



ALL-RUSSIAN GEOLOGICAL
RESEARCH INSTITUTE
OF A. P. KARPINSKY

**MEMORANDUM OF UNDERSTANDING
BETWEEN
INSTITUTE OF GEOSCIENCES AND MINERAL RESOURCES,
MINISTRY OF AGRICULTURE AND ENVIRONMENT
OF THE SOCIALIST REPUBLIC OF VIET NAM
AND
ALL-RUSSIAN GEOLOGICAL RESEARCH INSTITUTE
OF A. P. KARPINSKY
OF THE RUSSIAN FEDERATION**

This Memorandum of Understanding (hereinafter abbreviated as MOU) is signed by the Institute of Geosciences and Mineral Resources, Ministry of Agriculture and Environment, the Socialist Republic of Viet Nam (hereinafter abbreviated as VIGMR) that is located at 67 Chien Thang Road, Thanh Liet Ward, Ha Noi, Viet Nam and the All-Russian Geological Research Institute of A. P. Karpinsky (hereinafter abbreviated as the Karpinsky Institute) that is located at Sredny prospect. V. O. 74, 199106, Saint Petersburg, Russia.

VIGMR and the Karpinsky Institute (hereinafter abbreviated individually as the "Party" and collectively as the "Parties") participate in this MOU for mutually beneficial and meaningful research, development, and cooperation in geosciences and mineral resources, and have reached the following understanding:

Article 1: Areas of Cooperation

The Parties intend to cooperate in the following areas:

1. **Geological research and assessment of mineral and energy resources**, including studies of the origin, formation conditions, distribution patterns, characteristics, resource potential, and sustainable development of strategic mineral resources, as well as renewable and geothermal energy resources;
2. **Development of advanced geological information systems and predictive methodologies**, including integrated multi-source geological databases, mineral prospectivity assessment, predictive metallogeny, and evaluation of deeply buried mineral resources and resources concealed beneath basalt cover;
3. **Application of digital and artificial intelligence technologies in geosciences**, including the development and implementation of AI-assisted methods, models, and

software for geological research, mineral exploration, field identification, and classification of rocks and geological materials;

4. **Geological mapping and resource assessment projects**, including joint geological, geochemical, and metallogenic mapping programs aimed at identifying mineralization patterns, assessing resource potential, and supporting exploration targeting, particularly for critical and strategic minerals;
5. **Research, development, and application of technologies for exploration, extraction, beneficiation, processing, and sustainable utilization of mineral resources**, including the development of innovative technologies and best practices for strategic minerals;
6. **Environmental protection, rehabilitation, and climate-related geoscience solutions**, including post-mining environmental remediation, carbon capture, storage, sequestration, and mineralization;

Article 2: Forms of Cooperation

Specific forms of Cooperation include, but are not limited to, the follows:

1. Exchanges of technical information and materials;
2. Participation in training courses and conferences;
3. Joint scientific research programs;
4. Exchanges scientists in areas of mutual interests;
5. And any other cooperative research consistent with programs of the Parties in the fields of geosciences and mineral resources

Article 3: Procedure for Individual Project

The activities to be undertaken by each Party will be based upon individual project or program agreements as Annex Agreements between the Parties. The specific Annex Agreement implemented under this MOU, including, if necessary, details of financial arrangements, the allocation and protection of intellectual property rights, and general terms and conditions, will be confirmed in writing and established between the Parties before the commencement of the project or program. These Annex Agreements will include the specific work plans involving staffing requirements, cost estimates, funding sources, and other undertakings, obligations, or conditions that are not included in this MOU. If any inconsistency between this MOU and Annex Agreements here to, the terms of this MOU will prevail.

Article 4: Rights of Information, Data, and Innovations

All scientific, technical, and development information and data used or derived from work performed under this MOU or any Agreement hereto will be freely exchanged between the Parties except for such information and data that the Parties identify as requiring protection under the written law and regulation, of the respective Parties, or otherwise as sensitive

protection as its proprietary data. Either Party, after consultation with an agreement by the other Party, may, at its discretion and subject to its national law, publish the information and data exchanged. Each Party is to respect and acknowledge the other Party's copyright for information and data.

Article 5: Review of Activities

Except for specific projects or programs excluded by mutual agreement, each Party reserves the right to review activities carried out under this MOU or any Project Agreement to the MOU. Each Party agrees to inform the other of the outcome of any review of the activities.

Any intention by on Party to substantially modify or discontinue a project or program shall be subject to reasonable notice to the other Party.

Article 6: Coordinators for the MOU

The signatories appoint:

Name: Nguyen Dai TRUNG and Pham Thi Phuong HANG for the VIGMR

Email: trungvinakahe@gmail.com / phuonghang0711@gmail.com

Phone: +84 91 266 7164 / +84 904 061 213

and

Name: Ivan Zhuzhgin for the Karpinsky Institute

Email: Ivan_Zhuzhgin@karpinskyinstitute.ru/ivanzhuzhgin@gmail.com

Phone: +79215521480

As coordinators of the MOU.

Article 7: Dispute Resolution

This MOU is not legally binding and is made in accordance with the laws of Viet Nam and Russian Federation;

Any disputes between the Parties which arise over the interpretation and/or application of this MOU will be settled through direct negotiations and consultation between the Parties.

The activities of the Parties under this Memorandum shall be governed by and construed in accordance with the laws and regulations of the Russian Federation and the Socialist Republic of Viet Nam.

Article 8: Entry into Force, Amendment and Termination

This MOU shall enter into force upon signature, remain in force for five (5) years as of the day of its signature, and may be automatically extended if the Parties have no change to the content.

This MOU may be amended by prior written agreement of the Parties.

This MOU may be terminated at any time by either Party upon six (6) months' advance notice to the other Party. After 90 days from the receipt of such notification by any Party, this MOU will no longer be effective. The termination of this MOU shall not affect the completion of specific activities initiated and uncompleted.

IN WITNESS WHEREOF, this MOU has been duly signed in English, one copy for each Party.

On behalf of VIGMR 



Name: Trinh Hai Son
Title: Director
Place: Ha Noi, Viet Nam

Date: 31 July 2026

On behalf of Karpinsky Institute



Name: Maksim Tkachenko
Title: First Deputy Director General
Place: Saint Petersburg, Russia

Date:

31 July 2026