



НАУЧНО-ТЕХНИЧЕСКИ СЪЮЗ ПО МИННО ДЕЛО, ГЕОЛОГИЯ И МЕТАЛУРГИЯ  
SCIENTIFIC AND TECHNICAL UNION OF MINING, GEOLOGY AND METALLURGY  
НАУЧНО-ТЕХНИЧЕСКИЙ СОЮЗ ПО ГОРНОМУ ДЕЛУ, ГЕОЛОГИИ И МЕТАЛЛУРГИИ



# XI INTERNATIONAL GEOMECHANICS CONFERENCE

16 – 20 September 2024  
Aster Hotel & SPA, Golden Sands Resort  
Bulgaria

**Dear Ladies and Gentlemen,  
Dear colleagues,**

I am pleased to invite you on behalf of the Organizing Committee and personally on my behalf to take part in the **XI International Geomechanics Conference**, which will be held from 16 to 20 September 2024 in the Astera Hotel & SPA, Golden Sands Resort, Bulgaria.

This year's edition of the conference is the eleven, organized from over 25 years and this once again proves the authority and importance of this scientific forum. The main theme of the conference is New challenges of geomechanics.

The topics of the conference include the full range of fundamental issues on physical and mechanical properties of rocks, stress and strain of rock mass, measurement in geomechanics and remote methods, stability assessment, blasting and seismic impacts, dynamic rock pressure tests, ecology and environmental protection, education. We hope that the thematic topics will provoke your interest again and will be a precondition for many discussions.

The discussion during the conference of the research results will allow for the application of geomechanical methods related to the development and use of underground space in the mining industry, construction, industrial and public buildings, transport facilities and others.

With your participation in the forum you will contribute to raising the scientific level of the **XI International Geomechanics Conference** and strengthening business and personal contacts.

We look forward to seeing you at the XI International Geomechanics Conference!

**Assoc. Prof. Dr. Eng. Kremena Dedelyanova  
Chairperson of the Scientific and technical  
union of mining, geology and metallurgy**



## **Organizers**

SCIENTIFIC AND TECHNICAL UNION OF MINING, GEOLOGY AND METALLURGY



FEDERATION OF THE SCIENTIFIC ENGINEERING UNIONS IN BULGARIA

## **Co-organizers**

- University of Mining and Geology "St. Ivan Rilski"
- University of Architecture, Civil Engineering and Geodesy
- University of Chemical Technology and Metallurgy
- Geological institute, Bulgarian Academy of Sciences
- University of Transport "Todor Kableshkov"
- University of Structural Engineering & Architecture "Lyuben Karavelov"
- Bulgarian Chamber of Mining and Geology
- Bulgarian Society of Soil Mechanics and Geotechnical Engineering
- Antech TFA Ltd.
- Asarel-Medet JSCo
- Association Bulgarian Coal Mining
- Videx JSCo.
- Geostroy JSCo.
- Geotechmin Ltd.
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- Dundee Precious Metals Krumovgrad EAD
- Dundee Precious Metals Chelopech EAD
- Ellatzite-Med JSCo.
- Kaolin JSCo.
- Metropolitan JSCo.
- Maritza-Iztok Mines JSCo.
- Minproekt JSCo.
- Minstroy Holding JSCo.
- Niproruda JSCo.
- Yoda Ltd.

## **With media partners**

Journal Mining and Geology  
Journal Geology and Mineral Resources  
Newspaper Rudnichar  
Publishing house Ore and Metals, Russia  
Newspaper Science and Society

## **Organizing committee**

### **Chairman:**

Assoc. Prof. Dr. Eng. Kremena Dedelyanova      Chairperson, Scientific and Technical Union of Mining, Geology and Metallurgy

### **Honorary Chairmen:**

Prof. DSc Eng. Tzolo Voutov      Honorary Chairman, Scientific and Technical Union of Mining, Geology and Metallurgy

Prof. DSc Nikolay Nikolaev      Chairman, National Committee of Rock Mechanics

### **Deputy Chairmen:**

MSc Eng. Dragomir Draganov      Chairman, Bulgarian Chamber of Mining and Geology  
Prof. Dr. Ivaylo Koprev      Rector, University of Mining and Geology "St. Ivan Rilski"

Prof. Dr. Senia Terzieva      Rector, University of Chemical Technology and Metallurgy

Assoc. Prof. Dr. Arch. Gichka Kutova-Kamenova      Rector, University of Architecture, Civil Engineering and Geodesy

Dr. Eng. Vladimir Vutov      Vice-chairman, Scientific and Technical Union of Mining, Geology and Metallurgy

MSc Eng. Shteryo Shterev      Vice-chairman, Scientific and Technical Union of Mining, Geology and Metallurgy

### **Scientific Secretaries:**

Dr. Eng. Nikolay Milev      University of Architecture, Civil Engineering and Geodesy

Dr. Eng. Georgi Dachev      Ministry of Energy

Dr. Krassimira Arsova      Scientific and Technical Union of Mining, Geology and Metallurgy

### **Members:**

MSc Eng. Dimitar Angelov      Executive Director, Kaolin JSCo.

Dr. Eng. Nevena Babunska      University of Transport "Todor Kableshev"

Prof. Dr. Stoyan Bratoev      Executive director, Metropolitan JSCo.

Dr. Eng. Ivan Vutov      Chairman of the Board of Directors, Geotrading JSCo.

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Prof. Dr. Iliya Garkov      Senior Vice-President, European Operations, Dundee Precious Metals

Prof. DSc. Dimcho Iossifov      Scientific and Technical Union of Mining, Geology and Metallurgy

MSc Eng. Ivan Kozhuharov      Executive Director, Eurotest-Control JSCo.

Assoc. Prof. Dr. Ivan Mitev      Executive Director, Bulgarian Chamber of Mining and Geology

Prof. DSc Valeri Mitkov      University of Mining and Geology St. Ivan Rilski

Prof. Dr. Pavel Pavlov      University of Mining and Geology St. Ivan Rilski

MSc Eng. Nikolay Peltekov      Executive Director, Asarel-Medet JSCo

MSc Eng. Georgi Petrov      Deputy General Director Production, Ellatzite-Med JSCo.

Assoc. Prof. Dr. Dimitar Peshev      Vice-Rector, University of Chemical Technology and Metallurgy

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Prof. Dr. Stanislav Topalov      Chairman, Association Bulgarian Coal Mining

MSc Eng. Kostadin Hristov      Executive director, Minproekt JSCo.

MSc Eng. Yasen Chaushev      Maritza-Iztok Mines JSCo.

MSc Eng. Ilza Chinkova      Executive Director, Maritza-Iztok Mines JSCo.

### **National editorial committee**

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Assoc. Prof. Dr. Evgeniya Aleksandrova  
Prof. Dr. Dimitar Anastasov  
Dr. Eng. Tsvetomir Velkov  
Prof. Dr. Krastyo Dermendzhiev  
MSc Eng. Tzvetan Dilov  
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Assoc. Prof. Dr. Ekaterina Serafimova  
Prof. Dr. Andrey Totsev

### **International Advisory Committee**

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Academician Victor Prushak	- Belarus
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Prof. Ersin Arioglu	- Turkey
Prof. Resat Ulusay	- Turkey
Prof. Kemal Cetin	- Turkey
Prof. Garri Litvinskii	- Ukraine

## Topics

1. **Physical and mechanical properties of rocks and soils.**
2. **Stress and strain state of rock mass and soils. Interaction between rock mass and engineering structures.**
3. **Measurements in geomechanics. Contact and remote methods. Monitoring.**
4. **Stability evaluation. Dynamic impacts. Soil mass response. Probabilistic approach. Hazard and risk assessment in geomechanics.**
5. **Geotechnical research and geostructures.**
6. **Environment protection. Sustainable development.**
7. **Education and qualification.**

## Instruction to the authors

### Abstracts

- Abstracts must be in English and limited to 100 words. Text must be in Arial Narrow, 12 pt, Italic.

**Deadline for submission of abstracts – 30. 04. 2024**

### Papers

- **Volume** – up to 8 standard pages, A4 Format (210x297mm), including figures, tables and references with margins: top – 30 mm, bottom, left and right – 20 mm. Papers will be at one of official languages – Bulgarian, English, Russian;
- **Font** of main text – Arial Narrow, 12 pt., line spacing Single Space.
- **Title** – centered, bold capital letters, 12 pt. Below the title follows names of author/s, address, affiliation, position and E-mail address;
- **Subtitles in text** – centered and underlined;
- **Figures** – black-and white computer graphics placed in the respective position within the text field.
- **Color figures and pictures are not accepted!**
- **Tables** – numbered on the right (font size 10 pts, italic);
- **Formulae** – numbered on the right of the formula (in brackets);
- **Measurement units** – according to the International System of Units (SI);
- **Notes** – marked by stars (\*) in text and placed in the bottom of the respective page;
- **References** – in the text of the report the references must be in brackets. At the end of the report the references are arranged in alphabetical order, numbered.

**Deadline for submission of papers – 1. 07. 2024**

**Two papers for one author are allowed.**

**Duration of the paper presentation:**

- Plenary paper – 15 min.
- Oral presentation – 12 min.

**Please send the papers by e-mail in DOC format!**

**You can publish your paper (up to 2 papers per author) in IOP Conference Series: Earth and Environmental Science indexed in Scopus, Web of Science and others. All papers must within the IOP EES scope (<https://iopscience.iop.org/journal/1755-1315/page/scope>). Papers for IOP publishing must follow the journal guidelines (<https://publishingsupport.iopscience.iop.org/author-guidelines-for-conference-proceedings/>).**

## Participation types/forms

- Plenary sessions;
- Exhibition;
- Company presentation-;
- Oral presentation;
- Discussion;
- Business meeting.

## Official languages

The official languages of the conference will be **Bulgarian, English and Russian**. Simultaneous translation will be provided.

## Registration desk

The registration desk is going to be situated in the lobby of the Astera Hotel & SPA, Golden Sands Resort, Bulgaria. It is going to be open on 16 September 2024 from 10<sup>00</sup> to 19<sup>00</sup> h. Conference time is scheduled from 09<sup>00</sup> to 15<sup>00</sup> h.

## Registration fee (EURO)

	<b>Before 1.08.2024</b>	<b>After 1.08.2024</b>
<b>Author</b>	<b>250</b>	<b>-</b>
<b>Author (IOP)</b>	<b>400</b>	<b>-</b>
<b>Second paper (IOP)</b>	<b>200</b>	<b>-</b>
<b>Participant without paper</b>	<b>350</b>	<b>400</b>
<b>Exhibitor</b>	<b>350</b>	<b>400</b>
<b>Student, PhD student</b>	<b>100</b>	<b>-</b>

**The registration fee** includes admission to plenary sessions and exhibition, materials of the conference including Proceedings volume, Welcome cocktail, coffee and drinks during the coffee breaks, Gala dinner.

**The registration fee Author (IOP) includes publishing in the IOP Conference Series: Earth and Environmental Science.**

Students and PhD students are not going to receive the Proceedings volume.

Students and PhD students willing to publish their articles must provide a reference letter by academic rank scientists.

Only articles by authors who paid their registration fee until August 1, 2024, are going to be published.

## Exhibition and advertising

Companies and organizations can advertise their products and activities during the conference at an exhibition in the lobby of the Astera Hotel & SPA. The fee for the exhibition is 150 EURO/m<sup>2</sup> (minimum exhibition area - 2 m<sup>2</sup>). Exhibitors pay **Exhibitor** registration fee too.

Advertising during the conference is possible in the form of a company presentation – price 80 EURO/min.

Advertising in the Proceedings volume is possible at the cost of 1000 EURO - Color / Format A4.

### Hotel accommodation (BGN)

Hotel	Single room	Double room
Astera Hotel & SPA **** standard room	170	230

The accommodation is on the base Ultra All Inclusive.

Booking of the room in the hotel will be provided after receiving the filled registration form on e-mail address: **mdgm@fnts.bg** until **1 August 2024**

Payment for accommodation will be possible at the hotel reception on the registration day.

### Payment

Bank transfer at the following accounts:

**Scientific and technical union of mining, geology and metallurgy  
XI International geomechanics conference**

**UniCredit BULBANK  
1000, Sofia, BULGARIA  
BIC - UNCRBGSF**

- \* **BGN:       BG41UNCR76301022561959**
- \* **EURO:     BG55UNCR76301422597370**

### **IMPORTANT DATES**

<b>Deadline for receipt of abstracts</b>	<b>30.04.2024</b>
<b>Deadline for receipt of paper</b>	<b>01.07.2024</b>
<b>Deadline for receipt of registration form and paid fees</b>	<b>1.08.2024</b>

### Address for correspondence:

**Scientific and technical union of mining, geology and metallurgy  
BULGARIA, 1000 Sofia, 108, Rakovski Str.**

**Phone: ++359 2 986 13 79; E-mail: mdgm@fnts.bg**

**nts\_mdgm@abv.bg**

**Assoc. Prof. Dr. Eng. Kremena Dedelyanova** – Chairperson, Scientific and technical union of mining, geology and metallurgy

**Dr. Krassimira Arsova** – Scientific and technical activities, Scientific and technical union of mining, geology and metallurgy

**www.mdgm.org**

**http://confgeomech.mdgm.org/**



REGISTRATION FORM

XI International geomechanics conference

16 - 20 September 2024  
Astera Hotel & SPA,  
Golden Sands Resort  
BULGARIA

Title, name and family name .....

.....

Address .....

.....

Phone: ..... Fax: ..... E-mail: .....

I wish to participate:  with a paper       with a paper IOP       without a paper  
 with firm presentation       as an exhibitor on sq. m area

I use:  Bulgarian  English  Russian

I will accept accommodation in hotel for 16, 17, 18 and 19 September 2024

Astera Hotel & SPA  single room,  double room ;

I have transferred the following amounts:

..... EURO / Registration fee  
..... EURO / for advertisement  
..... EURO / for exhibition on ..... m<sup>2</sup>  
..... EURO / for firm presentation  
Total: ..... EURO

The transfer is made on the address:

Scientific and technical union of mining, geology and metallurgy  
UniCredit Bulbank  
1000, Sofia, BULGARIA  
BIC - UNCRBGSF  
\* EURO: IBAN – BG55UNCR76301422597370

DATE .....

SIGNATURE: .....

The registration form for participation is expected to be submitted to the Organizing Committee by e-mail [mdgm@fnts.bg](mailto:mdgm@fnts.bg) until 1 August 2024.

НАУЧНО-ТЕХНИЧЕСКИ СЪЮЗ  
ПО МИННО ДЕЛО,  
ГЕОЛОГИЯ И МЕТАЛУРГИЯ



SCIENTIFIC AND TECHNICAL  
UNION OF MINING,  
GEOLOGY AND METALLURGY

ФЕДЕРАЦИЯ НА  
НАУЧНО-ТЕХНИЧЕСКИТЕ  
СЪЮЗИ В БЪЛГАРИЯ



FEDERATION  
OF THE SCIENTIFIC ENGINEERING  
UNIONS IN BULGARIA