ANNOUNCEMENT

Dated: 1st March, 2024

No. Met4-14/6/2024 (R&D)
Government of India
Ministry of Mines

Invites Science and Technology Project Proposals

under R&D Component of Science and Technology Programme of Ministry of Mines

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 on the following topics of directed R&D and in the following thrust areas which have direct bearing on mineral sector, applied and sustainable aspect of mining and industrial applications:

2. TOPICS FOR DIRECTED R&D

A. Critical metals

Gallium	● **Gallium recovery from Bayer Liquor**: Extraction of Gallium from Bayer Liquor (mgpl level to gpl) and development of agents and chemicals for extraction of Ga and extraction.
Niobium, Tantalum	● **Recovery of Nb/Ta from primary ore.**
Niobium, Tantalum	● **Recovery of Nb/Ta from tin slag**: Development of process / technology for extraction of Nb & Ta from tin slag
PGE	● **Extraction of PGE/ Nickel from Ultrabasic rock.**
Nickel & Lithium	● **Recovery of Li/Ni from waste battery**: Cost effective process and technology for recovery of Nickel and Lithium from scrap battery
Lithium	● **Recovery of Li from new deposits:** Process flow sheets for Li beneficiation to be developed for new GSI finds and from Brine / salt beds.
Tungsten	● **Recovery of W from tool waste/ BGML dumps**: Development of process and technology for recovery of Tunsten from tool waste and BGML mill dumps
Germanium	● **Recovery of Ge from Pb-ZN circuit**: Process development for recovery of Germanium from lead-Zinc circuit. E-waste is another source, for Ge recovery.
Selenium and Tellurium	● **Recovery Se /Te from anode slimes**: Process / technology development for recovery of Se &Te from copper anode slimes
Indium	● Recovery of **Indium** from the sphalerite ore.

B. Rare Earth

- **Solvent extraction Chemicals**: Development of chemicals with higher separation ratios to reduce the number of stages in separation of Rare Earths chloride solutions (100-250gpl)
- **Chemicals for ion-exchange columns**: Development of new chemicals with higher selectivity and separation factors for Ion-Exchange columns for RE ion extraction.
- **Film Chromatography**: Development of high Speed Film Chromatography solutions for Individual RE metal separations and speciality chemicals for Film chromotography separation of individual RE metals.
- **REE recovery from khondalite**: Process design for treatment and process for extraction of REE and metal values from Khondalite or similar low value minerals.
  Beneficiation of lean / scattered strategic minerals: Development of mining techniques such as In-situ leaching and Electro-kinetic mining to be taken up for exploitation of lean and scattered strategic mineral occurrences. These advanced mining techniques eliminates excavation of large mass of earth's surface and sub-surface.
- **Recovery of REEs from e-waste**: Integrated technology development for recycling of e-waste to recover critical elements such as Li, rare-earths, Co, Ni, etc. (Urban Mining)

C. Recycling / Circular Economy

- **Laser Induced Brake Down Spectroscopy**: Development of a low cost automated system able to separate aluminium alloys using laser-induced plasma to analyze the composition of materials for rapid and accurate sorting and identification of metals in complex mixtures.
- **Artificial intelligence and Machine learning**: Development of metal scrap sorting technology based on color and shape-based which utilizes advanced imaging and computer vision techniques to identify and classify metal scraps
- **Electrochemical process**: Development of process / technology for metal recovery from e-waste which uses less solvent (minimal reagent) and shows convenient and precise control, reduced energy consumption, and low environmental impact
- **Hydrometallurgical process:** Development of technology for metal scrap recycling including selective leaching, solvent extraction, ion exchange resins, etc
- **Internet of Things (IoT) and sensor-based technologies**: Development of processes for metal recycling to enable real-time monitoring, optimize resource allocation, and improve overall operational efficiency
- **Collaborative robotics:** Development of robots also known as cobots, use cameras, robotic arms, grippers, and conveyor systems to lift, move, and stack materials as needed, and can perform a wide range of tasks such as material handling, assembly, inspection, and maintenance alongside human workers.
- **Heavy Media Separation**: Development of technology for scrap sorting based on density difference with higher separation efficiencies

D. Energy Efficiency

- **Energy recovery systems**: Designing of low cost heat exchangers or regenerative burners, which can support metal recycling industry for effectively tackling energy losses by capturing and repurposing waste heat generated during the recycling process. Through this approach, the industry can optimize energy utilization and minimize wastage, contributing to improved energy efficiency and sustainability in metal recycling practices.
- **Hydrogen Production by dross**: Process / Technology development for production of hydrogen from dross
- **Energy Efficiency of Anodes**: Development of new material for enhancement of energy efficiency of carbon anode for aluminium production with low carbon footprint (development of materials)
- **Energy Efficient pit furnace**: Design and development of pit furnaces with energy efficiency of more than 40%

E. New Material / Processes

- **Vapor technology for extraction of Nickel/ PGE etc.**
- **Atomised Ferro-silicon powder:** Development of **ferro** silicon powder for heavy media separation of metal scrap
- **High Conductivity copper**: Development of copper wire with more than 98% conductivity from armature & EoL electronics & machinery scrap
- **Coating for copper to prevent oxidation:** Copper gets oxidised during transportation and non-reactive and non-interference coating to be developed for preventing the oxidation.
- **Aluminium Casting Anodising:** Process / Technology for anodising high Si castings (5- 11)%
- **Aluminium casting:** SoPs for obtaining uniform composition while casting molten aluminium
- **Bulk utilisation of secondary dross:** Development of process for converting dross into flux material for steel industry
- **Homogenisation of melt:** Processes/ technology for obtaining uniform melt chemistry
- **Potash Extraction:** Process/ technology for Potash extraction from the nepheline syenite rocks
- **Zinc Recovery:** Development of technology for recovery of Zn from EAF/IF ash
- **Feasibility of economic mining of Rajasthan Potash evaporite basin.**

3. 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 equipment, 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.
xi. Decarbonisation and development of green technology in mineral based industries
xii. R&D to establish circular economy and use of recycled materials in mineral based industry
xiii. Focus on extraction of strategic, critical and REE at elemental level

4. As per guidelines, project proposals should meet following mandatory requirements:

a. MSME/Industry participation in the form of at least 20% financial contribution (between cash and kind contribution, at least 15% cash contribution).
b. R & D proposals should be targeting TRL 3 to 7, in the identified thrust areas.
c. Sample collection and its first level characterization should precede proposal submission.
d. the institute should have analysis capability or Prior tie-up with other institute in this regard for the intended purpose
e. In case of CSIR Labs, co-funding from CSIR of at least 25% of the total project cost or total cost of capital equipment, which ever is higher.

5. Scientific and Technical Merit and relevance to Industry: Important instructions:

i. 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 should be appropriate and valid.
l. intended/potential application area has to be made clear in the proposal, industry relevant, may include/involve 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).

ii. 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.

iii. The S&T Guidelines, details of terms and conditions and the prescribed proforma are available at SATYABHAMA Portal which may be accessed at research.mines.gov.in. PIs are requested to go through the S&T guidelines and terms and conditions available on the portal.

iv. Project proposals are required to be submitted online on the SATYABHAMA Portal only (research.mines.gov.in) by **30.04.2024**. A User Manual is also available on the Portal where the stepwise procedures for submission of project proposals have been highlighted. Also, a soft copy of the project proposal generated from the Portal in PDF format needs to be sent to the e-mail: met4-mines@gov.in. The PIs who have registered themselves on SATYABHAMA Portal earlier need not register again and can use the same credentials for logging into the portal for project submission. The PIs need not send the hard copy of project proposals. Project proposals submitted in physical mode will not be accepted. The PIs of those projects, which are shortlisted shall be directed to present their proposal either physically (in Delhi or in any other city in India) or through video conferencing, which will be communicated to them. The timelines are as under:

Details	Date
Beginning of PI Registration and Project Submission on SATYABHAMA Portal	01.03.2024
Last date of receipt of proposals	**30.04.2024**
Conducting Preliminary Scrutiny	By 2nd week of May, 2024
Conducting PERC Meeting	By 1st week of June, 2024
Conducting SSAG Meeting	By 4th week of June, 2024

v. The Grants-in-aid will be governed by the S&T Guidelines of the Ministry of Mines, Government of India's 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.

vi. For further queries, please email us at: met4-mines@gov.in.

Science and Technology Programme of Ministry of Mines – An Overview

Science and Technology Programme of Ministry of Mines has following three components

1. **Research and Development (R&D) component : Under this component, funds are released to Academic institutions, universities, national institutes and R&D institutions recognized with the Department of Scientific and Industrial Research, Government of India for undertaking research and development projects**

2. **Information Education and Communication (IEC) component : Under this component, funds are released to Industry Associations, recognised Universities, recognized Academic and Research Bodies having at least three years' experience in the mining and mineral sector by organizing or being associated with promotional events**

3. **Promotion of Research and Innovation in Startups and MSMEs in Mining, Mineral Processing, Metallurgy and Recycling Sector (S&T-PRISM) component: Under this component, funds are released to Startups/MSMEs to ensure timely availability of the seed support to the deserving startups / MSMEs/ individual innovators.**

For further details, please visit SATYABHAMA Portal of Ministry of Mines (research.mines.gov.in).

F. No. Met4-14/6/2024 (IEC)
Government of India
Ministry of Mines

New Delhi, Dated: 01.03.2024

Subject: Announcement inviting proposals for funding under IEC component of Science &Technology scheme of Ministry of Mines

Purpose: To create awareness regarding issues relating to the mining and mineral sector by organizing or being associated with promotional events, like seminars, workshops, exhibition, evaluation studies, surveys, awareness programmes, consultation with stakeholders, organization of national and international events/conference, creating audio-visual publicity materials and propagation of policies and programmes.

Eligibility for receiving funds under the Scheme:

i. Industry associations, recognized Universities, recognized Academic and Research Bodies.

ii. The applicant organization should have at least three years' experience in the mining and mineral sector.

Detailed guidelines and Proforma for submitting the proposals are available on SATYABHAMA Portal (research.mines.gov.in).

The **cut-off dates** for receiving proposals in the Ministry seeking grant under the scheme are:

7th March – for the quarter April, May and June
7th June – for the quarter July, August and September
7th September – for the quarter October, November and December
7th December – for the quarter January, February and March

The proposals in the prescribed proforma along with the relevant documents may be forwarded to:

The Under Secretary (Metal-IV),
Ministry of Mines,
Room no. 115-A, F wing, Shastri Bhawan,
Dr. Rajendra Prasad Road, New Delhi – 110001

A copy of the same may also be emailed to met4-mines@gov.in

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For further details, please visit SATYABHAMA Portal of Ministry of Mines (research.mines.gov.in).

जवाहरलाल नेहरू एल्युमीनियम अनुसंधान विकास एवं अभिकल्प केन्द्र नागपुर
JNARDDC
JAWAHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT & DESIGN CENTRE, NAGPUR
Autonomous Body, Ministry of Mines, Govt of India
ISO/IEC 17025:2017
TC-8254
NABL Accredited Laboratory
Amravati Road, Wadi, Nagpur 440023, INDIA | Phone: 91-7104-220701, 220017, 220476, 220763
FAX: 91-7104-220942 | Email: aao@jnarddc.gov.in | Website: www.jnarddc.gov.in

Dated : 1st March 2024

ANNOUNCEMENT inviting proposals for funding from Start-ups, MSMEs and Individual Innovators under S&T PRISM Program of Ministry of Mines

Proposals are invited from Startups, MSMEs and Individual Innovators for up to 2 years duration, which have direct bearing on mineral and metal sector, applied and sustainable aspect of mining, metallurgy and industrial applications, for funding under "Promotion of Research and Innovation in Startups and MSMEs in Mining, Mineral Processing, Metallurgy and Recycling Sector (S&T-PRISM)" under Science and Technology Program of Ministry of Mines so as to enable them to graduate to a level where they will be able to raise investments from angel/Venture Capitalist or they will reach a position to seek loans from commercial banks/financial institutions. The funding is positioned to act as a bridge between development and commercialization of innovative technologies/products/services in a relatively hassle free manner.

Funding support will be in the form of a grant of up to Rs. 50 lakhs for Startup, Rs. 1 Cr. for MSME and grant up to Rs. 2 Cr. may be considered for technology products requiring higher funding on the recommendation by TEC and approval by Apex Committee. Special emphasis will be on critical minerals.

The detailed advertisement and guidelines may be seen at website of Ministry of Mines (mines.gov.in) and SATYABHAMA Portal (research.mines.gov.in).

The proposals should be emailed to **startups-mines@gov.in** in pdf format along with all the enclosures. Last date of submission of proposals is **30.04.2024.**

For further details, please contact the Implementing Agency for S&T-PRISM: Jawaharlal Nehru Aluminium Research Development & Design Center, Nagpur.: https://jnarddc.gov.in / rnchouhan@jnarddc.gov.in / email proposals to: startups-mines@gov.in

Science and Technology Programme of Ministry of Mines – An Overview

Science and Technology Programme of Ministry of Mines has following three components

1. **Research and Development (R&D) component : Under this component, funds are released to Academic institutions, universities, national institutes and R&D institutions recognized with the Department of Scientific and Industrial Research, Government of India for undertaking research and development projects**

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For further details, please visit SATYABHAMA Portal of Ministry of Mines (research.mines.gov.in).

SCIENCE AND TECHNOLOGY PROGRAMME OF MINISTRY OF MINES

GUIDELINES FOR PROMOTION OF RESEARCH AND INNOVATION IN STARTUPS AND MSMEs IN MINING, MINERAL PROCESSING, METALLURGY AND RECYCLING SECTOR
(S&T-PRISM)

Government of India
Ministry of Mines
Shastri Bhawan, New Delhi 110001
(November, 2023)

SCIENCE AND TECHNOLOGY PROGRAMME OF MINISTRY OF MINES

Background

The need for a strong Science and Technology (S&T) base for mining Research and Development (R&D) is well recognized. Research in Mines is an essential prerequisite for generating reliable data and new R&D knowledge relevant to Indian conditions for ensuring sustainable development. Since 1978, the Ministry of Mines has been funding research through grant-in-aid projects to many research institutions in different areas under the broad ambit of Mines protection and management. The Ministry has taken a number of new initiatives to strengthen scientific research in the area of mining sciences.

Recognizing the paramount importance of safety, economy, speed and the efficiency in extraction of mineral resources and in its convergence into viable economic alloys and metals, National Mineral Policy has accorded higher priority to Research and Development (R&D) programmes.

The key components of Science and Technology Programme of Ministry of Mines are–

(i) Research and Development (R&D) component
(ii) Information Education and Communication (IEC)component
(iii) Promotion of Research and Innovation in Startups and MSMEs in Mining, Mineral Processing, Metallurgy and Recycling Sector (S&T-PRISM) component.

(i) **Research and Development (R&D) component** : Under this component, funds are released to Academic institutions, universities, national institutes and R&D institutions recognized with the Department of Scientific and Industrial Research, Government of India for undertaking research and development projects

(ii) Information Education and Communication (IEC) component : Under this component, funds are released to Industry Associations, recognised Universities, recognized Academic and Research Bodies having at least three years' experience in the mining and mineral sector by organizing or being associated with promotional events

(iii) Promotion of Research and Innovation in Startups and MSMEs in Mining, Mineral Processing, Metallurgy and Recycling Sector (S&T-PRISM): Under this component, funds are released to Startups to ensure timely availability of the seed support to the deserving startups.

GUIDELINES FOR FUNDING UNDER "PROMOTION OF RESEARCH AND INNOVATION IN STARTUPS AND MSMEs IN MINING, MINERAL PROCESSING, METALLURGY AND RECYCLING SECTOR (S&T-PRISM)" UNDER SCIENCE AND TECHNOLOGY PROGRAMME OF MINISTRY OF MINES

1.0 Introduction

Ministry of Mines (MoM) had organized 1st Mining Start-up Summit (MSS), in collaboration with Indian Institute of Technology, Bombay (IITB) on 29.05.2023 at IIT Bombay, to encourage startups in the mining sectors. One of the suggestions during 1st Mining Startup Summit is to explore possibility of making provision about funding the researches of the startups in the incubation centers at IITs/NITs/ other technical institutions relevant to mining and metal industry through R&D funds of the Ministry of Mines. Accordingly, these guidelines are being issued for funding startups or a consortium of startups under the Science and Technology Programme of Ministry of Mines that are working in areas that are critical for the growth of mining and metal industry.

2.0 The Need

Wide gap exists in financial support required by a technology driven Startup in its initial phase which are not being addressed properly. The basic idea of seed support is providing financial assistance to potential startups with promising ideas, innovations and technologies. This would enable some of these startups with innovative ideas/technologies to graduate to a level where they will be able to raise investments from angel/Venture Capitalist or they will reach a position to seek loans from commercial banks/financial institutions. Thus the proposed seed support disbursed to Startup is positioned to act as a bridge between development and commercialization of innovative technologies/products/services in a relatively hassle free manner.

3.0 Objectives: The objectives of S&T-PRISM under S&T programme are as under:

a) To promote the ecosystem for research, design, development, proof of concept testing, IPR creation, pilot project and manufacturing i.e., complete value chain in mining, mineral processing, metallurgy and recycling sector.

b) Bridge the gap between R&D and commercialization.

c) To create synergies among the Academia, Research Institutes, Startups and Industry for capacity building and development of a balanced mining ecosystem by organizing workshops/ seminar / webinar, etc. for sharing their views, plan, expectations and concerns in a free and constructive manner

4.0 Focus Areas of the S&T-PRISM:

The S&T-PRISM will be focused mainly in the following areas:

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 equipment, 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. Decarbonisation and development of green technology in mineral based industries
xi. R&D to establish circular economy and use of recycled materials in mineral based industry
xii. Focus on extraction of strategic, critical and REE at elemental level

The main idea of the S&T-PRISM is translation of research into technology (product/process/services) but not to carry out open ended fundamental research. Investigations must lead to innovation or new product/process ready for demonstration or pilot scale deployment (not only publication/ patent).

5.0 Name of the Implementing Agency for S&T-PRISM: Jawaharlal Nehru Aluminium Research Development and Design Center, Nagpur.

6.0 Budgetary Outlay:

The requirement of funds under **S&T-PRISM COMPONENT** will be met from the budgetary support under the Science and Technology Programme of Ministry of Mines. The **S&T-PRISM** has following two sub components:

(a) **Startups Funding** - For this the applicant showing capability, intent, and promise to be able to produce functional prototypes or to productize existing technologies will be awarded grants of up to Rs. 2 crore strictly based on a milestone basis.
(b) **Setting up Incubation Centres** and strengthening them with grant up to Rs. 10 crore which will be disbursed based on the milestone of the centre.

7.0 Administrative set-up for implementation of S&T-PRISM:

(a) The S&T-PRISM will be implemented under the aegis of an Inter-Ministerial Apex Committee which will be reconstituted every 3 years. The Composition of the Inter-Ministerial Apex Committee will be as follows:-

i.	Secretary, Ministry of Mines	Chairperson
ii.	Additional Secretary, Ministry of Mines	Member
iii.	Joint Secretary / Economic Adviser, Ministry of Mines	Member

iv.	Joint Secretary and Financial Advisor, Ministry of Mines	Member
v.	One Member each from Industry and Academia to be opted by the Chair	Member
vi.	Representative from NITI Aayog	Member
vii.	Representative from Ministry of Earth Science	Member
viii.	Representative from Department of Science and Technology	Member
ix.	Director General, National Mineral Exploration Trust	Member
x.	Controller General, Indian Bureau of Mines	Member
xi.	Director General, Geological Survey of India	Member
xii.	Director, Jawaharlal Nehru Aluminium Research Development and Design Centre	Member Secretary
xiii.	Director, National Institute of Rock Mechanics	Member
xiv.	Director (Technical), Ministry of Mines	Member
xv.	DS / Director (Metal-IV), Ministry of Mines	Member
xvi.	Any other representative(s) from Central Government Ministry/ Department/ Organization may be co-opted with the approval of Chairperson	Members

8.0 Changes in the guidelines: Notwithstanding anything contained in the guidelines, any changes/deviation may be made in the guidelines with the approval of Secretary (Mines).

Enclosures:

1. Annexure-I Standard Operating Procedure for Grant.
2. Annexure-II Terms & Conditions for Grant-in-Aid.

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Annexure-I

STANDARD OPERATING PROCEDURE FOR GRANT UNDER S&T-PRISM

1. Implementation Mechanism & Scope of Implementing Agency

JNARDDC will implement the S&T-PRISM on behalf of the Ministry of Mines. The Implementing Agency will work under the overall supervision of the Apex Committee and guidelines issued by the Ministry of Mines.

2. Role and responsibility of the Implementing Agency

The role and responsibility of the of the Implementing Agency are as under:

2.1 Due Diligence

2.1.1 A Technical Expert Committee (TEC) consisting of following members will be constituted by the Implementing Agency to select beneficiaries, recommend release of grants/continuity/extension/short- close, periodically steer and review the technical and financial progress of the grant under S&T-PRISM, etc.:

i.	Director, Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC)	Chairperson
ii.	Director (OD), Indian Bureau of Mines	Member
iii.	DDG (RSAS), Geological Survey of India	Member
iv.	DDG (NMH-Mission 2), Geological Survey of India	Member
v.	Director, National Institute of Rock Mechanics	Member
vi.	Director, CSIR - Institute of Minerals and Materials Technology	Member
vii.	Director, CSIR - National Geophysical Research Institute	Member
viii.	Director, CSIR - National Environmental Engineering Research Institute	Member
ix.	Representative from IIT Bombay	Member
x.	Representative from IIT-ISM, Dhanbad	Member
xi.	Representative from HZL	Member
xii.	Representative from HINDALCO	Member
xiii.	Scientist from JNARDDC (to be nominated by Director, JNARDDC)	Member Secretary
xiv.	Eminent persons relevant to the field may be coopted by the Chairperson	Members

TEC will be reconstituted every 3 years in consultation with the Ministry of Mines.

2.1.2 Due diligence of beneficiaries will be carried out by TEC.

2.1.3 The due diligence process involves: -

- Reconfirming eligibility
- Legal, technical & financial due diligence
- Confirming how the application has tied up all resources: space, equipment, manpower, advisors, incubation services, etc.
- Preference to Startup/MSMEs of North East Region and women led enterprises (5% of the budget of S&T-PRISM for each)
- Budget utilization plan (usually by providing quotations); other requirements if any
- Finalization of milestones, budget and payment schedule; defining clear milestone targets that are easy to track.

2.2 Signing Agreement

2.2.1 Final grant approval will be accorded by Apex Committee of the Ministry.

2.2.2 After the approval of the Apex Committee, an agreement will be signed between the implementing agency and the beneficiary, defining terms of association.

2.3 Fund disbursement

2.3.1 Fund will be released into the dedicated no lien account created by the beneficiary for the purpose.

2.3.2 Fund disbursement will commence as per the milestones stipulated at para 6.3.

2.4 Monitoring

Once the works as per the timeline begins, TEC will periodically monitor, at least once a quarter, progress of the Startup. Beneficiaries will submit periodic reports and utilization certificates in the prescribed format to the implementing agency.

3. Financial Support to Start-up and MSME

Under the S&T-PRISM, financial support will be provided to those projects/ideas who have reached at least "Proof of Concept (POC)" level. Financial support will be provided to the beneficiary in the form of grants. However, the implementing agency will work with other venture funds to get them more funding on mutually agreed entry-exit terms.

3.1 Eligible expenditures for funding:

Since the focus of S&T-PRISM is to facilitate creating of prototypes and bringing of products /technologies to market, applicants will be encouraged to spend on: -

a) Research & Development (It includes the expenditure on manpower capitalized in the books of account for the development of product)
b) Prototyping
c) Testing, Trials and Piloting
d) Commercialization

While, expenses on following are not permissible under the funding

a) HR manpower expenses (Administrative expenses of Startups/MSMEs not included)
b) Tools & Machineries
c) Office expenses

4. Eligibility Criteria

4.1 Eligible Beneficiaries:

4.1.1 Startups, as defined and recognized by Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India, working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.

4.1.2 Any Indian company incorporated under the Companies Act 1956/2013, primarily a Micro, Small and Medium Enterprises (MSME) as defined in the MSME Act, 2006 having over 51% stakes by the Indian Citizen / NRI / OCI and Head Quarter in India.

4.1.3 Individual Innovators will also be encouraged to apply (research & academic institutions can use this category to apply). However, release of the fund shall be subjected to compliance of eligibility conditions for either Startup or MSME before agreement signing.

4.2 More than one organization can jointly submit the application in partnership with consortium, registered societies & Academia

4.3 Collaboration with Academia / R&D Organization will be encouraged

4.4 Every proposal must clearly identify a Project Lead (PL) who will take responsibility for the technical and managerial aspects of the project execution. If an application is selected for funding support, then its Project Leader will be required to sign the project Agreement on behalf of the applicant(s).

5. Application Procedure

5.1 Online Application Submission, Project Status Tracking, Monitoring/Mentoring, Event Promotion, Partnership facilitation, Regulatory Information etc., will be done through SATYABHAMA Portal (research.mines.gov.in).

5.2 Ownership of any intellectual property generated by the participant will accrue solely to those participants. Ministry of Mines has the first right of refusal for preferential access to these technologies for product, go-to-market, and investment.

6. Implementation Methodology

6.1 Selection & Funding Process

6.1 .1 All applications will be Initially scrutinized for the Eligibility Check

and completeness by the Implementing Agency.

6.1 .2 Eligible applicants will be shortlisted by the Implementing Agency.

6.1 .3 Shortlisted applicants will be called to give a detailed presentation to showcase their idea/product/solution to the TEC. TEC will recommend applications to the Implementing Agency for the approval of the Apex Committee.

6.1 .4 Recommended applicants by the TEC will undergo the due- diligence process as stipulated at para 2.1.

6.1 .5 After due diligence, the final grant proposal will be presented by the implementing agency to the Apex Committee for approval.

6.1.6 A funding agreement will be signed between the implementing agency and successful applicants.

6.1 .7 Fund will be released into the dedicated no lien account created by the successful applicants for the purpose of S&T-PRISM.

6.1.8 Fund disbursement will commence against the milestones of the project as stipulated at para 6.3.

6.1.9 Beneficiaries will submit periodic reports and utilization certificates in the prescribed format to the implementing agency.

6.1.10 Implementing agency will Coach / Mentor the project during Project Completion and two years post completion through its Expert panel.

6.1.11 Implementing Agency will help beneficiaries in Piloting, Testing and Public Procurement. Further, Implementing agency will connect beneficiaries with PSUs/Academia or any other institute/organization where Ministry of Mines has funded for testing/pilots of technology/solutions developed.

6.2 Indicative Evaluation Criteria

The indicative evaluation criteria for applicants under S&T-PRISM are as follows:

S. No.	Criteria	Details	Indicative Weightage (%)
1	**Technical Feasibility**	Feasibility & reasonability of the technical claims, methodology used/to be used for validation, roadmap for technology development	20
2	**Potential Impact**	Environmental sustainability, Market size, customer demographic & the technology's effect on these	20
3	**Novelty**	USP(s) of the technology, associated with the technology, national importance if any	15
4	**Commercialization Strategy**	Utilization of technology to create a product/service, its positioning & value addition for the intended customers, plan forgo-to-market, challenges executed	25
5	**Team**	Technical & business expertise, mentors	20
Total			100%

Selected beneficiaries will be offered funding over a period of maximum 24 months in installments against agreed milestones.

6.3 Milestone based Fund releases

6.3.1 Successful applicants will be offered funding support in the form of a grant of up to Rs. 50 lakhs for Startup and Rs. 1 Cr. for MSME. However, the grant up to Rs. 2 Cr. may be considered for technology products requiring higher funding on the recommendation by TEC and approval by Apex Committee. The fund disbursement will be milestone-based and will be released in 4 installments:

Installment	Milestone	Release
1st Installment	Signing of Contract	40% of Total Grant
2nd Installment	Completion of 1st Milestone	20% of Total Grant
3rd Installment	Completion of 2nd Milestone	20% of Total Grant
4th Installment	Completion of project & submission of final report with prototype/product (focusing on Technology Completion of the project and outcome could be Technical Success or Failure	20% of Total Grant

6.3.2 Timelines for milestones of the project shall be decided between the beneficiary and Implementing Agency after due-diligence approval.

6.4 Monitoring

6.4.1 The TEC will ensure timely and proper implementation of the project without time and cost overruns.

6.4.2 The Implementing Agency shall ensure that the TEC shall meet as frequently as required but at least once in every quarter. Implementing Agency will submit its report duly signed by the Head of the implementing agency to Ministry of Mines. This report will be used to review the progress of utilization of the funds released and will also be taken into account while considering further release of funds by the department.

7. Fund Disbursement from Ministry of Mines to Implementing agency

7.1 Funding Pattern

7.1.1 The funds shall be released to the Implementing Agency for further release to beneficiaries based on the recommendation of TEC

7.1.2 The 1st installment will be released after approval is accorded to the projects by the Apex Committee. Further installments may be released based on the achievements of the set milestones and recommendation / ratification of TEC.

7.1.3 Release of further installments shall be subject to furnishing of complete Utilization Certificate, report of the TEC recommending the release and the proof of matching contribution of the funds having been invested by the Implementing Agency from its own or other sources as per the approved cost sharing.

7.1.4 Upon approval of projects by the Apex Committee, Implementing agency would communicate to the successful applicant and initiate the funding process.

7.1.5 First installment of payment to be made available to successful applicants within three weeks.

7.1.6 Technical Expert Committee of Implementing Agency would recommend each milestone payment to be made available to startup & MSME; Implementing agency to disburse the fund to beneficiaries.

7.1.7 Final Milestone Payment will be made after a 3rd party audit by an Expert assigned by Ministry of Mines..

7.1.8 Implementing agency will maintain a separate bank account for all activities related to the S&T-PRISM.

7.1.9 Implementing agency will submit a Statement of Expenditure (SE) on annual basis during the beginning of the Financial Year for the preceding year.

7.1.10 Implementing agency will submit a half-yearly progress report of fund disbursements in the month of April and October for preceding 6 months.

7.1.11 Ministry of Mines and Implementing agency will conduct an annual review of fund disbursement, other activities and deliverables to gauge output, and to approve activities for the forthcoming year.

7.2 Administrative Expenses of Implementing Agency: The administrative expenses will be granted to Implementing Agency at the rate of 2% of cost of every project.

8 Assistance and Support

8.1 Incubation /Mentoring Support

Selected Startup and MSMEs will be provided mentorship or incubation support and technical advisory support during entire project development period and additionally for two years from the date of Technical Completion, by a Facilitation & Mentorship Team under the Implementing Agency Team along with panel of Experts consisting of Technical, Financial, Market Development, Legal & Compliance etc and with the use of various dedicated government portal such as MAARG Portal of Startup India, DPIIT . The objective of this coaching/mentorship is to create success stories in the mining, mineral processing, metallurgy and recycling sectorby offering focused and detailed support individually to each selected projects. This incubation support shall be provided by Incubator Partners, Industry Partners, etc.

8.2 Scope of Mentoring Support

a) **Advisory:** Strategic support for scaling up of operations & expansion in new geographies, and product building & enhancement.
b) **Network:** Reach out to relevant individuals/entities to enable R&D, specialized mentorship, partnerships, marketing, etc.
c) **Tapping Resources:** Enable startup's participation in grand challenges, Government. Schemes, incubation/acceleration programs, relevant events, etc.
d) **Pilots:** Enabling pilots with corporate, Government, universities, etc.
e) **Business Plan:** Guidance on raising capital
f) **Funding Raising:** Startup can raise the fund from various sources depending on the nature of business, viz Grant from other Ministry/Dept, Conditional Grant, Award, Soft Loan, Loan etc.

Besides the above, to further strengthen innovation and entrepreneurial development, startup beneficiaries may also leverage the MAARG portal, the Startup India international bridges, Startup India's corporate programs and the Startup India Investor Connect Portal.

9. Success Metrics for the S&T-PRISM

Performance of the mentor will be judged on quarterly basis on clear tangible outcomes, such as:

a) Jobs created

b) Royalty Collection and Corpus Rebuilding
c) Expansion of startup and MSME into new geographies
d) Growth in userbase/clientele of startups and MSME
e) Growth in startup and MSME revenue
f) Capital raised (equity/debt/grant), as required
g) Government incentives availed
h) Mentorship hours for startup (external specialized mentor)
i) Feedback of startup and MSME
j) Pilots conducted
k) Volume and value of sales

10. Pilot Opportunity

10.1 Piloting opportunity for supported Startup and MSME, shall be provided in the mining, mineral processing, metallurgy and recycling sector.

10.2 The pilot opportunities will be provided to startups and MSMEs in the following manner:

a) Any Startup/ MSME desirous of availing the opportunity for pilot, shall be required to submit a detailed proposal outlining their requirements, scope of work, location for the pilot, timelines, potential impact, success metrics, etc.
b) This proposal will be presented to Apex Committee for review & inputs.
c) Apex Committee shall hold a one-on-one meeting with each interested team to discuss the proposal and finalize requirements.
d) JNARDDC, NIRM and Startup India can provide strategic inputs in the Apex Committee evaluations and provide pilot opportunities to the shortlisted startups and MSME. R&D support from these organizations may be provided to shortlisted startups and MSME for at least 3 months to help these startups fine-tune their products and services,
e) All finalized B2B proposals will be presented to a panel of corporate from mining, mineral processing, metallurgy and recycling sector on a 'Demo Day'. Apex Committee will facilitate all experimental licenses and other resources within 30 days of proposal review.

11. Procurement Opportunity

Implementing Agency shall make appropriate mechanisms to ensure that products/ services developed by startups/MSMEs funded under S&T-PRISM, find market and become financially viable over a period of time. Ministry of Mines shall try to work with PSUs for getting them educational orders and also make available and work with them for technology trials. As per the Public Procurement Policy for Micro and Small Enterprises (MSMEs) every Central Ministry/Department/PSU shall set an annual goal of minimum 25 percent of the total annual purchases from the products or services produced or rendered by MSMEs. Ministry of Mineswill sensitize the concerned agencies about the products/services developed by startups/MSMEs and request for consideration of their proposals, submitted i.r.o. their tenders, as per due rules and procedures.

12. For Incubator Support

A grant up to Rs. 10 crores will be allotted for setting up each Incubation Centre and strengthening them based on the progress.

13. Recall of the Central Grant

13.1 The Implementing Agency has to abide by Terms & Conditions for Grant-in-Aid as per **Annexure II.**

13.2 Apex committee retains the right to curtail/ recall the central grant along with applicable interest calculated at 3 years SBI MCLR prevailing on the date of disbursement in case of unsatisfactory use of the grant including compromise with the quality envisaged, or partial/incomplete implementation of the project.

******

Annexure -Il

Terms & Conditions for Grant-in-Aid

The grant is for the specific project as approved by the Ministry of Mines. It shall be subjected to the conditions listed below. The proposal originating industry and implementing agency shall give an undertaking that they agree to be governed by these conditions.

1. The grant amount shall be i) spent for the head for which it has been released within the specified time; and ii) Any portion of the grant, which is not ultimately required for expenditure for the approved purposes, shall be duly surrendered to Ministry of Mines;

2. The implementing agency should adhere to GFR guidelines while incurring expenditures out of Ministry of Mines' grant under the project. The Implementing Agency shall be responsible for ensuring that all procurement of goods, equipments and services, including works, are through a transparent and competitive bidding process as per the applicable government rules / guidelines;

3. The implementing agency shall maintain an audited record in the form of a register in the prescribed proforma for permanent, semi-permanent assets acquired as solely or mainly out of Ministry of Mines grant;

4. The assets referred to in (3) above will be property of Ministry of Mines and should not, without prior sanction of Ministry of Mines, be disposed off or encumbered or utilized for the purposes other than those for which the grant has been sanctioned;

5. In addition to the ownership of the facility created, preparation and approval of the DPR, the Implementing Agency shall also be responsible for obtaining all necessary statutory approvals/clearances including those for environmental compliance and quality standards as applicable;

6. The implementing agency shall furnish Utilization Certificate (UC) along with its request for next release of Grant in Aid certifying that the fund released to them for which UC has been furnished is as per the objective of S&T-PRISM;

7. The implementing agency shall render progress-cum-achievement reports at interval of not exceeding six months on the progress made on all aspects of the project including expenditure incurred on various approved items during the period;

8. The implementing agency shall render an audited statement of accounts to Ministry of Mines.

9. The audited statement of accounts relating to grants given during financial year together with the comments of the auditor regarding the observance of the conditions governing the grant should be forwarded to the Ministry of Mines within six months following the end of the relevant financial year;

10. The utilization of grant for the intended purposes will be looked into by the Auditor of implementing agency according to the directives issued by the Government of India from time to time and the specific mention about it will be made in the audit report;

11. Ministry of Mines or its nominee(s) will have the right of access to the books and accounts of the implementing agency for which a reasonable prior notice would be given;

12. The implementing agency should maintain separate audited account for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest, thus earned should be reported to this department. All Interest against Grant-in-aid should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances should not be allowed to be adjusted against future releases;

13. Institutes may retain the sale proceeds of prototypes, etc fabricated as a result of the development of the project arising directly from funds granted by the department. The Institute may use funds thus generated for furtherance of project objectives;

14. The Intellectual property and the rights associated with it shall be agreed between the participating organizations before the start of the project. The Industry/ Industry Consortium/ Institution(s) will make all efforts to protect intellectual property generated out of the project. The institution(s)/ industry would submit the periodic report to Ministry of Mines for a period of minimum 1 year on the status of IPRs created/ commercialization under the project. Furthermore, IPR must also reside in India so that India has access and complete control to these rights in times of emergency to protect our national interest. Ministry of Mines shall have first right of refusal to such IPR.

15. Application by implementing agency for any other financial assistance or receipt of grant/ loan from any other Agency/ Ministry/ Department for this project should have the prior approval of Ministry of Mines;

16. The Implementing agency(s) is not allowed to entrust the implementation of this project for which grant-in-aid is received to another institution and to divert the grant-in-aid received from Ministry of Mines as assistance to the later institution;

17. In case of any dispute on any matter, related to the Startup during the course of its implementation, the decision of the Secretary, Ministry of Mines, shall be final and binding on the proposal originating industry/ industry consortium and grantee institute;

18. The financial assistance given under S&T-PRISM shall be subject to audit by the CAG of India;

APPLICATION

FOR

S&T PRISM PROGRAM

(no part of the form is to be deleted)

Last date of submission: 30.04.2024

Email for submission: startups-mines@gov.in

For Guidelines visit: https://research.mines.gov.in/

सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF
MINES

Implementing Organization for S&T-PRISM
Jawaharlal Nehru Aluminium Research Development and Design Center
Autonomous body, Ministry of Mines, Government of India
https://jnarddc.gov.in

Part - I

1.	Applying as an (Select whichever is applicable)	Choose an item.

Part. II Details of the Project Lead (PL)

1.	Name	
2.	Designation / Role in the company	
3.	Mobile No	
4.	Email ID	Preferable company email
5.	Project Lead's bio-data	***To be attached with the application form***
6.	Date of joining the company	
7.	Relationship with Other Directors	
8.	Date of retirement (till the date of reporting)	
9.	Latest passport size photograph of the PL	Please insert here

Part. III Company Details

1.	Name of the company		
2.	Business area of the company		
3.	Total Number of Directorship		
4.	Company's Registration No		
5.	Company's GST number		
6.	Company's PAN number		
7.	Certificate of Incorporation	***To be attached with the application form***	
8.	Date of Incorporation		
9.	Legal Status		
10.	Are you incubated with any Incubator? IF YES, 6.1. Incubator Name 6.2. Certificate from Incubation Centre / Park / Association	YES ☐ / NO ☐ ***To be attached with the application form***	
11.	If not associated yet, which incubator would you like to be associated with for monitoring and support		
12.	Latest Audited Balance sheet:	***To be attached with the application form***	
13.	Have you bootstrapped (Own contribution) in your startup	YES ☐ / NO ☐	
14.	Have you raised/Received any funds/investment from external sources	YES ☐ / NO ☐	
15.	Please provide turnover details for last two years certified by CA (if applicable) Amount (In ₹)	Year 1 ₹	Year 2 ₹
16.	Details of business startup/funding from Government of India in the last five years	***To be attached with the application form***	
17.	Current Registered office Address 1.City 2.State 3.Phone 4.Postal Address		

18.	Factory address 1.City 2.State 3.Phone 4.Postal Address 5.Website Link	
19.	Geo coordinates of your company	

Details of the companies in the consortium, if applicable

1.	Name of the company		
2.	Business area of the company		
3.	Total Number of Directorship		
4.	Company's Registration No		
5.	Company's GST number		
6.	Company's PAN number		
7.	Date of Incorporation		
8.	Legal Status		
9.	Latest Audited Balance sheet:	***To be attached with the application form***	
10.	Please provide turnover details for last two years certified by CA (if applicable) Amount (In ₹)	Year 1 ₹	Year 2 ₹
11.	Details of business startup/funding from Government of India in the last five years	***To be attached with the application form***	
12.	Current Registered office Address 1.City 2.State 3.Phone 4.Postal Address		
13.	Factory address 1.City 2.State 3.Phone 4.Postal Address 5.Website Link		
14.	Geo coordinates of the company		

Part. IV PL's Company Team Details

1. Team size:
2. Founding Team Details (Fill in details of each member)

Name of Founder	
Gender	
Qualification	
Role in the Company	
Professional Experience	
Date of Birth	
Mobile No	
Email ID	
% of the shareholding in the company	

3. Directors Information of the company

Name of the Director	
DIN	
Name	
Date of Birth	
PAN No.	
Present Address/Permanent Address	
Position of director: Chairman/MD/WTD/Manager etc	
Category of Director:	
Academic Qualification	
If nominee, name of the Institution:(whether institution is lending or investing institution/company/body corporate)	
Date of joining the company	
Relationship with Other Directors	
Total Number of Directorship	
No. of Committee Membership across Companies	
No. of Committee Chairmanship across Companies	
Date of retirement (till the date of reporting)	

4. Key Employee Details of the Company (max 3 nos)

Name of the Employee	
Gender	
Category	
Qualification	
Role in the Company	

5. Advisor/Mentor details of your company (max 3 nos)

Name of Advisor/Mentor	
Gender	
Professional experience	
Qualification	
Current organisation, if applicable	
Role in the Company	

Part. V Technical Details

1.	Title of your project proposal			
2.	Domain/Trust Area		**Please click here to select**	
3.	Objectives of the proposal			
4.	Brief about your product/solution			
5.	Final outcome			
6.	Total duration of the project (Maximum 02 years)			
7.	Beneficiaries of innovation			
8.	Milestones with timeline			
	Milestone no.	Milestone	Milestone description	Timelines (t_0 + in months)
	M0	Signing of agreement	Signing of contract	**1**
	M1	Technical planning	***Detailed description of milestone***	***# months***
	M2	Prototyping	***Detailed description of milestone***	***# months***
	M3	Final deliverable	***Detailed description of milestone***	***# months***
9.	Deliverables of the project		***Define the deliverables***	
10.	Attach the Note on technical Details or work/process flow of production solution		***To be attached with the application form***	
11.	National importance if any			
12.	Project plan with clear objectives, timelines and milestones		***To be attached with the application form***	
13.	Please provide the Power Point Presentation / two minutes product video		***To be attached with the application form***	
14.	Current status of Product/solution		TRL level to be given	
15.	National importance of your proposed product / solution / technology, if any			
16.	Proof of PoC (Video/Picture etc)		***To be attached with the application form***	
17.	Have you filed a patent for your product/solution? If yes, please provide details*		YES ☐ / NO ☐	
	Application Number			
	Date of Filing			
	Country			

18.	Have you validated/tested your product? If yes, then attach the details.	YES ☐ / NO ☐ ***To be attached with the application form***
19.	Approval and required certifications to sell in India?	YES ☐ / NO ☐
20.	Does your solution have all the necessary regulatory approvals and required certifications to sell in India?	YES ☐ / NO ☐
21.	Please provide the deployment roadmap of your company for next one year A. Provide the list of prospective/existing buyers B. Go to Market Strategy C. Go to Market Strategy-Timelines and detailed plan to reach the customer D. Details of raw materials and manufacturing facility to supply solution at large scale? Please provide some details of vendors for manufacturing/ raw materials/ service providers etc. E. Any other significant information related to roadmap	***To be attached with the application form***
22.	Is there any similar product solution available in market write your solutions.	
	If Yes does your proposed products has advantage over other existing solutions a. List the competition	
	b. List out possible advantages your product/solution has over your competition. Please compare the uniqueness and cost of your product	

Part VI Financial Details

<table>
<tr><td></td><td colspan="4">Request for the Grants From S&T PRISM Program
Since the focus of the programme is to facilitate creating of prototypes and bringing of products/ technologies to market, applicants will be encouraged to spend on: -
a) Research and development (It includes the expenditure on manpower capitalized in the books of account for the development of product)
b) Prototyping
c) Testing, Trials and Piloting
Expenses on following are not permissible under the funding
a) HR manpower expenses (Administrative expenses of Startups/MSMEs not included)
b) Power
c) Tools & Machineries
d) Office expenses

The applicant’s own contribution in the total project budget should be at least 25% of GoI GRANT</td></tr>
<tr><td rowspan="6">1</td><td colspan="4">Budget breakdown (attach detailed breakup of each expenditure head)</td></tr>
<tr><td>Expenditure head</td><td>Total expenditure (in ₹ lakhs)</td><td>Funds committed by applicant (in ₹ lakhs)</td><td>Grant request from MoM (in ₹ lakhs)</td></tr>
<tr><td>Research and Development</td><td>##</td><td>##</td><td>##</td></tr>
<tr><td>Prototyping</td><td>##</td><td>##</td><td>##</td></tr>
<tr><td>Testing trials and Piloting</td><td>##</td><td>##</td><td>##</td></tr>
<tr><td>Total</td><td>##</td><td>##</td><td>##</td></tr>
<tr><td>3</td><td colspan="3">Have you applied to any other agency for your proposed solution?
If-Yes-Provide the
a) Funding agency name
b) Purposed
c) Amount Sought (₹)
d) Status of application</td><td>YES ☐ / NO ☐</td></tr>
<tr><td>4</td><td colspan="3">Proposed Revenue model</td><td>To be attached with the application form</td></tr>
</table>

Part VII Declaration

I declare that all the information given by me in this application and documents attached hereto are true to the best of my knowledge and that I have not wilfully suppressed any material facts. I accept that if any of the information given by me in this application is in any way false or incorrect my application may be rejected, any offer of the grant may be withdrawn, or my candidature may be rejected at any time during the scheme period.

I will utilize the grant for the specific project as approved by Ministry of Mines (MoM)

I agree that "Terms and conditions" and guidelines may be modified by the concerned authorities of MoM/Apex committee as or when required.

I will provide the other necessary information related to the project to the Implementing Agency as or when required by them on a timely basis.

Grants will not be used for the following expenses :-

a. HR manpower expenses (Administrative expenses of Startups/MSMEs not included)
b. Power
c. Tools & Machineries
d. Office expenses

I agree to contribute at least 25% of GoI GRANT in the total project budget.

I Agree to abide by Terms & Conditions for Grant-in-Aid as per Annexure II of the S&T-PRISM Guidelines.

(Signature of Project Lead)

Name of Project Lead

Part VIII List of Mandatory Attachments

1.	51% Shareholding by Indian Citizen or Indian Entity	
2.	Declaration by Individual that he will fulfill all the criteria of selection as startup/MSME under the scheme before getting any tranche of the grant if he gets shortlisted by the committee	
3.	Legal document of the companies such as Agreement/T&C/MoA/MoU for working together	
4.	Copy of passport of Project Leader (PL)	
5.	If IP owned by third party confirmation of freedom to operate	
6.	No pending litigation towards the company Founder Co-founders	
7.	NOC for IP if not owned by the company	
8.	Business Plans to present the case for Product Solution Venture Scaling	
9.	Project plan with clear objectives and timelines	
10.	Provide the details of your client segment	
11.	List of customers and competitors	
12.	Competitive advantage/ Differentiation w.r.t the competition if any	
13.	Details of business startup/funding from Government of India in the last five years	
14.	GST	
15.	PAN	

(Signature of Project Lead)

Name of Project Lead

Part IX Details Required for Due Diligence

The following details are required for carrying out due diligence of the organisation which is a necessary step for disbursing funds on final selection.

LIST OF DIRECTORS AS ON 29/02/2024

A. TOTAL NO. OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

Particular	DIRECTOR-1	DIRECTOR-2
DIN		
Name		
Date of Birth		
PAN No.		
Present Address/Permanent Address		
Position of director: Chairman/MD/WTD/Manager etc		
Category of Director:		
Academic Qualification		
If nominee, name of the Institution:(whether institution is lending or investing institution/company/body corporate)		
Date of joining the company		
Relationship with Other Directors		
Total Number of Directorship		
No. of Committee Membership across Companies		
No. of Committee Chairmanship across Companies		
Date of retirement (till the date of reporting)		

B. TOTAL NO. OF DIRECTORS AS ON REPORTED AS ON 29/02/2024

Category	**Numbers**
Executive	
Non-Executive	
Independent	
Nominee	
Total	

C. INFORMATION KEY MANAGERIAL PERSONNEL (KMP) AS ON 31/12/2023

Sr. No	**Name of Key Managerial personnel**	**Designation**	**Education Qualification**	**Shareholding**

D. DETAIL FOR DISCLOSING INFORMATION ABOUT BOARD COMMITTEES AS ON. 29/02/2024

Name of Committee	**Composition (Name of Director)**	**Designation in Committee**	**Changes if any during the relevant period**	**Restriction on the power of Committee, if any.**
Audit Committee				
Nomination and Remuneration Committee				
Stakeholder Relationship Committee				
Corporate Social Responsibility				

JAWAHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT AND DESIGN CENTRE
Autonomous Body Ministry of Mines, Government of India

STATEMENT SHOWING SHAREHOLDING PATTERN

As on 29-02-2024

Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	EQUITY				As a percentage of (A+B)	As a percentage of (A+B+C)	Number of shares	As a percentage
(A)	**Shareholding of Promoter and Promoter Group**							
A.1	**Indian**							
(a)	Individuals/Hindu undivided Family							
(b)	Central Government/ State government(s)							
(c)	Bodies Corporate							
(d)	Bank(s)/financial institutions(s)							
(e)	Any Others (Anuradha Cooperative Housing Society)							
Subtotal (A) (1)								
A.2	**Foreign**	-	-	-	-	-	-	-

JAWAHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT AND DESIGN CENTRE
Autonomous Body Ministry of Mines, Government of India

Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	EQUITY				**As a percentage of (A+B)**	**As a percentage of (A+B+C)**	**Number of shares**	**As a percentage**
(a)	Individuals (Non-Resident Individuals)	-	-	-	-	-	-	-
(b)	Bodies Corporate	-	-	-	-	-	-	-
(c)	Institutions	-	-	-	-	-	-	-
(d)	Any Others (Specify)	-	-	-	-	-	-	-
Subtotal (A) (2)		-	-	-	-	-	-	-
Total Shareholding of Promoter and Promoter Group (A)=(A)(1)+(A)(2)		-	-	-	-	-	-	-
(B)	**Public shareholding**	-	-	-	-	-	-	-
B.1	**Institutions**	-	-	-	-	-	-	-
(a)	Mutual Funds/UTI	-	-	-	-	-	-	-
(b)	Financial Institutions/Bank	-	-	-	-	-	-	-
(c)	Central Government/ State Government(s)	-	-	-	-	-	-	-
(d)	Venture Capital Funds	-	-	-	-	-	-	-

Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	EQUITY				**As a percentage of (A+B)**	**As a percentage of (A+B+C)**	**Number of shares**	**As a percentage**
(e)	Insurance Companies	-	-	-	-	-	-	-
(f)	Foreign Institutional Investors	-	-	-	-	-	-	-
(g)	Foreign Venture Capital Investors	-	-	-	-	-	-	-
(h)	Any Other (Specify)	-	-	-	-	-	-	-
Subtotal (B) (1)		**-**	-	-	-	-	-	-
B.**2**	**Non- institutions**	-	-	-	-	-	-	-
(a)	Bodies corporate	-	-	-	-	-	-	-
(b)	Individuals	-	-	-	-	-	-	-
	i) Individual Shareholders holding nominal share capital up to Rs 1 lakh	-	-	-	-	-	-	-
	ii) Individual shareholders holding nominal share capital in excess of Rs 1 lakh	-	-	-	-	-	-	-

Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	EQUITY				As a percentage of (A+B)	As a percentage of (A+B+C)	Number of shares	As a percentage
(c)	Stock Option / ESOPs	-	-	-	-	-	-	-
(d)	Any other (Specify)	-	-	-	-	-	-	-
Subtotal (B) (2)		-	-	-	-	-	-	-
Total Public Shareholding (B) = (B)(1)+(B)(2)		-	-	-	-	-	-	-
Total (A)+(B)								
(C)	**Shares held by Custodians and against which Depository Receipts have been issued**							
GRAND TOTAL (A)+(B)+(C)								

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CHANGES IN SHAREHOLDING PATTERN:

Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	PREFERENCE	-	-	-	**As a percentage of (A+B)**	**As a percentage of (A+B+C)**	**Number of shares**	**As a percentage**
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=(8)/ (7)*100
(A)	**Shareholding of Promoter and Promoter Group**	-	-	-	-	-	-	-
1	**Indian**	-	-	-	-	-	-	-
(a)	Individuals/Hindu undivided Family	-	-	-	-	-	-	-
(b)	Central Government/ State government(s)	-	-	-	-	-	-	-
(c)	Bodies Corporate	-	-	-	-	-	-	-
(d)	Bank(s)/ financial institutions(s)	-	-	-	-	-	-	-
(e)	Any Others (specify)	-	-	-	-	-	-	-
Subtotal (A) (1)		-	-	-	-	-	-	-
2	**Foreign**	-	-	-	-	-	-	-
(a)	Individuals (Non-Resident Individuals)	-	-	-	-	-	-	-
(b)	Bodies Corporate	-	-	-	-	-	-	-
(c)	Institutions	-	-	-	-	-	-	-
(d)	Any Others (Specify)	-	-	-	-	-	-	-
Subtotal (A) (2)		-	-	-	-	-	-	-

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Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	PREFERENCE	-	-	-	**As a percentage of (A+B)**	**As a percentage of (A+B+C)**	**Number of shares**	**As a percentage**
Total Shareholding of Promoter and Promoter Group (A)=(A)(1)+(A)(2)		-	-	-	-	-	-	-
(B)	**Public shareholding**	-	-	-	-	-	-	-
1	**Institutions**	-	-	-	-	-	-	-
(a)	Mutual Funds/UTI	-	-	-	-	-	-	-
(b)	Financial Institutions/Bank	-	-	-	-	-	-	-
(c)	Central Government/ State Government(s)	-	-	-	-	-	-	-
(d)	Venture Capital Funds	-	-	-	-	-	-	-
(e)	Insurance Companies	-	-	-	-	-	-	-
(f)	Foreign Institutional Investors	-	-	-	-	-	-	-
(g)	Foreign Venture Capital Investors	-	-	-	-	-	-	-
(h)	Any Other (Specify)	-	-	-	-	-	-	-
Subtotal (B) (1)		-	-	-	-	-	-	-
2	**Non- institutions**	-	-	-	-	-	-	-
(a)	Bodies corporate	-	-	-	-	-	-	-
(b)	Individuals	-	-	-	-	-	-	-
	i) Individual Shareholders holding nominal share capital up to Rs 1 lakh	-	-	-	-	-	-	-
	ii) Individual shareholders holding	-	-	-	-	-	-	-

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Category Code	Category of Shareholder	No. of Shareholders	Total No. of Shares	No. of Shares held in dematerialized form	Total Shareholding as a percentage of	Total Shareholding as a percentage of	Shares Pledged of otherwise encumbered	Shares Pledged of otherwise encumbered
	PREFERENCE	-	-	-	**As a percentage of (A+B)**	**As a percentage of (A+B+C)**	**Number of shares**	**As a percentage**
	nominal share capital in excess of Rs 1 lakh							
(c)	Stock Option / ESOPs	-	-	-	-	-	-	-
(d)	Any other (Specify)	-	-	-	-	-	-	-
Subtotal (B) (2)			-	-	-	-	-	-
Total Public Shareholding (B) = (B)(1)+(B)(2)		-	-	-	-	-	-	-
Total (A)+(B)		-	-	-	-	-	-	-
(C)	**Shares held by Custodians and against which Depository Receipts have been issued**							
GRAND TOTAL (A)+(B)+(C)		-	-	-	-	-	-	-

CHANGES IN SHAREHOLDING PATTERN:

JAWAHARLAL NEHRU ALUMINIUM RESEARCH DEVELOPMENT AND DESIGN CENTRE
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LIST OF SHAREHOLDERS – Equity Share Capital (As on 29/02/2024)

S. No	Name & Father Name	No. of Shares	Nominal Value Per Share	Share Capital (Amount in Rs.)
1				
2				
Total				

DETAILS OF TRANSACTIONS WITH BUSINESS ENTITIES IN WHICH MEMBERS / DIRECTORS ARE INTERESTED

Sr. No	Name of Related Party	Nature of relationship	Name of Directors interested	Nature of Transaction	Amount in Rs.
1					
2					
3					

INVESTMENTS MADE IN FIRMS/COMPANIES IN WHICH DIRECTORS ARE INTERESTED

Sr. No	Name of the Relatives/Firms/ Companies	Nature of relationship	Name of Directors interested	Loans advanced (Rs.)	Guarantees given (Rs.)	Securities Provided (Rs.)	Investment in Securities
1.							
2.							

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DISCLOSURES OF COMPANY'S DOMESTIC BORROWINGS

The amount borrowed by the company from its directors, members, financial institutions, banks and others:

Sr. No	Particular	Amount due for Repayment as on 29/02/2024	Amount due for Repayment as on 29/02/2024

PARTICULARS OF INSURANCE COVERED BY THE COMPANY ARE AS UNDER:

Sr. No	Particulars of Asset Insured	Type of Asset	Sum Insured (Rs.)	Nature of Risk Covered	Amount of policy	Name of Insurance Company	Validity	Insurance Policy Number	Name of Financer

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