along with its surging scientific and technological presence in today's world.

Recognizing the huge talent with SCO youth, fifth session of Heads of Ministries and Departments of Science and Technology of the SCO Member States supported the initiative to hold youth events (forums, competitions, etc.) on a regular basis and agreed with the proposal of India to host the SCO Forum of young scientists and innovators within its territory. In pursuance of this decision, India is hosting the second SCO Young Scientists Conclave 10-14 October 2022 in hybrid mode with a preference for in-person.

II. Vision and Objectives

The vision and objectives of SCO-Young Scientists Forum are to:

- Create connectivity and networking among the SCO youth to harness their knowledge for addressing common societal challenges through research and innovation and strengthen the advancement of complementary skills and research competencies of youth drawn from Science, Engineering and allied disciplines.
- Create consortia of young scientists, professionals, innovators and entrepreneurs to conduct joint R&D activities.
- Prepare next-generation scientific leadership in Science, Technology and Innovation (STI) and future-ready Science, Technology, Engineering and Mathematics (STEM) Professionals.
- Build SCO scientific identity in STI through creative youth.
- Provide access to large scale research infrastructure and unique analytical facilities.
- Create Internship and training opportunities for young researchers.

This Conclave proposes to bring together the innovative young minds from SCO Member States on to a common platform in virtual mode to discuss issues like, 'ways and means to bring in transformative changes to address the societal challenges through scientific and technological

interventions'. This will also facilitate the confluence of ideas to resolve specific problems of Member States. Thus, the Conclave hopes to seed a SCO Scientific Identity through the establishment of a network of young talents across these Member States.

III. Themes

Out of many challenges pervading the SCO Member States that deserve S&T interventions, the thematic areas are chosen to promote collaborative work in Science, Technology and Innovation (STI) among these Member States.

1. Agriculture and food processing
2. Environmental protection and natural resource management
3. Artificial Intelligence and big data research and application
4. Sustainable energy and energy storage Energy
5. Disease Biology and Healthcare

IV. Participants

- a. **Eligibility:** Young bright academicians/ scientists/ engineers/ technologists/ innovators/ techno-entrepreneurial start-up professionals from STEM disciplines and allied sciences up to 40 years of age as on 1st October 2022 and nominated by the SCO Member States.
- b. **Number of participants (total 21 from each Member State):** Each Member State will nominate twenty young scientists/researchers with one senior faculty/expert/scientific Ministry or department official. Four young scientists may be nominated for each theme indicated in section (III) above.
- c. **On-stage presentation:** Apart from the five on-stage presentations, rest will present posters. The young scientist participants (one per theme as in Section III, total of five) will present a scientific paper at the related thematic session highlighting his/her scientific and technical work, novel ideas and prototypes developed for 10-12 minutes.
- d. **Poster presentation:** Student participants will present posters highlighting important scientific results/ideas from the laboratory, printed on A0 paper.
- e. **Full-time participation:** All participants are expected to stay for the entire duration of the conference.

V. Selection Process

Each Member State will make announcement in their own country to select the participants as per their country norms.

VI. Call announcement

The Member States may give wide publicity to disseminate the information and to attract the best talent and to trigger the scope for networking of youth among the SCO Member States.

VII. Closing date for receiving the nominations

Each SCO country should send the list of their nominated candidates along with duly filled nomination form (in the format Annex-1 given at the end of concept note) through e-mail to Prof. Ravi Manjithaya, Associate Professor JNCASR, Bengaluru, Email: scoysc22@jncasr.ac.in and a copy to Dr. Arvind Kumar, Scientist – F, Department of Science and Technology, Ministry of Science and Technology,

India, Email: scoysc-india2022@gov.in. A copy of the list of nominated candidates should also be routed through the respective country National SCO Coordinator to Indian National SCO Coordinator, Ministry of External Affairs, Govt. of India through the diplomatic channel. All the documents should preferably be in pdf format to avoid any distortion. The closing date for receiving the nominations is **15 August 2022** and therefore the nominations may be sent on or before the closing date. A brief curriculum vitae and a digital photograph of the nominee may also be attached to the

VIII. Liaison Officer

To facilitate easy communication, time saving, and to contact in unforeseen emergency situations, each country may nominate a Liaison Officer as a single point contact. The name and contact details including telephone/mobile number and e-mail of the liaison officer may be provided by each of the SCO Member States. The Liaison Officer will be in regular contact with the Organizer, Department of Science and Technology (Dr. Arvind Kumar) and the Organizing Secretariat at JNCASR (Prof. Ravi M.) whose contact information is given below for exchange of information and follow up actions.

IX. Venue of the Conclave

Venue for the conclave is Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, India. JNCASR is a multidisciplinary research institute situated in Jakkur, a locality north of Bengaluru city. It is relatively young yet well-known around the Globe. The mandate of the centre to pursue and promote world-class research and training at the frontiers of Science and Engineering covering broad areas ranging from Materials to Genetics. It provides a vibrant academic ambience hosting more than 500 Researchers. The Centre is an autonomous institution under Department of Science and Technology, Govt. of India and a deemed to be university.

Meeting Rooms: JNCASR Conference Hall

X. Mode of Conclave

The conclave will be in **hybrid mode with a preference for in-person** participation depending upon the COVID-19 pandemic situation.

XI. Tentative programme *

10 October afternoon: Conclave begins with the Inaugural session followed by a Plenary talk and Networking dinner

11 - 14 October: On-stage presentations in several sessions (10 min each); Poster presentation sessions for students. Other attractions include Organized tours around neighbouring institutes and traditional shopping centres.

Conclave concludes by the early evening of 14th October. There is likely to be a field visit on 15th October.

*The detailed programme and administrative circular will be sent later.

Contact details of Organizing Secretariat

Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru

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