RESPOND BASKET 2024

Capacity Building and Public Outreach
Indian Space Research Organisation
Bengaluru

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Message

Academia has been contributing in Research and Development (R&D) activities of Indian Space Programme from early days through Sponsored Research (RESPOND) programme of ISRO. Over the years, RESPOND has developed the lead programme to channelize and harness Indian academia potential for National Space Programme. It has significantly contributed for advancing space R&D, developing human resources in advanced technology and building institutional capacity.

As Indian Space Research Organisation (ISRO) has an ambitious plan for next two decades to have its own “Bharatiya Antariksh Station” and develop indigenous capability for human landing on Moon, the role of academia to achieve the same will be going to be very important. With announcements of Space Sector Reforms and Indian Space Policy-2023 by Government of India, the doors of space sectors have been opened up for start-ups and Non-Government Entities (NGEs). Academia can play a significant role to prepare and up-skill the human resources through programme like RESPOND to make them future ready for growing space industry.

The academic community and other R&D organisations are encouraged to engage and contribute to ISRO's focused R&D efforts. In this context, the Capacity Building and Public Outreach (CBPO) office at ISRO Headquarters with supports of all Centres / Units of ISRO / Department of Space has compiled a document titled "RESPOND Basket-2024," outlining the key R&D needs, where academia can actively contribute. I am pleased to announce the release of this document and invite R&D proposals on the relevant topics. I am confident that through collaboration between ISRO and the academic community, we can overcome all the upcoming challenges post in development of cutting edge technologies and discover new opportunities to contribute. I look forward to witness the innovative outcomes of this partnership.

Date: 27/11/2024

(Somanath S)

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Preface

The Indian Space Research Organisation (ISRO) has a remarkable legacy of prioritizing self-sufficiency and fostering innovation in the field of space exploration. Since its inception, ISRO has focused on developing critical technologies in-house, often in collaboration with academic and research institutions across the nation. This legacy has been pivotal in achieving milestones such as launching satellites, interplanetary exploration and now ISRO is pursuing more ambitious goals towards the futuristic missions of ISRO.

As the Director of Capacity Building and Public Outreach (CBPO) at ISRO HQ, I take great pride in extending a warm invitation to join hands with ISRO in this exciting journey. The convergence of academic expertise and ISRO's operational prowess holds immense potential to elevate Indian Space Programme to much greater heights in the global space race.

To facilitate this partnership, ISRO annually releases the "RESPOND Basket", which serves as a curated repository of research topics that are critical to ongoing and future missions. The 2024 edition, enriched by the inputs of experts led by Dr. Unnikrishnan Nair, Director, VSSC, features approximately 150 research proposals. These proposals span diverse domains, offering a wide spectrum of opportunities for academic involvement.

The RESPOND Basket includes timely and relevant research topics aligned with ISRO's strategic objectives & brief summary of research topic outlining anticipated deliverables with its potential linkages to Indian Space Programme. It will serve as a clear pathway for faculty and researchers to prepare and submit impactful R&D proposals.

I cordially invite you to explore these collaborative avenues and contribute your expertise towards building a brighter future. Let us unite to transform challenges into milestones and establish India as a global leader in space exploration.

Date: 27/11/2024

(G Harikrishnan)

GENERAL INSTRUCTIONS

1. RESPOND BASKET comprises of the most urgent and important research problems identified by ISRO/DOS Centre / Units on the basis of ISRO's upcoming programmatic R&D requirements. Each research problem comprises of a brief write-up about the topic for the faculty of the academic Institutions/R&D laboratories other than the Space Technology Cells (STCs), Regional Academic Centre for Space (RAC-S) and Space Technology Incubation Centre (STICs) to select and prepare the proposals.

2. An individual or group(s) of scientists / faculty members affiliated to any academic institution/ autonomous R&D institutions are eligible for submitting the proposals. The Principal Investigator(s) should be a full-time employee(s) of the concerned institution.

3. Principal Investigator shall be a domain expert in the area to which the proposal belongs and the list of publications to be uploaded in the portal at the time of submission of proposal. There may also be co-investigator(s) from the same/different institution(s) working on the project. But satisfactory completion of a project will be the responsibility of the Principal Investigator and the institution involved.

4. The age limit for the Principal Investigator is below 65 years (sixty-five) including the project period. Proposals from individuals not affiliated to any recognized institution/ R & D institutions will not be considered.

5. The signed "Declaration Form" shall be uploaded in the portal at the time of submission of proposal in the prescribed format. Format is given in the Annexure -1.

6. For other information regarding terms and conditions of ISRO Grants, details on research fellowships and Guidelines governing the allocation of funds etc., please visit ISRO website (https://www.isro.gov.in/SponsoredResearch.html).

7. The last date for submitting the proposals online under "RESPOND BASKET-2024' is January 31, 2025.

8. The submitted proposal will be subjected to critical evaluation by the ISRO/DOS Centre experts. The proposal will be evaluated on the basis of novelty, methodology, approach, experience of the PI in the subject area, duration of the project, budget etc.

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