



United Nations  
Educational, Scientific and  
Cultural Organization



International  
Geoscience  
Programme

# International Geoscience Programme

## IGCP 2020 CALL FOR PROPOSALS

*Within the United Nations, UNESCO alone has a mandate to support research and capacity-building in geology and geophysics. The International Geoscience Programme (IGCP) is our flagship.*

*Since 1972, the IGCP has financially supported about 30-40 projects per year. These are assessed via a peer-review process and have a lifespan of five years.*

*Projects must be of international importance and societal relevance, demonstrate interdisciplinary cooperation and involve international partners, including female scientists from developing countries. Project proposals may be submitted by individuals to the IGCP Secretariat, accompanied by a letter of endorsement (if possible) from at least one of the project leaders' National IGCP Committees. Project leaders are strongly advised to inform the National Commission for UNESCO and UNESCO Permanent Delegation of their home country of their application.*

The Council of the International geoscience programme (IGCP) agreed, during the 5th Council session in March 2020, to launch new call for project proposals to promote collaborative projects under UNESCO umbrella with a special emphasis on the benefit to society, capacity-building, and the advancement and sharing of knowledge between scientists.

The call emphasizes and prioritizes proposals addressing the Vision, Themes and annually defined topic of the IGCP detailed below. We also welcome proposals that include Artificial Intelligence (AI), big data and cloud computing methodologies applications in the Geosciences.

Women, young and early career scientists from developing countries are especially encouraged to apply. Proposals will be ranked taking into account gender equality, geographic distribution of the leaders, project beneficiaries. The top multidisciplinary project will receive a Council Award and special funding.

Successful projects will be sponsored for up to five years jointly by UNESCO, the International Union of Geological Sciences (IUGS), the Jeju Province Development Corporation (JPDC) of the Republic of Korea and the UNESCO National Commission for the People's Republic of China.

### IGCP 2020 Vision:

- ✓ Efficient, safe, sustainable and renewable natural resources exploration and extraction
- ✓ Better understand, predict and mitigate climate change and geohazards.



Sustainable  
Development  
Goals



# IGCP 2020 Themes:

## Earth Resources: Sustaining our Society

The call for proposals under the Earth Resources Theme will support innovative research and capability building projects in the areas of mineral resources and Geoenery. The call will provide seed funding to projects addressing:

- environmentally responsible and innovative methods of exploration and exploitation of mineral resources and their recycling
- sustainable approaches for the exploration and extraction of energy derived from the earth such as fossil fuels, coal, peat and geothermal energy
- Carbon Capture and Storage (CCS), Geological Sequestration of CO<sub>2</sub>

## Hydrogeology: Geoscience of the Water Cycle

The call for project proposals under the Hydrogeology Theme will support innovative research and capacity building projects in the areas of water resources and services that are essential to achieving global sustainability. The call will provide seed funding to projects addressing:

- Water provision issues associated with climate change: water availability, quality and health, which are emerging critical issues for the future sustainability of our society
- Small islands developing states (SIDS) and Africa, being UNESCO priority regions, are especially vulnerable with respect to contamination and (sufficient) water supply, hence proposals addressing these regions will be given priority

## Geohazards: Risk and Mitigation Assessment for Sustainable Development

The Geohazards Theme will support research projects focusing on measuring, analysing, modeling, forecasting, prediction or mitigation of natural hazards (volcanoes, earthquakes, tsunamis, floods, droughts, landslides, hurricanes, meteoric impacts, etc.) and triggered by recent human interactions (e.g. earthquakes derived from O&G industry, mining-related landslides, dam-made floods.). In this call we welcome proposals with particular emphasis in:

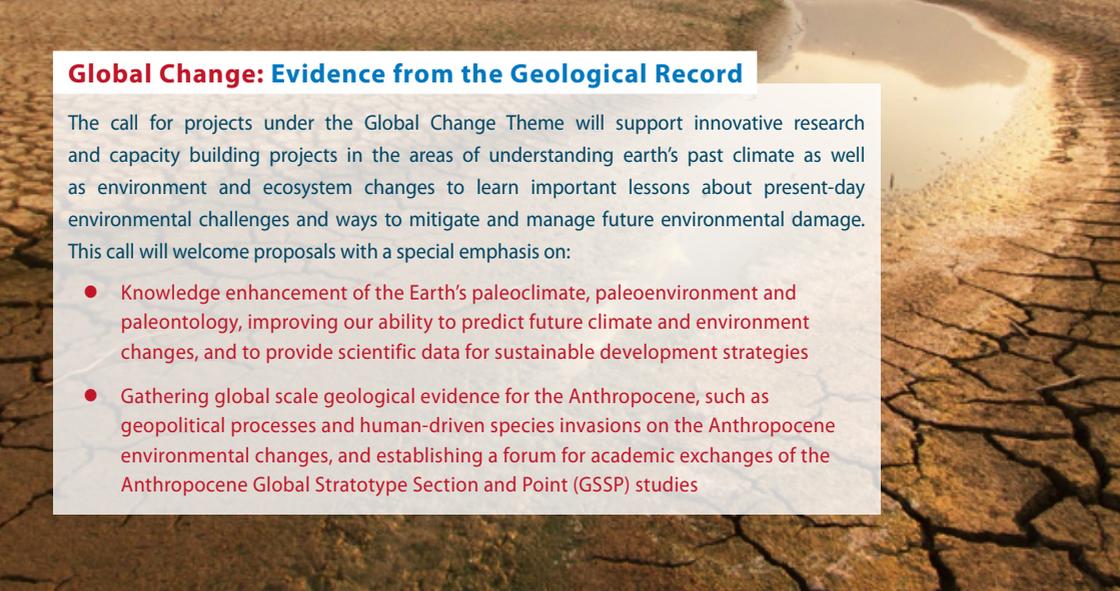
- Geohazards nearby metropolitan areas
- Geohazards disaster risk reduction related to human activities



## **Geodynamic: Control our Environment**

The call for proposals under the Geodynamic Theme will prioritize projects using inter alia (geochemical, petrological, mathematical and geophysical) techniques to study deep Earth processes (ranging from changes in the Earth's magnetic field to plate tectonics) which are also relevant to natural resource exploration, distribution and management of groundwater resources and the study and mitigation of natural hazards such as earthquakes and volcanoes. IGCP 2020 project proposal call will provide seed funding to project proposals that focus on the research and capacity building for the application of multidisciplinary geosciences techniques to study:

- Earth processes with outcomes addressing global scientific, environmental, economic and societal challenges (such as responsible use of natural resources, geoharitage, geohazards and climate change mitigation) in developing countries.



## **Global Change: Evidence from the Geological Record**

The call for projects under the Global Change Theme will support innovative research and capacity building projects in the areas of understanding earth's past climate as well as environment and ecosystem changes to learn important lessons about present-day environmental challenges and ways to mitigate and manage future environmental damage. This call will welcome proposals with a special emphasis on:

- Knowledge enhancement of the Earth's paleoclimate, paleoenvironment and paleontology, improving our ability to predict future climate and environment changes, and to provide scientific data for sustainable development strategies
- Gathering global scale geological evidence for the Anthropocene, such as geopolitical processes and human-driven species invasions on the Anthropocene environmental changes, and establishing a forum for academic exchanges of the Anthropocene Global Stratotype Section and Point (GSSP) studies



# IGCP 2020 Annually Defined Topic: Geoheritage for Sustainable Development

UNESCO's mandate acknowledges the research on geological heritage as an important instrument for the holistic approach to sustainable development of UNESCO Member States. The call for proposals under the Geoheritage for Sustainable Development Special Topic will support projects focusing on the protection of geological formations which are essential to (1) keeping the memory of the evolution of the earth; (2) learning from evolving processes to solve emerging problems and (3) the success of a future sustainable development of local communities, in particular in terms of resource management, renewable energies, energy efficiency, farming, land use and peatland management. The call for Geoheritage for Sustainable Development will provide seed funding to projects applying best practices and to projects contributing to the strengthening and empowering of local communities to ensure that the geological importance of an area can be preserved and promoted for science, education and culture.

**Deadline for project proposal submission : 15 October 2020**

## What to do next...

If you are a scientist wishing to submit a research proposal of relevance to one of the above mentioned topics, please contact:

Ozlem Adiyaman Lopes: [o.adiyaman@unesco.org](mailto:o.adiyaman@unesco.org)

Marie-Laure Faber: [ml.faber@unesco.org](mailto:ml.faber@unesco.org)



**UNESCO IGCP Secretariat**  
**Earth Sciences and Geo-hazards**  
**Risk Reduction Section**  
**Division of Ecological and Earth Sciences UNESCO**

7, Place Fontenoy - 75732 Paris Cedex 15 France  
Tel.: +33 1 45 68 14 33 — e-mail: [o.adiyaman@unesco.org](mailto:o.adiyaman@unesco.org)

sponsored by:

