

Call for research proposals in the field of paleoclimates, sea level changes, CO₂ sequestration, reactive Nitrogen, phosphorus and carbon cycles, coral reefs and Ocean acidification with reference to climate Change

Deadline: May 25, 2018 (Friday) 1730 hrs.

Message:

Applicants are encouraged to read the text of the call carefully and to comply with the requirements stipulated for the relevant application type and the call for proposals. Grant to applications that do not comply with these requirements will be rejected.

A copy of the proposal in the **prescribed format** along with the [personal details](#) in pdf format may be submitted by Indian PIs, as per details mentioned below

Guidelines and important considerations relevant to all types of applications in this call for proposals:

The English-language call for proposals is the legally binding version.

This call aims at fostering research collaboration among various R & D institutions, academia and organizations in the country to adopt cross cutting multi-disciplinary, multi- organizational approach while addressing any scientific problem falling under overall mandate of the National programme.

Funding for approved / sanctioned research projects with duration up to 3 years, shall be made available depending upon budgetary provisions of the financial year/s.

Applicants are encouraged to incorporate own and/or additional funding. Applicants are also encouraged to demonstrate sustainable commitments from own institutions or other sources during and/or beyond the project period.

Broader Scientific themes and/or scientific issues to be addressed in the project proposals

The broad theme of the project proposal must cover the following:

- The Geological aspects of paleoclimate studies, particularly those related to Late Cenozoic, Quaternary as well as the deep time (i.e. Tertiary) with a view to identification of appropriate analogies that can be used for into projection into the future.
- Identification of various potential proxies to assess Climate Change and Global warming issues.
- Modeling for the future trend of various potential factors and to identify the major determinants controlling these factors causing Global warming.
- One major line of study should be interlinking surface land and ocean processes with climate and tectonics with lot of input coming from quantitative geomorphology.
- A second line of study could be related to Critical Zone programmes, which regulate interactions between atmosphere-biosphere-hydrosphere-lithosphere.
- Paleoclimatic including paleo sealevel assessment / reconstructions from lacustrine, riverine, estuarine, coastal regions and pelagic regions using various biotic and abiotic proxies.
- C, N, P cycles in earth system
- Interlinking of surface processes with climate and tectonics with inputs from quantitative geomorphology
- Critical Zone programmes, which regulate interactions between atmosphere-biosphere-hydrosphere-lithosphere
- Land and Ocean based CO₂ sequestration
- The Societal impacts (geological), particularly in terms of relationship between climate change and disaster (not the management issues, but a cause-and-effect relationship).

Administrative part

Who can apply

Any Indian Citizen who is a serving employee of any R & D Institution, academia and organization established by government, with established scientific experience in related field can apply as PI. **Each project proposal must keep a Co-PI as well** for smooth functioning of project. **Institutes are encouraged to submit Institutional research project over individual's.** However inter-disciplinary and multi-institutional research projects adopting cross cutting scientific approach shall be preferred. Joint project proposals must be carried out by established research groups across the country. The PI and Co-PIs must belong to an eligible institution and detailed Bio-data of all PIs and Co-PIs and their specific role and responsibility needs to be submitted. With regard to manpower projections standard approved positions by MoES purely on project mode shall be entertained. **It is important to understand that proposals towards establishing major infrastructural facility shall not necessarily be entertained under this programme due to budgetary constraints.** The period of project must be for three years and budget should be rationale and should not be too ambitious. New ideas / testing of idea under various themes of the programme shall be preferred over the routine type research project from different geographical region. Novelty of scientific ideas and its societal relevance shall be preferred.

Cooperation between / among participating institutions should be outlined in the project description supporting with the written endorsement of Heads of the participating organization. To ensure adequate participation of all project partners and encourage long-term cooperation, the project description should also clearly describe specific in-kind and financial contributions by each partner (participating institution) as well as their role in the joint project.

Application requirements

- All grant applications are to be submitted in English
- The project description must have a maximum of 10 pages, including footnotes and references, following the enclosed template with font "Times New roman 12 points". For references and figure text, font size 9 can be used.
- Activities, including dissemination and networking activities, should be clearly described in the project description and according to timeline. Plans for access to data and data storage should be described.

- The work should be organized in well-defined work packages with corresponding responsibility.
- Milestones should be identified that can be used to easily follow the progress of the project.
- Budget information should be detailed and clearly presented, specifying all relevant expenses such as travel costs, and should be specified in the project description.
- Management structure and partner roles must be described.
- Three year research project duration is set as a maximum.
- CV's including publications list must not exceed 4 pages.
- Communication and dissemination of research results to key decision-makers, the public administration and the public at large is of particular importance and will be emphasized.
- Funding agency i.e. Ministry of Earth Sciences shall be acknowledged for financial support in all publication arisen out of approved project under this programme.
- MoES may at an appropriate time ask for data generated by PIs for data archive / repository and the same shall be binding for PIs/ Co-PIs. Each PI shall provide an undertaking to share the data with MoES following set approvals and shall be made available for repository purpose. IPR of PIS/Co-PIs shall be taken care of. All data generated shall be made available in public domain within 2 years upon completing the project. Each PI has to provide written undertaking about data submission if his/her project is finally approved.

Timely submission of 6-12 months progress report along with utilization certificate is must on part of PI.

Review Process :

Each proposal received within stipulated date and time shall under go rigorous scientific reviews by three independent experts in the field with masked identity of the concerned PIs and their organization. Each applicant is required to provide references in text in number like (1,2,3 etc.) instead of references given by name like (XYZ, 2018 or XYZ et al. 2018 etc.). The Numbered references in text can be detailed at the end under References list. First page of proposal must contain title of proposal PI and Co-PIs name and affiliation whereas the second page should only mention title and start with proposal as per format.

Those project proposal/s which secure atleast 60% average marks in independent review process becomes eligible to be invited (in order of merit) for the presentation of their proposal before duly constituted high power expert committee. Number of project proposals to be called for presentation shall be finalized by the ministry depending upon its priority / budget and novelties of scientific ideas. Depending upon Expert Committee recommendations based on scientific content / novelty / feasibility / assurance of deliverability / societal relevance and the priority of Ministry and funds availability finally recommended projects **shall be supported financially in order of merit.**

Mere submission of proposal to MoES against this call does not entitle any PI to be called for presentation and get financial support. *PI needs to bear his /her travel expenses for presenting their proposal at MoES.* Final decision with regard to financial support to any project shall lie with MoES which shall be guided by Expert Committee. **Only successful candidates shall be informed by MoES. Decision of Independent Reviewer and Expert Committee shall be binding on all applicant and no correspondence in this regard shall be entertained by the Ministry.**

Additional information

Undertaking and Endorsement:

The Indian PI has to give **undertaking and endorsement** from the Head of the Institution

Contact:

Dr. N. Khare, Advisor Ministry of Earth Sciences, Prithvi Bhawan, Lodi Road, New Delhi- 110003. email: neloy.khare@nic.in

Submission of proposal:

Detail proposal alongwith scan copy of all required documents/endorsement/undertaking needs to be email at following address:

neloy.khare@nic.in. After emailing the proposal it is mandatory to send by post (registered/Speed post) hard copies (10 Nos.) including original endorsement/undertaking etc. at following address super scribing proposal for Paleoclimate Programme:

Dr. N. Khare, Advisor Ministry of Earth Sciences, Room No. 312, Prithvi Bhawan, Lodi Road, New Delhi- 110003

FORMAT FOR SUBMISSION OF PROJECT

(Prescribed font : Calibri 11, 1.5 spacing)

Section 1: Project title

Title of the Project (not exceeding 150 letters)

Section 2: Subject

Please mark only one of the boxes.

- Atmospheric Science
- Earth System Science Technology
- Geosciences
- Hydrology & Cryosphere
- Ocean Science & Resources
- Paleo Climate Change Programme

Section 3. Principal Investigator and Co- Investigators:

- Name(surname first)
- Date of Birth(dd/mm/yyyy)
- Affiliation(s)
- Address for correspondence
- Email address
- Mobile No./ telephone/fax number
- Specialization in key words(not more than 20 words)

Section 4. Principal Implementing Institution

- a. Status (University/Govt./autonomous etc.)
- b. In case of University, provide AICTE Registration No. or UGC Notification No.

Section 5: Collaborating Investigators/Institutions

In case a project is to be executed by more than one Institutions (which MoES encourages) and/or requires regular inputs from other scientists, the names of collaborating institutions and Scientists are to be recorded.

The Project should also explicitly indicate, the nature of contributions by the individual PIs (who will do what) in terms of Scientific/technological contributions.

Section 6: Project: salient features (two page, font 11, 1.5 spacing), **to include a statement each on the following**

Intellectual merit:

State briefly why this work is important in the national and international context and what new science is being explored or new hypotheses are being examined.

Data Collection and Analysis :

Detail the primary data to be collected and state what novel methodology or computational aspects will be explored

Broader impacts:

A statement each on the following: Include statements on the following aspects

- a. Training and support of (a) scientists, (b) students (MS, PhD)
- b. Fostering of new interdisciplinary collaborations between scientists.
- c. Development or Calibration or lab facilities.
- d. Dissemination of results by students and collaborators at professional meetings and in peer-reviewed journals.
- e. Activities that reach out to the society or general public such as exhibitions, school-education etc.
- f. A brief about the technical expertise of PI & Co-PI to execute the Proposed Project supported by Publications in the cited journals having Impact Factor.

- g. A statement about sharing of data and knowledge to the scientific communities of India

Project Summary:

The project title, PI name and name of the Institution involved should precede the summary.

The summary (in telegraphic language) should be a self-contained description of the research activity including (a) subject (b) research objectives (c) methodology to be adopted (d) expected outcome and deliverables of the project and (e) brief budget.

Section 7: Project Description (not to exceed 10 pages including figures, tables and references 500 words /page) First 10 pages of this section will only be considered.

(a) Objectives

The objectives may be given point by point in telegraphic language keeping in view the definition of the problem. (<200 words)

(b) State of knowledge

This should be based on literature survey with key references and relevance of the knowledge both at National and International level. Also, identify gaps in the area vis-à-vis their relevance in line with our national priorities and how the work proposed will

help in addressing the gap areas. Include important references. Crisp and digital statements will help.

- National Scenario
- International scenario

(c) Importance of the proposed project

(d) Justification for support -

Highlight the new science questions being asked and justify your equipment needs here.

(e) Patent details (domestic and International) If anticipated

(f) Methodology (should explicitly mention the hypotheses being tested)

(g) Work schedule and detailed plan of implementation with year wise time lines and targets time

(h) Utilisation of research results

- specific deliverables-digital statements
- impacts of the proposed work on the broader scientific community in terms of training, and publication of results, collaborations and benefits to society

Section 8: Budget

(a) Budget for Research Manpower & Justification for their salaries and wages

Provide monthly consolidated salary outflow and a detailed justification for the manpower requirement

(b) Budget for Consumables with justification,

(c) Budget for travel within India with detailed justification.

(d) Budget for other costs and justification for the same

Some projects may have special requirements not covered under sections 8(a) to (c) . Costs for such requirements are to be indicated, based on realistic estimates and due justifications.

Budget for permanent equipment and justification.

- Detailed Specifications of the equipment proposed
- Details of such equipment in the country and the need for additional facility
- statement on the capabilities of the PI in using these
- cost estimate (notional quotations)
- For major equipment of cost > 50 lacs, please indicate as to how the instrument will be maintained after the project completion. This should be a formal statement by the head host institution on its letter head indicating how much financial and infrastructural support will be available. (PLEASE NOTE MAJOR INFRASTRUCTURAL / INSTRUMENTAL SUPPORT IS DISCOURAGED UNDER PALEOCLIMATE RESEARCH. However PI can project their requirement in their proposal if they so desire.

Section 9: Existing facilities

Basic infrastructural facilities, equipment and other resources available that would be extended by the institute to the project should be recorded viz.

- (a) Equipment within the research group of PI/Co-PIs.
- (b) Equipment in the Department/University/Institution
- (c) Equipment in other Departments or Centers of the institution in the region including Regional Sophisticated instrumentation centers

References in text must be provided in numbers and not by name of authors. A separate page detailing these reference may be provided.

Section 10: CURRICULUM VITAE (Max 2 pages)

One page Biodata with 5 relevant publications of the Principal Investigator and other Investigators who are in employment and will contribute to the project. Publication record should include publication during the last 5 years in peer reviewed SCI journals; h-index and citation details.

Section 11: Other research projects with investigators (one page)

List of Projects with the PI/Co-PI along with name of funding agency, project funding amount, and date of completion and summary details of the projects (completed/ on-going or proposed) with different investigators may be given. A summary of results from these projects and publication is to be enclosed..

Section 12: Any other information (in direct relevance to the project)

APPLICATIONS EXCEEDING PAGE LIMITATIONS AND INCOMPLETE IN ANY RESPECT WILL BE RETURNED.

ENDORSEMENT FROM HEAD OF INSTITUTION

(On the Institute's Letter Head)

- a) Certified that the Institute welcomes participation of _____, as has principal Investigator for the project titled _____, submitted under the theme on _____ in the field of Earth System Sciences. ,
- b) In the unforeseen event of discontinuance by the Principal Investigator, the Head will depute a competent expert from the institute as PI for the successful completion of the project (with due information to ESSO-MOES).
- c) Certified that the equipment and other basic facilities and such other administrative facilities as per terms and conditions of the grant, will be extended to the investigator(s) throughout the duration of the project.
- d) Certified that data generated out of the project will be made available for use by any researchers after two years of completion of project and shall be provided to Ministry of Earth Sciences or its identified agency for the repository purpose after two years of completion of project.
- e) Institute assumes to undertake the financial and other management responsibilities of the project.

Date:

Signature with Official Seal

Place:

CERTIFICATE FROM INVESTIGATORS

- a) I/We agree to abide by the terms and conditions of the ESSO-MoES research grant.
- b) I/We did not submit the project proposal elsewhere for financial support.
- c) I/We have explored and ensured that equipment and basic facilities will actually be available as and when required for the purpose of the projects. I/We shall not request financial support under this project, for procurement of these items.
- d) I/We undertake that spare time on permanent equipment will be made available to other users.
- e) I/we undertaken to provide UC & progress report (6 – 12 month basis) to MoES in time & utilize the GiA strictly in compliance of GFR.

Signature of Principal Investigator
with Official Seal

Date :

Place:

UNDERTAKING FROM INVESTIGATORS

- a) I/We agree to acknowledge the financial support given by Ministry of Earth Sciences in all publications (reports/scientific papers/review articles etc) emerging out of the research/activity undertaken under this project as per the following format

“The author/authors gratefully acknowledge the financial support provided by the Earth System Science Organization, Ministry of Earth Sciences, Government of India vide grant no.” to conduct this research.”

- b) I/We agree to submit all data generated (raw/processed) out of this fully funded project of MoES to data repository of MoES within 2 years of the completion of the project compulsorily.

Signature of Principal Investigator
with Official Seal

Date :

Place: