

Mine Seismology Workshop

4-5 November 2026 | Istanbul Technical University (İTÜ) | Faculty of Mines

Prof. Dr. Ihsan Ketin Conference Centre

Hosted by ITU, Faculty of Mines, MOPAM and CASK, with IMS as key technical presenter

A two-day technical industry workshop for mining and geotechnical professionals working with seismic monitoring, rockburst hazard, ground control and operational risk management. The programme combines a practical primer course, mine case studies and current developments in seismic monitoring equipment and data analysis.

Workshop Focus

- Practical use of seismic monitoring in underground mines and high-stress mining environments.
- Seismic hazard and rockburst hazard assessment for mine planning and daily operations.
- Interpretation of seismicity, event mechanisms, source parameters and seismic response to mining.
- Operational applications, including re-entry protocols after blasting or large seismic events.
- New developments in seismic monitoring systems, sensors, processing workflows and data analytics.

Preliminary Programme

Date / Time	Session	Main content
Wednesday 4 November 09:00-17:00	Introduction to Mine Seismology: Primer Course for Geotechnical Engineers	Elementary principles for non-seismologists: objectives of seismic monitoring, seismic waves and sources, monitoring systems, event location, source parameters, source mechanisms, event classification and interpretation of seismicity.
Thursday 5 November 09:00-13:00	Implementation and Applications of Seismic Monitoring in Mines - Case Studies	Best practices and mine applications: rockburst damage mechanisms, data processing, audit of mine design assumptions, in situ stress interpretation, re-entry protocols, seismic hazard and rockburst hazard assessment.
Thursday 5 November 14:00-17:00	Latest Advances in Seismic Monitoring Equipment and Data Analysis Techniques	Recent developments in seismic monitoring hardware, network design, sensors, data quality control, automated processing, event interpretation, visualization and decision-support tools for geotechnical and operational teams.

Call for Mine Case Studies

Geotechnical practitioners and mining companies are invited to contribute short case-study presentations on seismic monitoring implementation and applications at operating mines. **Presentations are expected to be 20-30 minutes including Q&A.** Suggested topics include seismic monitoring practice, hazard assessment, rockburst management, data interpretation, mine design feedback and operational response protocols.

Workshop Format

Participation

- The workshop is primarily planned as an in-person event to support technical discussion and networking.
- A limited online option may be considered where appropriate; details will be confirmed in the next circular.
- The first announcement should be treated as a save-the-date and call for case studies.

Language and contributions

- Workshop language: English.
- Day 2 case-study talks: 20-30 minutes including Q&A.
- Contributions from IMS, ITU/CASK and mine operators are expected.

Why Attend?

Technical value

- Understand how seismic monitoring supports mine safety, production decisions and ground control practice.
- Learn directly from IMS specialists and mine-based practitioners.
- Discuss the link between seismic data, rock mass response and operational decision making.

Network and visibility

- Exchange experience with peers from underground metal mines, coal operations and selected open pit mines.
- Share operational lessons from real mines in Türkiye and the wider region.
- Build links between industry, academia and technology providers.

Who Should Attend?

Mine technical teams	Management and risk teams	Academic / research community
Geotechnical engineers Rock mechanics engineers Mine planning engineers Production engineers	Mine managers Technical managers HSE and risk professionals Operational decision makers	Researchers Graduate students University-industry project teams Seismology specialists

Organising Structure

The workshop will be organised under the ITU institutional umbrella, with MOPAM and CASK supporting local coordination and IMS providing the main technical content. This positioning is intended to make the event a regional industry workshop rather than a purely academic seminar or commercial product presentation.

Registration and Information

Registration details and the official registration link will be announced through the [IMS website](#) and the ITU/CASK/MOPAM communication channels. Detailed fees, final programme, speaker list and presentation arrangements will be confirmed in the next circular.

Presentation interest / local coordination: Assoc. Prof. C. Atilla Öztürk – atilla.ozturk@itu.edu.tr