



National Seminar on

# 75 years of Mineral Exploration and Future Challenges in India (MEFCI-2022)

Organised by

Atomic Minerals Directorate  
for Exploration and Research (AMD), Hyderabad

&

Geological Society of India, Bengaluru



Venue

Dr. Homi Jehangir Bhabha Auditorium, AMD, Hyderabad  
March 24-25, 2022



Convener

**Shri B. Saravanan**

Co-Convener

**Shri R. Mamallan**

Organising Secretary

**Dr. T.S. Sunil Kumar**

Atomic Minerals Directorate for Exploration and Research  
Department of Atomic Energy  
1-10-153-156, AMD Complex  
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## About the Seminar

Mineral Resources are one of the vital components for the growth of human society. The non-uniform distribution of mineral resources around the world is attributed to the diversity in evolutionary history of the Earth crust. In the endeavor to promote domestic industry, reduction in import dependency and in line with the Make in India initiative, it is essential to discover large tonnage high-grade deposits so as to secure the sustained supply of resources of metals and industrial minerals.

Since independence, there has been a significant growth in the discovery of new deposits of diverse minerals and their production in the country both in terms of quantity and value. Mining activities in the post-independence era have been largely confined to the traditionally known mining centres, both metallic and non-metallic. There has been vast development and progress in the exploration and exploitation of mineral resources in India since 1947. The recovery of principal resources in India like coal, lignite, petroleum (crude), bauxite, chromite, copper, iron, lead-zinc, manganese, silver, diamond, limestone, phosphorite, ilmenite, rutile, garnet, sillimanite etc. has gone up whereas a decline is seen in case of gold and few others since independence.

The mining sector too has shown significant growth since 1947 mainly due to significant achievements made in the recovery of almost all metallic, non-metallic, minor and atomic minerals. There has been a paradigm shift in the mineral exploration strategies in India. State-of-the-art multidisciplinary techniques are being adopted for survey and prospecting for minerals in the diverse geological domains of the country. Today, remote sensing and geophysical data in combination with conventional exploration methods and modern laboratory inputs are used extensively to delineate mineral zones that are both near- surfaces and/or buried deeply. The introduction of modern drilling technologies has significantly enhanced the drilling capabilities. Besides, computer aided orebody modeling, 3D visualization, volumetric analysis, resource estimation and orebody simulation are practiced in line with best global practices.

Under the 'Make in India' initiative, the Government of India aims to make the mineral sector more profitable so as to attract business investments. India is dependent on imports for many critical minerals that need the intervention of international markets. Adopting methods for optimum conservation of resources and maintaining a balance between exploitation and consumption is the need of the hour.

With these objectives in mind, Atomic Minerals Directorate for Exploration and Research (AMD) and Geological Society of India (GSI) is organising a two-day national seminar on **"75 years of Mineral Exploration and Future Challenges in India (MEFCI-2022)"** during **March 24-25, 2022**, at AMD Complex, Hyderabad. The seminar will provide a common platform to academicians, professionals, researchers and government agencies to come together and interact on various issues concerning mineral resources, challenges in mineral exploration and exploitation, optimum utilization and conservation of mineral resources for sustainable development. The seminar will be conducted in hybrid (both physical and virtual) mode.

## Organisers

### Atomic Minerals Directorate for Exploration and Research (AMD)

AMD is the oldest unit of Department of Atomic Energy (DAE) which emerged from a dedicated wing of Geological Survey of India (GSI) named Rare Minerals Survey Unit (RMSU) which was created during the Second World War (1939-1945). Subsequently, after the promulgation of the Atomic Energy Act in 1948, RMSU was brought under the control of the Ministry of Natural Resources and Scientific Research with mandate to look for the raw materials required for the nuclear power programme of the country. After constitution of Atomic Energy Commission (AEC) in August, 1948, RMSU was brought under AEC on 29th July 1949. RMSU was re-named as Raw Material Division (RMD) in 1953, subsequently Atomic Minerals Division in 1958 and finally, on its Golden Jubilee, the organization was rechristened as Atomic Minerals Directorate for Exploration and Research (AMD) in 1998. AMD has its Regional Exploration & Research Centres located at New Delhi, Bengaluru, Jamshedpur, Shillong, Jaipur, Nagpur and Hyderabad (Headquarter & South Central Region). Two Sectional Offices at Thiruvananthapuram and Visakhapatnam cater to the activities on survey and exploration for beach placers.

The major role of AMD is to identify the resources of Uranium (U), Thorium (Th), Zirconium (Zr), Rare Metals (RM) including Niobium (Nb), Tantalum (Ta), Beryllium (Be), Lithium (Li) and Rare Earth Elements (REE) required for various programmes of DAE. Since its inception AMD is involved in multi-disciplinary and multi-faceted exploration for atomic minerals and related research activities. Well-equipped Physics, Chemistry, Petrology, EPMA, Geochronology, Stable Isotope and Instrumentation Laboratories provide adequate support to the exploration programme carried out through the Regional Centres and Sectional Offices. AMD with more than seventy (70) years of glorious past, has achieved many milestones in augmenting atomic mineral resources for the nuclear power programme of the country.

### Geological Society of India, Kathriguppe, Bengaluru

The Society was established on 28<sup>th</sup> May, 1958 through the efforts of Padma Shri Dr. B.P. Radhakrishna, with a small group of veteran geologists, led by Dr. D. N. Wadia (who was also Geological Adviser to AMD), the doyen among Indian Geologists, as its first President and Professor L. Rama Rao as Editor, with a mission to promote advanced study and research related to geosciences in India. The Society is well known by its flagship monthly publication 'The Journal of the Geological Society of India', reputed for its scientific content and unflagging periodicity with peer-reviewed articles under the category of Review Articles, Research Papers, Short Communications, Notes & News, Correspondence and Book Reviews. The articles deal with all aspects of Earth Systems Science. The Journal, since 2009, is being uploaded on the Springer's Platform which has a world-wide visibility.

The Society organizes scientific meetings, lectures, training programme, workshops, seminars and symposia on issues of current geological interest. The proceedings of the events are published as Memoirs and Special Publications. The Society also publishes Text books, Popular science books, Field Guide books and other important publications. The Society recently completed 60 years of its service to Indian & International Earth Science community in the year 2018 and is continuing in its endeavour of supporting geoscientific research in India.

## Themes

- *Historical perspectives of mineral exploration and mining in India.*
- *Challenges and Advancements in Mineral Exploration techniques for metallic, non-metallic and atomic minerals.*
- *Exploration for Rare Earth Elements, Critical Elements and Heavy Minerals in placers.*
- *Geochemistry, Mineral Chemistry and Ore Mineralogy of mineral deposits.*
- *Mineral Deposit: Genesis and Modeling.*
- *Developments in Mineral Processing.*
- *Mineral Economics and Strategy for the Development of Resources.*

## Important Dates

Sl.	Events	Timeline
1.	Submission of abstracts	December 31, 2021
2.	Submission of full papers	January 31, 2022
3.	Last date for Registration	February 28, 2022

## Participation

Participation in following categories is invited.

- Oral presentation
- Poster presentation
- Exhibition

Participants below 35 years of age (Students/Research Scholar/Young Scientists) as on 01.01.2022 will be considered for awards for **Best Oral Presentation** and **Best Poster Presentation**

## Registration

Information brochure along with Registration Form can be downloaded from websites of AMD (<https://amd.gov.in>) and Geological Society of India (<http://www.geosocindia.org>). Duly filled in registration form along with abstract may be submitted to the **Convener, MEFCI-2022** through e-mail [convener-mefci.amd@gov.in](mailto:convener-mefci.amd@gov.in)

*There is no provision for spot registration.*

## Submission of Abstracts and Full papers

Abstracts and full papers of original research works are invited. Editorial Committee will review the abstracts and the acceptance for oral/poster presentation will be conveyed to the corresponding authors through e-mail. Full papers submitted as per JGSI guidelines on or before January 31, 2022 will only be considered for publication in a special issue of the Journal of Geological Society of India in the month of August, 2022, after peer-review.

## Guidelines for submission of Abstracts

The abstract should be written in English and submitted in MS Word (.doc) format. While submitting the abstract, authors shall mention the sub-theme of the conference under which the abstract is submitted. The name of the authors(s) along with the affiliation(s) and e-mail of the corresponding author shall be mentioned for further correspondence. The body text of the abstract (not more than 500 words) shall be in Times New Roman normal font and not more than 3 keywords shall be given below the abstract. Abstract as per the above guidelines may be submitted along with duly filled registration form through e-mail to [convener-mefci.amd@gov.in](mailto:convener-mefci.amd@gov.in)

*Abstract received after the deadline will not be accepted.*

## **Exhibition Space**

Exhibition booth / information counter (3m x 2m cubicle) will be made available with modular shell stand structure, spotlights, power outlet and chairs for participants from industries / companies / entrepreneur(s) to showcase their products, instruments related to the emerging trends of software applications, tools and instrumentations related to mineral exploration and geoscientific utility.

Interested agencies / participants can book their spaces by mentioning the required number of booth(s) in the Registration Form. Charges for each 3m x 2m cubicle is INR ₹ 60,000.

## **Accommodation and Transport**

Limited accommodation in Government Guest houses (AMD, NFC, ECIL, NGRI) will be arranged on payment basis by the individuals. If hotel accommodation is preferred, participants may make their own arrangements. However suggestions and assistance would be extended for hotel accommodation on courtesy basis. Transport will be provided to delegates for commuting between hotel/guest house to the venue of the seminar.

## **Weather**

The weather during March will be pleasant at Hyderabad with temperatures around 28 - 35° C and humidity between 35 - 40%.

## Registration Form\*

<b>Name in full</b>		Dr./Mr./Ms.
<b>Designation</b>		
<b>Affiliation</b>		
<b>Address for Correspondence</b>		
<b>Telephone Number</b>		
<b>Mobile Number</b>		
<b>E mail ID</b>		
<b>Title of the paper</b>		
<b>Participation</b>	<b>Mode</b>	Physical / Virtual <i>(strike out whichever is not applicable)</i>
	<b>Category</b>	Oral / Poster <i>(strike out whichever are not applicable)</i>
<b>Delegate Category</b>		Employed/Research Scholar/Student/Govt / Public Sector/ Industry / Private <i>(strike out whichever are not applicable)</i>
<b>Registration Fee details</b>		
Registration fee amount:		INR ₹
Exhibition Booth (3m x 2m) charges		INR ₹
Cheque/Demand Draft No & Date:		
If online transaction, Reference No. & date:		
<b>Accommodation requirement</b>		Hotel / Guest house / Not required <i>(strike out whichever are not applicable)</i>
Place:		<b>Signature</b>
Date:		
The cheque/Demand Draft should be drawn in favour of <b>NATIONAL SEMINAR MEFCI 2022</b> , payable at Hyderabad.		
* All fields are mandatory		

### Registration

#### Participation in Physical mode

Indian & Foreign Delegates : INR ₹ 1,000  
Student/Research scholar : INR ₹ 500  
Exhibition booth space (3m x 2m) : INR ₹ 60,000

**Participation in Virtual mode**: INR ₹ 500

### Bank Details

**Bank Name** : CANARA BANK,  
Kundanbagh Branch,  
Hyderabad-500 016  
**Branch code** : 001626  
**Account Name** : NATIONAL SEMINAR MEFCI 2022  
**A/C No** : 1200 0051 0514  
**IFSC code** : CNRB0001626  
**MICR code** : 500015014

*(Registration is mandatory for both Physical and Virtual mode participants)*