

ISRM Workshop on Soft Rocks 2025

15-16 May 2025 | Porto, Portugal

https://fe.up.pt/isrm-wsr2025/

Bulletin No. 2

Introduction

Soft rock, with its intricate mechanical behaviour, poses significant challenges in rock engineering, particularly as projects in coal mining, water conservancy and transportation extend into deeper territories. The encounter with weak and fractured strata in complex geological settings, characterized by high in-situ stress, geothermal gradients and the presence of groundwater, necessitates innovative approaches to ensure safety and manage construction costs effectively. The comprehensive understanding of soft rock's physical properties and classification, and the development of novel design methods for engineering in such environments is crucial for the advancement of the field.

The Soft Rocks Commission of the International Society for Rock Mechanics and Rock Engineering (ISRM) is proud to announce the organization of the ISRM Workshop on Soft Rocks, to be held in Porto, Portugal, in May 2025. We look forward to receiving your groundbreaking research and to a fruitful exchange of ideas at the ISRM Workshop on Soft Rocks in 2025.

Organisers

- ISRM Commission of Soft Rocks
- Faculty of Engineering of the University of Porto (FEUP)
- China University of Mining and Technology, Beijing
- Chinese Society for Rock Mechanics and Engineering (CSRME)
- Portuguese Geotechnical Society (SPG)

Themes & Topics

- Concept and classification of soft rocks
- Physical and mechanical characterization of soft rocks
- Stability analysis, monitoring and control technology of soft-rock slopes
- Deformation mechanism and control technology of soft-rock tunnels
- Design measures of soft-rock engineering

Honour Commission

- Seokwon Jeon, ISRM President
- Ki-Bok Min, ISRM Vice President for Asia
- Muriel Gasc-Barbier, ISRM Vice President for Europe
- Luis Lamas, ISRM Secretary General
- Manchao He, CSRME President

Organizing Committee

The Organizing Committee includes all the members of the ISRM Commission of Soft Rocks and specialists from Portugal:

- Luis Ribeiro e Sousa (Chairman), Portugal
- Xiaoming Sun (Co-Chairman), China
- António Fiuza, Portugal
- Cuiying Zhou, China
- Giovanni Grasselli, Canada
- Hui Zhou, China
- Joaquim Sousa Góis, Portugal
- Luís Lamas, Portugal

- Manchao He, China
- Mostafa Sharifzadeh, Australia
- Nuwen Xu, China
- Pham Quoc Tuan, Vietnam
- Pingye Guo, China
- Qi Wang, China
- Quansheng Liu, China
- Sérgio Fontoura, Brazil
- Wei Wu, Singapore

Conference Secretary

- Manuel Carvalho, University of Porto, Portugal (<u>manuel@fe.up.pt</u>)
- Danting Hu, Chinese Society for Rock Mechanics and Engineering, China (csrme@163.com)

Publication

- Special issue: Soft Rock Engineering of the International Journal of Coal Science & Technology
- Website for Submission: <u>https://link.springer.com/journal/40789</u>
- Please choose Special Issue on Soft Rock Engineering: Challenges and Innovations

Provisional Program

May 15, Thursday

08.30 – 9.00 **Registration**

$09.00-9.30\ \textbf{Opening Session}$

ISRM President (Seokwon Jeon, South Korea); ISRM VP (Kyoshi Kishida, Japan); IAEG President (Vassilis Marinos, Greece); ISRM Secretary-General (Luís Nolasco Lamas, Portugal); President ISRM NG China (Manchao He, China); President ISRM NG Portugal (Paulo da Venda Oliveira, Portugal); Director of Faculty of Engineering, University of Porto (Rui Calçada, Portugal); President of ISRM Commission on Soft Rocks (Xiaoming Sun, China), and Chairman of the ISRM Workshop on Soft Rocks (Luís Ribeiro e Sousa, Portugal).

9.30 - 11.00 Submission of Communications

Chair – Cristina Rodrigues (University Agostinho Neto, Luanda, Angola) and Xiaoming Sun (Mining University of Beijing, China)

11.00 - 11.30 **Coffee Break**

11.30 – 13.30 Round Table on Concept and Classification of Soft Rocks in Mining Exploration

Chair - Manchao He (Mining University of Beijing, China)

Members – Gustavo Paneiro (University of Lisbon, Portugal); Mostafa Sharifzadeh (Curtis University, Australia); Xiaoming Sun (Mining University of Beijing, China); Leandro Alejano (Vigo University, Spain); Giovanni Grasselli (Toronto University, Canada) and António Fiuza (University of Porto, Portugal).

13.30 – 14.30 **Lunch**

14.30 – 16.30 Submission of Communications

Chair – Leandro Alejano (University of Vigo, Spain) and Rita Leal e Sousa (University of New York, Abu Dhabi, UAE)

16.30 – 17.00 **Coffee Break**

17.00 - 19.00 Submission of Communications

Chair – Paulo da Venda Oliveira (University of Coimbra, Portugal) and Pingye Guo (Mining University of Beijing, China)

May 16, Friday

9.00 – 11.00 Submission of Communication

Chair - Vassilis Marinos (University of Athens, Greece) and Lemos de Sousa (University Fernando Pessoa, Porto, Portugal)

11.00 – 11.30 **Coffee Break**

11.30 – 13.30 Submission of Communications

Chair – Sérgio Fontoura (Catholic University of Rio de Janeiro, Brazil) and António Viana da Fonseca (University of Porto, Portugal)

13.30 – 14.30 Lunch

14.30 – 16.30 Submission of Communications

Chair - Pham Quoc Tuan (University of Hanoi, Vietnam) and Manuel Matos Fernandes (University of Porto, Portugal)

16.30 - 17.00 Coffee Break

17.00 - 19.00 **Round Table on Stability Analysis, Monitoring and Control Technology of Soft-Rock Slopes** Chair – Seokwon Jeon (ISRM President, South Korea)

Members – António Topa Gomes (University of Porto, Portugal); Kyoshi Kishida (University of Kyoto, Japan), Conrad Felice (University of Florida, USA), Eduardo Marques (Viçosa University, Brazil); Tiago Miranda (University of Minho, Guimarães, Portugal); and Luis Ribeiro e Sousa (University of Porto, Portugal). 19.00 – 24.00 **Workshop Dinner**

May 17, Saturday

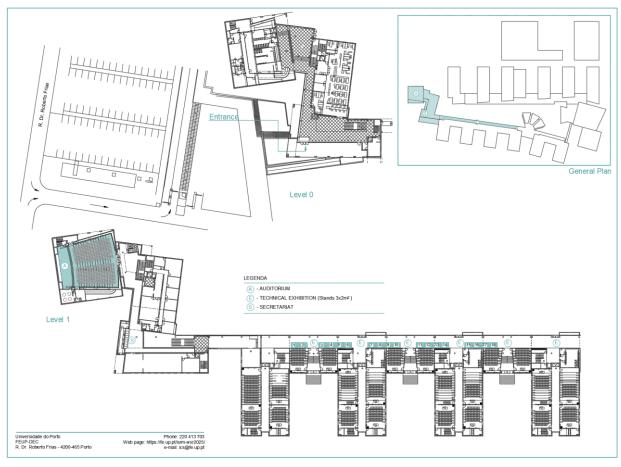
10.00 – 13.00 Technical Visit to Metro of Porto

Leaders – Jorge Quelhas (Metro of Porto, Portugal) and Luis Nolasco Lamas (LNEC, Lisbon, Portugal).

Registration Cost

- Members of ISRM, CSRME, SPG and FEUP: 200 EUR; Students: 100 EUR
- Other members 250 EUR
- The registration cost includes the proceedings, participation in the sessions, and coffee breaks
- The workshop dinner is not included in the registration cost.

Technical Exhibition



□ Stand $2x6m^2$ (4.500€ + VAT) □ Stand $2x3m^2$ (2.500€ + VAT)

The price includes: Free registration (3 registrations for a 12m² stand and 2 registrations for a 6m² stand).

Sponsorship Opportunities

Platinum Sponsorship – 3000€ + VAT

- 3 Workshop registration;
- Presentation of the Logo at the event during the Workshop sessions;
- Platinum sponsorship logo in the final program;
- Platinum sponsorship logo on the Workshop website;
- Thanks for the Platinum sponsorship in the Workshop publications and during the opening and closing sessions;
- Possibility of including brochures in the Workshop folders;
- Include promotional videos during breaks.

Gold Sponsorship – 2000€ + VAT

- 2 Workshop registration;
- Presentation of the Logo at the event during the Workshop sessions;
- Gold sponsorship logo in the final program;
- Gold sponsorship logo on the Workshop website;
- Thanks for the Gold sponsorship in the Workshop publications;
- Possibility of including brochures in the Workshop folders.

Silver Sponsorship – 1000€ + VAT

- 1 Workshop registration;
- Presentation of the Logo at the event during the Workshop sessions;
- Silver sponsorship logo in the final program;
- Silver sponsorship logo on the Workshop website;
- Thanks for the Silver sponsorship in the Workshop publications;
- Possibility of including brochures in the Workshop folders.

Hotels

1. HOTEL IBIS PORTO SAO JOÃO - **

Rua Dr. Plácido Costa Paranhos 4200-450 Porto

2. EUROSTARS PORTO – ****

Rua do Rosário 160-164 4050-521 Porto

3. AXIS PORTO BUSINESS SPA HOTEL - ****

Rua Maria Feliciana, 100 – São Mamede de Infesta 4465-283 Matosinhos Porto

4. HOTEL DE INFANTE SAGRES – *****

Praça D. Filipa de Lencastre, 62 4050-259 Porto

5. GRANDE HOTEL DO PORTO - ***

Rua de Santa Catarina, 197 4000-405 Porto

6. INTERCONTINENTAL PORTO – *****

Praça da Liberdade, 25 4000-322 Porto Porto

7. CASUAL INCA PORTO - ****

Praça Cel Pacheco, 52 4050-453 Porto Porto **8. HF FENIX PORTO –** ****

Rua Gonçalo Sampaio 282 4150-365 Porto

9. HF TUELA PORTO - ***

Rua Arq. Marques da Silva, 200 4150-483 Porto

10. HF IPANEMA PORTO - ****

Rua do Campo Alegre,156-172 4150-169 Porto

11. HOTEL EUROSTARS DAS ARTES – **** Rua do Mestre Guilherme Camarinha, 212 4200-537 Porto

12. QUALITY HOTEL PORTUS CALE - ****

Av. da Boavista, 1060 Porto

13. SHERATON HOTEL PORTO & SPA – ***** Rua Tenente Valadim, 146 4100-476 Porto 14. PORTO PALÁCIO HOTEL - *****
Av. da Boavista, 1269
4100-130 Porto
15. CROWNE PLAZA Porto - ****
Av. da Boavista, 1466
4100-114 Porto
16. PESTANA VINTAGE PORTO - *****
Praça da Ribeira, 1
4050-513 Porto
17. HF IPANEMA PARK - *****
Rua de Serralves, 124
4150-702 Porto
18. TRYP PORTO CENTRO HOTEL - ***
Rua da Alegria, 685
4000-046 Porto

19. LEGENDARY PORTO HOTEL – ***

Praça da Batalha, 127-130 4000-102 Porto **20. HOTEL NEYA – ****** Rua de Monchique, 35-41 4050-394 Porto Organization **21. HOTEL STAR INN** - *** Rua Senhora Do Porto, 930, 4250-452 Porto **22. HOTEL VILA GALE** - **** Av. Fernão Magalhães 7, 4300-190 Porto **23. PORTO CITY HOTEL -***** Rua de Faria Guimarães 211-215, 4000-206 Porto

Venue

The Portuguese northern city of Porto is the second largest city in the country and is one of the best destinations in Europe for a city break. It was in Porto that the independent Portugal was born in the 12th century. The city lies on the right bank of the Douro River and the historic centre was awarded UNESCO World Heritage, in 1996, due to its numerous medieval, baroque, neoclassic churches and palaces. But it is in the narrower streets where the unique atmosphere of the old Porto is to be found, where cultural heritage is an everyday fact of life. In addition, the surrounding region is of major industrial and commercial importance, noted for its textiles, shoes, furniture and jewelry, known for its cuisine, wines and the unique combination of tradition and modernity. Porto is also internationally known for exporting the famous Porto wine.

Looking further ahead in 2025, conference participants will meet a city that offers a variety of resources and historic authenticity to its visitors. Experience a perfect combination of tradition and modernity and enjoy the unique atmosphere of Porto attending the ISRM Workshop on Soft Rocks 2025!



Porto - view of the old city

Workshop location

Faculty of Engineering (FEUP) is the largest faculty at U. Porto. Excellence, innovation and entrepreneurship are qualities that make FEUP an engineering school high reputed in Portugal and abroad. Its mission is to train world-class engineers and our effort is on research and development of distinctive quality. Supported on the R&D resulting from the excellence of its research units and international partnerships, FEUP seeks to ensure that students can conceive and operate complex systems, to generate added value in an environment of social and professional sustainability.

HOW TO REACH US

By metro

FEUP is efficiently served by three modern Metro stations on the D line (yellow), with *IPO* station being the closest one. For additional information, please consult the <u>Porto Metro Network Map</u>.

By bus

There are 4 bus lines in the Faculty's area: 204, 300, 301 and 803. There are other STCP bus lines from Hospital de São João, as well as regular bus routes to other cities. To choose the best bus routes for your needs, please visit the website: <u>www.stcp.pt</u>.

By train

If you are coming to Porto by train, there are two main ways to the Faculty, depending on which station you arrive at:

- If you are arriving from *Campanhã station*, you should take the Metro and choose any one of the following lines: A (blue), B (red), C (green) or E (purple). Then you will have to change to line D (yellow) at *Trindade station*, after which you should follow the directions given in the option "By Metro";
- If you are arriving from *São Bento station*, you should take Metro Line D (yellow) and then follow the directions given in the option "By Metro".

By plane (Sá Carneiro Airport)

Porto is served by a modern airport, <u>Francisco Sá Carneiro</u> Airport, located about 12 km from the city centre. To get from the airport to the city, several options are available:

- <u>Metro</u>: Line E (Purple) is an excellent connection between the airport and the city centre (recommended). Line D (yellow) should then be taken to get to FEUP;
- Shuttles: direct shuttles from the airport to hotels in the city centre are also available;
- Taxi: taxis can be found right in front of the airport door, with an average fare of 20.00 € (plus 1.50 € to carry volumes in the luggage compartment).