

**ANNOUNCEMENT**  
**No. 14/1/2014-Metal-IV**  
**Government of India**  
**Ministry of Mines**

**Invites Science and Technology Project Proposals**

Projects are invited from Academic Institutions, Universities, National Institutes and R&D Institution recognized by the Department of Scientific and Industrial Research, Government of India, for up to 3 years duration in the following thrust areas which have direct bearing on mineral sector, applied and sustainable aspect of mining and industrial applications:

**2. THRUST AREAS OF RESEARCH IN MINES**

The broad thrust areas for supporting Research in Mining are given below:

- i. Prospecting/exploration for strategic rare and rare earth minerals.
- ii. Development of new technology for mineral exploration and mining on land and deep sea to locate and exploit new mineral resources.
- iii. Research in mining methods. This includes rock mechanics, mine designing, mining equipments, energy conservation, environmental protection and mine safety.
- iv. Improve efficiency in process, operations, recovery of by-products and reduction in specification and consumption norms.
- v. Research in metallurgy and mineral beneficiation techniques to utilize lower grade and finer size ores.
- vi. Extraction of value added products from mine waste, plant tailings etc.
- vii. Development of new alloys and metal related products, etc.
- viii. Evolve low capital and energy saving processing systems.
- ix. Production of materials of high purity.
- x. Cooperative research among organizations associated with the mineral sector.

Additional weightage for consideration of support will be given in the following conditions:

- a. Preference for projects submitted by scientific/academic institution with collaboration with the concerned industry.
- b. Encouragement for proposals with higher Technology Readiness Level (TRL), ideally leading to pilot scale plants, for projects on high purity materials, advanced alloy products, waste utilisation, recovery from slags/tailings, recycling, urban mining etc
- c. Encouragement for proposals with pre-developed proof of concept.
- d. Mineral deposit targeting based on the geoscience data made available in public domain by GSI
- e. The research / academic institutes may access and collaborate with government agencies for laboratory support for developing project proposals in coordination
- f. Preference for projects on development of products or on materials, which have possibilities of import substitution

**3. Scientific and Technical Merit and relevance to Industry**

All organization should follow the instructions given below before submitting the project proposals to the Ministry:-

- a. the proposal should be relevant to the overall mandate of mining, exploration, minerals, metals value addition, waste and environmental impact of mining and metallurgical processing
- b. industry inputs and participation

- c. Originality in terms of concept, method, innovation, or in application;
- d. development of new methods, synthesis of advanced materials,
- e. process improvements and innovation,
- f. design of apparatus and other research tools,
- g. process development for waste/secondary/low grade materials recovery,
- h. zero waste mining, large data analysis and simulation modeling etc.
- i. nature of study as experimental, modeling/simulation and both
- j. There must be a clear enunciation of objectives and deliverable in the proposal
- k. detailing of research methodology, design of experiments, chosen methods of analysis appropriate and valid.
- l. intended/potential application area has to be made clear in the proposal, industry relevance, industry participation if appropriate
- m. potential scalability to pilot plant and later on plant levels
- n. what are the techno economic benefits (at least rough estimates).

Science & Technology (S&T) projects are funded through grant-in-aid by the Ministry of Mines through the process of project evaluation by Project Evaluation and Review Committee (PERC) and recommended projects are approved by the Standing Scientific Advisory Group (SSAG) constituted by the Ministry.

The details of terms and conditions and the prescribed proforma are available at the website [www.mines.gov.in](http://www.mines.gov.in) under "Science & Technology"-> **GUIDELINES FOR SUPPORT TO MINING RESEARCH** or can be downloaded from the link: <https://mines.gov.in/writereaddata/UploadFile/GUIDELINES%20FOR%20SUPPORT%20TO%20MINING%20RESEARCH.pdf>

Project proposals can be submitted to the **Section Officer (Metal-IV section), Room No. 115A, F-Wing, Shastri Bhawan, Dr. Rajendra Prasad Road, New Delhi-110001 (in the prescribed proforma) by 17<sup>th</sup> July 2019 (5 copies) alongwith soft copy of the project proposal in MS word format (not more than 3 MB) to the e-mail: [met4-mines@gov.in](mailto:met4-mines@gov.in)**. Those projects, which are shortlisted shall be directed to present their proposal either in Delhi or any other city. The timelines are as under :

Details	Date
Last date of receipt of proposals	17 <sup>th</sup> July 2019
Scrutiny of proposals	By last week of July 2019
Conduct of PERC Meeting	By 1 <sup>st</sup> week of August 2019
Conduct of SSAG Meeting	By 3 <sup>rd</sup> week of August 2019

The Grants-in-aid will be governed by Government of India terms and conditions as amended from time to time. The head of the institute may please ensure that no utilization certificate under any project under the S&T Programme Scheme of Ministry of Mines being implemented by their institute is pending for more than one year, for consideration of their project proposals.