

Call for Collaborative and Coordinated Research Project (CRP) Proposals from Principal Investigators (PI) of Non-DAE Institutes



(CRP-2025)

December 03, 2025

BRNS has identified some of the recent priority research areas in which scientists from different units of Department of Atomic Energy (DAE) are interested in establishing collaborations with research groups from academia and research institutes outside DAE. Interested Principal Investigators (PIs) and Co-PIs from the non-DAE institutes, may communicate with Principal Collaborators (PC) / Co-PC from DAE units / institutes, for working out detailed project proposals for collaborative research. Such project/sub-project proposal, in required BRNS format, shall be submitted on BRNS website, for evaluation and consideration of BRNS for suitable funding. The proposed project proposal shall have clear deliverables and timeline.

Salient features of CRP Programme are as follows:

1. CRPs will be in priority research areas identified by DAE units.
2. Project Proposal Applications (PPAs) will be prepared jointly by PIs from participating institutions outside DAE and PCs from DAE Units.
3. Proposals should be submitted ONLY BY ONLINE MODE (<https://brns.res.in>) by Scientists / Engineers / Researchers / Technologists working in Academic Institutions and National Universities. For further details, please refer terms and conditions available on BRNS website.
4. PI should have relevant work experience (publications, patents, prototype, technology demonstration should be cited in submission).
5. A CRP may consist of multiple sub-projects and based on research areas and expertise of PIs and Co-PIs, may have participation of multiple institutions.
6. A PI who has any ongoing BRNS project, is not entitled for any CRP project / sub-projects. Similarly, a PC having two ongoing projects, is not eligible for participation in a CRP or any other project / sub-projects of BRNS.
7. The duration of CRP implementation will be 3-5 years accordingly, deliverables

from each Sub-project (maximum duration 3 years) will be integrated into the main project within its span.

8. Selection and evaluation of a CRP will be based on collective merit of all its components / sub-projects to deliver the end result embedded in CRP mandate.
9. Processing of sub-projects under each CRP title will be same as stand-alone research project. However, from inception to closure, to fulfill the objective of CRP, these subprojects will be processed in collective manner. Progress review and subsequent funding also will be done in integrated manner for all the sub-projects of the CRP.
10. Deliverables and time schedules will be clearly defined and the progress will be monitored at frequent intervals for all the sub-projects of a CRP.
11. Project / Sub-projects of CRP proposals will be evaluated and recommended by BRNS committees.
12. Technology Readiness of participating research groups in executing the projects will be given due importance & consideration.
13. Project proposals with translational components and market potentials will be given preference.
14. The list of priority research areas will be updated frequently, as and when fresh proposals, duly forwarded by Heads of DAE units are received in BRNS Secretariat.

Titles of the Coordinated Research Projects (CRP) and sub-projects for which project proposal application (PPA) may be submitted by the Project Investigators (PI) on BRNS website, in consultation with specified Project Collaborators (PC / Co-PCs), are as follows.

1. Design and Development of SSA constituent technologies viz., AC and DC Power Technology, Control Technology and stabilized Mechanical structure for Solid State Power Amplifier (SSPA) systems for accelerators. [Shri Sandip Shrotriya \(PC\), Email: sds@barc.gov.in](mailto:sds@barc.gov.in)

- a. Design of innovative AC and DC Power technology inclusive of DC bus with Active PFC and Development of a 3.5 kW DC-DC Converter. [Shri Sandip Shrotriya \(PC/Co-PC-1\), Email: sds@barc.gov.in](mailto:sds@barc.gov.in)
- b. Design of development of advance Interlock Protection and Monitoring System (IPMS) for 100 kW and design of IPMS for 300 kW SSA. [Shri Shram S Jena \(Co-PC-2\), E mail : ssjena@barc.gov.in](mailto:ssjena@barc.gov.in)
- c. Design and analysis of associated innovative and stabilized mechanical structure/s. [Shri Niranjan Patel \(Co-PC-3\), E mail : nrpatel@barc.gov.in](mailto:nrpatel@barc.gov.in)

2. Real time earthquake response measurement for base isolated structures and its utilization for assessing safety of 3-Dimensionally isolated buildings. Dr. Y.M.Parulekar (PC), E mail: yogitap@barc.gov.in

- a. Real time measurement of Response of Base Isolated and Conventional Buildings Subjected to Earthquakes. **Dr. Srijit Bandyopadhyay (Co-PC-1), srijit@barc.gov.in**
- b. Studies on Three-dimensional Isolation System for application on RC structures located in higher seismic zones. **Shri P. Ramakrishna(Co-PC-2), prama@barc.gov.in**

3. Innovative & Integrated Approaches for the Treatment of High-Level (HLW) & Intermediate-Level (ILW) Radioactive Liquid (Aqueous & Organic) Waste. Dr. J.Selvakumar (PC) Email:jselva@igcar.gov.in

- a. Green Synthesis of Efficient & Selective Symmetric and Unsymmetric N-Donor Extractants for Actinide–Lanthanide Partitioning and Separation of Americium from High-Level Liquid Waste: Eliminating Toxic Chemicals, Solvents, and Process Modifiers. **Shri Gogai Diganta(Co-PC-1), gogai@igcar.gov.in**
- b. Innovative Composite Matrix Design for Immobilization of Lanthanides and Minor Actinides from High-Level Liquid Radioactive Waste Using CCIM Technology. **Shri Sourav Maity (Co-PC-2), sourav@igcar.gov.in**
- c. Design and Development of Ionic Covalent Organic Frameworks (ICOFs) for the Removal of Residual Tc-, Ru-, and Sb-Based Oxyanion Radionuclides from Highly Saline Intermediate- and Low-Level Liquid Waste Streams. **Shri Vangala Sri Datta Chaitanya (Co-PC-3), vsdchaitanya@igcar.gov.in**
- d. Process Development and Optimisation for the Recovery and Reuse of Exotic Spent Solvents, and Management of Unrecoverable or Highly Degraded Solvents through Efficient Mineralisation Processes. **Shri G.Saipriya (Co-PC-4), saipriya2009@igcar.gov.in**

For any further query related to this CRP-2025 call, you may write to **Dr. Ajay Kumar, Programme Officer, BRNS (Email: ajaykls@barc.gov.in)**. Last date of online submission of project proposal is **March 03, 2026**. Proposal submitted after the due date will not be considered.

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