



भारत सरकार  
GOVERNMENT OF INDIA  
भारतीय भूवैज्ञानिक सर्वेक्षण प्रशिक्षण संस्थान  
GEOLOGICAL SURVEY OF INDIA TRAINING INSTITUTE  
शैलिकी प्रभाग / PETROLOGY DIVISION  
हैदराबाद / HYDERABAD



### प्रशिक्षण घोषणा / TRAINING ANNOUNCEMENT

#### खनिज अन्वेषण में शैलिकी के अनुप्रयोगों पर अग्रवर्ती पाठ्यक्रम Advanced Course on Applications of Petrology in Mineral Exploration

कार्य सत्र & मद संख्या / Field Season and Item Code: **FS 2023-2024 & M5REF/NC/TI\_RHQ/2023/47156**

#### पाठ्यक्रम का उद्देश्य / Aim of the Course:

To equip participants with the requisite knowledge, skills and attitude relating to the applications of petrology in mineral exploration and to introduce the recent advances for understanding the fingerprints of the ore deposits.

#### उद्देश्य / Objectives:

By the end of this advanced course, the participants will be able to:

1. Identify and classify the hydrothermal alteration and also to extract the necessary information from the petrological data.
2. Identify the signatures and footprints of hydrothermal deposits through petrology studies.
3. Understand about the porphyry indicator minerals, porphyry vectoring and fertility tools through petrography and geochemistry.
4. Generate and utilise the petrography data acquired for the better understanding about the mineral deposit.

पाठ्यक्रम की अवधि / Duration of the Course: **10 Days (From 28-08-2023 to 07-09-2023)**

#### प्रतिभागियों का स्तर / Level of the Participants:

Geoscientists of GSI who are actively involved in the mineral exploration projects for unravelling the concealed mineral deposits such as **UNCOVER, Regional Mineral Targeting, G3 and G2 stage explorations** for the complex type deposits (Magmatic/Porphyry/VMS/Hydrothermal systems).

पाठ्यक्रम क्षमता / Course Capacity: The maximum number of participants that can be admitted to the Course is **20**.



### पाठ्यक्रम के लिए नामांकन/ Nominations for The Course

The HODs of all the Regions of GSI, and the Competent Authority of State DMGs and other Organizations are requested to kindly nominate Geoscientists for this training programme. All the participants are requested to ensure sending their nomination through the proper channel in the following format to [petrology.gsiti@gsi.gov.in](mailto:petrology.gsiti@gsi.gov.in), GSITI, Hyderabad on or before **12-08-2023**.

Name of the trainee	Designation	Employee Id.	Current place of Posting	Current Project and experience in Mineral Exploration	e-mail Id	Mobile No. (WhatsApp)

### नामांकन की स्वीकृति/ Acceptance of the Nominations:

Geoscientists whose nominations are accepted by the GSITI shall be intimated through GSITI and GSI websites. No separate communication by email/post would be issued by GSITI and therefore Participants may see the website of GSITI/GSI regularly i.e. [www.gsiti.gov.in](http://www.gsiti.gov.in) and [www.gsi.gov.in](http://www.gsi.gov.in).

### पाठ्यक्रम विषयसूची/ Course Content:

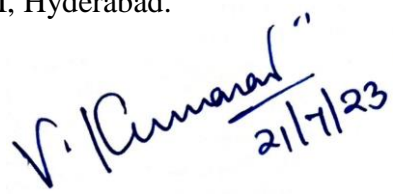
- Role of Petrology in the ore forming processes and ore genesis.
- Classification of hydrothermal alteration through petrological studies.
- Interpretation of ore mineral textures: primary and secondary.
- Petrology of Porphyry Indicator Minerals (PIMs)
- Porphyry Vectoring and Fertility Tools (PVFTs)
- Remnant Indicator Minerals (RIMs)
- Application of Fluid Inclusion Geothermometry: Principles, types and its role in ore genesis with case studies.
- Alteration indices and mass-balance Calculations.

### आवास / Accommodation:

GSITI has a modest hostel facility where rooms are available on twin sharing and first-come-first-served basis. Only course participants will be permitted to stay in the hostel. Participants are requested to apply through email for hostel facility only after acceptance of their nomination. **Contact: Dr. Srikanth D., Senior Geologist & Estate Officer**, GSITI (email id: [estate.gsiti@gsi.gov.in](mailto:estate.gsiti@gsi.gov.in) and Mobile: +91 8763570353).

### संपर्क करें / Contact person:

श्री जे.के. अरविंद, वरिष्ठ भूवैज्ञानिक & संकाय, शैलिकी प्रभाग, जीएसआईटीआई, हैदराबाद. मो: +91 9966033200  
Shri J.K. Aravind, Senior Geologist & Faculty, Petrology Division, GSITI, Hyderabad.

  
(डॉ वी. कुमारवेल/Dr. V. KUMARAVEL)  
निदेशक / Director  
शैलिकी प्रभाग / Petrology Division  
कृते उप महानिदेशक व प्रमुख, मिशन- V / for DDG & Head, Mission-V

