

## XIVth NATIONAL CONFERENCE OF SOIL MECHANICS AND FOUNDATION ENGINEERING

2 – 3 JUNE 2021, ONLINE

### CONNECTING ROMANIAN GEOTECHNICAL ENGINEERING TO EUROPEAN TRENDS

Wednesday, June 2<sup>nd</sup>, 2021

9:00-9:15	Connection on the digital platform	
9:15-10:00	<b>OPENING</b>	
10:00-13:00	<b>PLENARY SESSION 1. CONNECTING TO EUROPEAN TRENDS: GEOTECHNICAL DESIGN AND EUROPEAN STANDARDIZATION</b> <b>Chairpersons :</b> <b>Prof. Loretta Batali (Technical Univ. of Civil Engineering Bucharest)</b> <b>Ing. Alexandra Ene (Popp &amp; Asoc. Ing. Geotehnică, Bucharest)</b>	
10:00-10:45	Dr. Andrew Bond (GEOCENTRIX, UK)	<i>Bridging the gap: bringing geotechnical and structural design together in the 2<sup>nd</sup> generation Eurocodes</i>
10:45-11:05	Eng. Cristina Chirea (ASRO)	<i>Standardization activity in Geotechnical Engineering. National framework, European context, perspectives (RO)</i>
11:05-11:25	Prof. Loretta Batali (Technical Univ. of Civil Engineering Bucharest)	<i>Impact of Eurocode 7 revision on the Romanian technical norms in Geotechnical Engineering (RO)</i>
11:25-11:35	Q&A session	
11:35-11 :45	Coffee break / Exhibition visit	
11:45-12:00	Prof. Radu Văcăreanu (Technical Univ. of Civil Engineering Bucharest)	<i>Ground conditions and calibration of seismic action in Eurocode 8, Part 1-1. Present stage of the draft standard elaborated by CEN TC250/SC8 – Radu Văcăreanu &amp; Florin Pavel (UTCB) (RO)</i>
12:00-12:15	Eng. Alexandra Ene (Popp & Asoc. Inginerie Geotehnică)	<i>Reliability-based design applied in Geotechnical Engineering – present stage and development perspectives (RO)</i>
12:15-12:23	Eng. Dan Iancu (DI&A Design & Consulting)	<i>Considerations on the safety of deep excavations in urban areas seen through the existing technical norms – Dan Iancu &amp; Dragoș Knappe (DI&amp;A), Loretta Batali &amp; Horațiu Popa (UTCB) (RO)</i>
12:23-12:53	Eng. Lóránd Sata (SBR Soletanche Bachy Fundații)	<i>Presentation Sponsor DIAMOND : Digital transformation: a challenging process (RO)</i>
12:53-13:00	Q&A session	

13 :00-13 :30 Lunch break / Exhibition visit

**13:30-16:00 PARALLEL SESSION  
DISCUSSION SESSION 1 : GEOTECHNICAL INVESTIGATION AND MODELLING**

**Chairpersons :**

**Assoc. Prof. Vasile Fărcaș (Technical Univ. Cluj-Napoca)**

**Eng. Adrian Centea (CENCONSTRUCT SRL Timișoara)**

13:30-13:50	Prof. Sanda Manea (Technical Univ. of Civil Engineering Bucharest)	<i>General report Session 1: Geotechnical investigation and modelling (RO)</i>
13:50-14:05	Assoc. prof. Mihaela Stănciucu (Bucharest Univ.)	<i>Characterization of Dâmbovița alluvial formations based on geotechnical and geophysical investigations - Mihaela Stănciucu &amp; Mircea Irina (Bucharest Univ.), Adrian Diaconu (Geotesting C.I.) (RO)</i>
14:05-14:20	Dr. eng. Andrei Ilaș (Arcadis Excellence Center Romania S.A.)	<i>Techniques of testing soils compressibility in an original consolidometer – Andrei Ilaș (Arcadis Excellence Center Romania S.A.), Anghel Stanciu (TU Iași) (RO)</i>
14:20-14 :35	Eng. Adrian Ghencea (ALLBIM Net)	<i>Presentation Partner: BIM Stratigraphic model with GEO5, entry ticket for big investments (RO)</i>
14:35-14:45	Q&A session	
14:45-15:00	Coffee break / Exhibition visit	
15:00-15:08	Eng. Ionuț Ciocaniu (GEOSOND S.A.)	<i>Methods used for site works for a complex geotechnical investigation - Ionuț Ciocaniu &amp; Alexandru Teofilescu (GEOSOND S.A.), Loretta Batali, Robert Gavriluc &amp; Cristian Arion (UTCB) (RO)</i>
15:08-15:16	Eng. Denisa Pașca (UT Cluj-Napoca)	<i>Calculation application for overconsolidation ratio of Quaternary clays in Transylvania: practical use and theoretical approach - Denisa Pașca, Andor Nagy, Nicoleta Ilieș &amp; Vasile Farcaș (UTCN), Călin Bruchental (UBB) (RO)</i>
15 :16-15 :24	Assist. Prof. Ioan Boți (Technical Univ. of Civil Engineering Bucharest)	<i>Identification of soils prone to liquefaction based on SPT and CPT according to SR EN 1998-5 – Ioan Boți &amp; Loretta Batali (UTCB) (RO)</i>
15 :24-15 :32	Eng. Alexandra Ene (Popp & Asoc. Inginerie Geotehnică)	<i>Determining the characteristic values of geotechnical parameters using various statistical methods for the diaphragm wall of a deep excavation in Bucharest – Alexandra Ene (PAIG) (RO)</i>
15 :32-15 :40	Eng. Emilia Milutinovici (Bucharest Univ.)	<i>Statistical analysis of the geotechnical parameters of swelling clays in Romania and their influence on the geotechnical design of highways - Emilia Milutinovici &amp; Daniel Mihăilescu (Univ. București) (RO)</i>
15 :40-15 :48	Eng. Alexandru Poenaru (Technical Univ. of Civil Engineering Bucharest)	<i>Variation of geotchnical parameters in Bucharest area – Alexandru Poenaru (UTCB) (RO)</i>
15 :48-16 :00	Q&A session	

**13:30-16:00 PARALLEL SESSION**  
**DISCUSSION SESSION 2 : GEOTECHNICAL STRUCTURES AND DESIGN 1**  
**(Foundations, retaining structures, rehabilitation works)**

**Chairpersons :**

**Prof. Irina Lungu (Technical Univ. Gh. Asachi Iași)**

**Assist. prof. Iulia Prodan (Technical Univ. Cluj-Napoca)**

13:30-13:50	Prof. Horațiu Popa (Technical Univ. of Civil Engineering Bucharest)	<i>General report Session 2 : Foundations, retaining structures, rehabilitation works (RO)</i>
13 :50-14 :05	Prof. Adrian Ciutină (Politehnica Univ. Timișoara)	<i>Robustness of foundations in case of a column loss – case- study - Adrian Ciutină, Florea Dinu, Ioan Mărginean &amp; Filip Domșa (UPT) (RO)</i>
14 :05-14 :20	Assoc. prof. Nicoleta Ilieș (Technical Univ. Cluj-Napoca)	<i>Geotechnical problems for deep excavations in Cluj-Napoca. Case-study - Nicoleta Ilieș, Călin Mureșan, Sebastian Pălăcean, Dan Sofronie, Augustin Popa &amp; Vasile Fărcaș (UTCN) (RO)</i>
14:20-14:35	Eng. Horia Giurgea, Eng. Ionuț Daniel Moise (STRABAG- ZUBLIN)	<i>Presentation Sponsor GOLD : Deep foundations on bored piles. Solutions applied in the present projects of STRABAG – ZÜBLIN (RO)</i>
14 :35-14 :40	Q&A session	
14 :40-14 :55	Coffee break / Exhibition visit	
14 :55-15 :03	Eng. Paul Țurcanu (S.C. PROCONRIM SRL)	<i>Study regarding direct foundation of a high building – Mădălina Pohrib (TU Iași), Paul Țurcanu (PROCONRIM SRL) (RO)</i>
15 :03-15 :11	Eng. Andrei Dumitrescu (Saidel Eng.)	<i>Comparative analysis between numerical modelling and monitoring results for a deep excavation - Andrei Dumitrescu, Ion Răileanu, Tudor Stanciu, Alisa Găină &amp; Tudor Saidel (Saidel Eng.) (RO)</i>
15 :11-15 :19	Eng. Ionela Ionescu (Popp & Asoc. Inginerie Geotehnică)	<i>Comparative calculation of the retaining structure for a deep excavation in Bucharest. Comparison with previous stages of the same project and with monitoring results - Alexandra Ene, Ionela Ionescu, Despina Dorneanu &amp; Dragoș Marcu (PAIG), Horațiu Popa (UTCN) (RO)</i>
15 :19-15 :27	Dr. eng. Arpád Szerző (SBR Soletanche Bachy Fundații)	<i>Retaining system adapted for a deepened excavation from 15.70 m to 22.20 m - Lóránd Sata, Sorin Brutaru, Hulpuș Trifan &amp; Arpád Szerző (SBR), Augustin Popa, Olimpiu Mureșan (UTCN) (RO)</i>
15 :27-15 :35	Eng. Ionuț Ciocaniu (GEOSOND S.A.)	<i>Consolidation of existing structures using self-drilling bars - Ionuț Ciocaniu, Petre Uță, Iustin Ene &amp; Ovidiu Duță (GEOSOND S.A.), Sanda Manea (UTCN), Romeo Ciortan (Univ. Ovidius Constanța), Eugeniu Vasilache (PROINGINER SRL) (RO)</i>
15 :35-15 :50	Eng. Iulian Amolioaiei Eng. Constantin Daniel Nicolau (TERRATEST GEOTEHNIC)	<i>Presentation Sponsor GOLD : TERRATEST GEOTEHNIC – company presentation and big projects (RO)</i>
15 :50-16 :00	Q&A session	

16 :00-16 :30	Coffee break / Exhibition visit	
<b>16 :30-18 :00</b>	<b>WORKSHOP : GEOTECHNICAL ENGINEERING APPLIED IN ACADEMIA AND PRACTICE</b>	
	<b>Chairpersons:</b>	
	<b>Assoc. prof. Ernest Olinic (Technical Univ. of Civil Engineering Bucharest)</b>	
	<b>Assoc. prof. Vasile Fărcaș (Technical Univ. Cluj-Napoca)</b>	
16 :30-16 :45	Assoc. prof. Ernest Olinic (Technical Univ. of Civil Engineering Bucharest)	<i>Study regarding the existing technical support in Romania for elaborating geotechnical documents – Ernest Olinic, Ioan Boți &amp; Andrei Olteanu (UTCB), Tatiana Olinic (USAMV), Georgiana Butulescu (Romcim), Brândușa Cazacu (Geotech Dobrogea SRL) (RO)</i>
16 :45-18 :00	Discussions, attendees : Prof. Sanda Manea & Prof. Loretta Batali (UTCB), Prof. Irina Lungu & Prof. Nicolae Boțu (TU Iași), Prof. Valentin Feodorov (IRIDEX Group & USAMV), Eng. Dragoș Marcu (PAIG), Eng. Lóránd Sata (SBR) (RO)	

## Thursday, June 3<sup>rd</sup>, 2021

8:45-9:00	Connection on the digital platform	
<b>9 :00-11 :30</b>	<b>PLENARY SESSION 2 : CONNECTING TO EUROPEAN TRENDS- NEW CHALLENGES IN EUROPEAN GEOTECHNICAL ENGINEERING</b>	
	<b>Chairpersons :</b>	
	<b>Prof. Sanda Manea (Technical Univ. of Civil Engineering Bucharest)</b>	
	<b>Dr. eng. Árpád Szerző (SBR Soletanche Bachy Fundații)</b>	
9 :00-9 :45	Prof. Dietmar Adam (TU Vienna)	<i>Retaining Structures in Challenging Ground Conditions - Case Studies from Europe</i>
9:45-10:05	Dr. Sebastien Burlon (SETEC-TERRASOL)	<i>Seismic design : towards a displacement-based approach</i>
10:05-10:10	Q&A session	
10:10-10:20	Coffee break / Exhibition visit	
10:20-10:50	Prof. Sanda Manea (Technical Univ. of Civil Engineering Bucharest)	<i>Geotechnical challenges for Bucharest municipality (RO)</i>
10 :50-11 :05	Prof. Irina Lungu (Technical Univ. Gh. Asachi Iași)	<i>Another contribution to the Romanian Geotechnical Engineering – A new volume in FOUNDATIONS series (RO)</i>
11:05-11:20	Eng. George Corbescu (IRIDEX – Geobrugg)	<i>Presentation Sponsor PLATINUM : GUARD – Remote monitoring of protection systems against rock fall (RO)</i>
11 :20-11 :30	Q&A session	
<b>11 :30-13 :30</b>	<b>PARALLEL SESSION</b>	
	<b>DISCUSSION SESSION 3 : GEOTECHNICAL STRUCTURES AND DESIGN 2</b>	
	<b>(Ground improvement, reinforced fills, infrastructure works)</b>	
	<b>Chairpersons :</b>	
	<b>Prof. Adrian Ciutină (Politehnica Univ. Timișoara)</b>	
	<b>Prof. Nicolae Boțu (Technical Univ. Gh. Asachi Iași)</b>	

11:30-11:50	Prof. Irina Lungu (Technical Univ. Gh. Asachi Iași)	<i>General report Session Ground improvement, reinforced fills, infrastructure works (RO)</i>
11 :50-12 :05	Assist. prof. Tatiana Olinic (Univ. of Agriculture and Veterinary Medicine Bucharest)	<i>Improvement methods efficiency for water - sensitive / active soils - Ernest Olinic, Sanda Manea &amp; Cătălin Burlacu (UTCB), Tatiana Olinic (USAMV) (RO)</i>
12 :05-12 :13	Dr. eng. Cornelia Dobrescu (INCD URBAN INCERC)	<i>Reuse of glass waste as eco-sustainable solution to stabilize clay soils (RO)</i>
12 :13-12 :28	Eng. Dragoș Marcu (Popp & Asoc. Inginerie Geotehnică)	<i>Presentation Sponsor Gold Plus : Integrated approach of geotechnical works: from geotechnical investigations, to structural and geotechnical design and monitoring - Ionela Ionescu, Alexandra Ene, Dragoș Marcu, Despina Dorneanu &amp; Iulia Gheorghe (PAIG) (RO)</i>
12 :28-12 :35	Q&A session	
12 :35-12 :50	Coffee break / Exhibition visit	
12 :50-12 :58	Dr. Arash Khansari (BBG Germany)	<i>In-situ investigation of arching mechanism and long-term deformation of load transfer platforms over pile foundations – Arash Khansari, Lars Vollmert (BBG)</i>
12:58-13:06	Dr. eng. Monica Tsitsas (GT Ground Eng. & Constr. Services)	<i>Geotechnical testing for quality control of dynamic intensive compaction of collapsible soils - Monica Tsitsas &amp; George Tsitsas (GT Ground Eng.), Sanda Manea (UTCB), Romeo Ciortan (Univ. Ovidius Constanța) (RO)</i>
13:06-13:21	Marius Onofrei (Carmeuse Holding)	<i>Presentation Sponsor GOLD PLUS : Stabilised soil layers for civil and industrial buildings foundation - Larisa Soporan, Diana Oprean &amp; Marius Onofrei (Carmeuse Holding) (RO)</i>
13 :21-13 :30	Q&A session	
<b>11 :30-13 :30</b>	<b>PARALLEL SESSION DISCUSSION SESSION 4 : GEO-HAZARDS, ENVIRONMENT, HYDROGEOLOGY, ENERGY Chairpersons : Assoc. prof. Ernest Olinic (Technical Univ. of Civil Engineering Bucharest) Assist. prof. Oana Colț (Technical Univ. Gh. Asachi Iași)</b>	
11:30-11:50	Assoc. prof. Nicoleta Ilieș (Technical Univ. Cluj-Napoca)	<i>General report Session Geo-hazards, environment, hydrogeology, energy (RO)</i>
11:50-12:05	Assist. prof. Olimpiu Mureșan (Technical Univ. Cluj-Napoca)	<i>Influence of deep excavations on the foundations of buildings on slopes. Case study - Olimpiu Mureșan, Vasile Chiorean &amp; Augustin Popa (UTCN) (RO)</i>
12:05-12:13	Dr. eng. Dan Carastoian (PROEXROM SRL)	<i>Stabilisation solutions for a sliding slope in Galați - Dan Carastoian &amp; Adrian Ilieși (PROEXROM SRL), Oana Colț &amp; Nicolae Boțu (TU Iași) (RO)</i>
12:13-12:28	Prof. Marin Marin (TERRAMIX)	<i>Presentation sponsor GOLD PLUS : Improvement of ground structure by Implus Compaction technology (RO)</i>
12 :28-12 :35	Q&A session	
12 :35-12 :50	Coffee break / Exhibition visit	

12 :50-12 :58	Eng. Octavian Bujor (Technical Univ. Cluj-Napoca)	<i>Energy-pile foundations. Case study - Octavian Bujor, Iulia Prodan &amp; Augustin Popa (UTCN), Horia Ban (Termoline SRL) (RO)</i>
12:58-13:06	Prof. Loretta Batali (Technical Univ. of Civil Engineering Bucharest)	<i>Study for consolidating an unstable site for a waste landfill – Loretta Batali &amp; Horațiu Popa (UTCB) (RO)</i>
13 :06-13 :14	Dr. eng. Alisa Găină (Saidel Eng.)	<i>Determination of dynamic characteristics of Bahlui clay by means of small – medium strain laboratory tests – Alisa Găină (Saidel Eng.), Anghel Stanciu (TU Iași) (RO)</i>
13 :14-13 :22	Assoc. prof. Florin Pavel (Technical Univ. of Civil Engineering Bucharest)	<i>Site-specific seismic hazard analysis for cities in Romania - Florin Pavel, Radu Văcăreanu &amp; Cristian Arion (UTCB) (RO)</i>
13 :22-13 :30	Q&A session	
13 :30-14 :00	Lunch break / Exhibition visit	
<b>14 :00-16 :00</b>	<b>WORKSHOP : NUMERICAL MODELING IN GEOTECHNICAL ENGINEERING</b> <b>Chaipersons:</b> <b>Assoc. prof. Nicoleta Ilieș (Technical Univ. Cluj-Napoca)</b> <b>Assist. prof. Daniel Manoli (Technical Univ. of Civil Engineering Bucharest)</b>	
14 :00-14 :05	Assoc. prof. Nicoleta Ilieș (Technical Univ. Cluj-Napoca)	<i>Introduction (RO)</i>
14 :05-14 :35	Prof. Cosmin Chiorean (Technical Univ. Cluj-Napoca)	<i>Numerical modelling in Geotechnical Engineering – Practical aspects (RO)</i>
14:35-14:50	Eng. Adrian Ghencea (ALLBIM Net)	<i>Presentation Partner: Dikes and seepage curves modelling. Working demo with GEO5 (RO)</i>
14 :50-15 :05	Roxana Sărmășan (GEOSTRU)	<i>Presentation Sponsor GOLD PLUS : Software și services for Geotechnics</i>
15 :05-15 :15	Assist. Vasile-Florin Chiorean (Technical Univ. Cluj-Napoca)	<i>Simulation of material discontinuity using interface elements in slope stability analysis – Vasile-Florin Chiorean, Olimpiu Mureșan &amp; Augustin Popa (UTCN) (RO)</i>
15 :15-15 :25	Eng. Alexandra Ene (Popp & Asoc. Inginerie Geotehnică)	<i>Examples of application of material partial factors for numerical modelling of retaining structures – Ionela Ionescu, Despina Dorneanu, Alexandra Ene &amp; Dragoș Marcu (PAIG), Horațiu Popa (UTCB) (RO)</i>
15 :25-15 :35	Assist. prof. Adrian Priceputu (Technical Univ. of Civil Engineering Bucharest)	<i>A new effective discretization approach of a complex drillings pattern from Romania – Adrian Priceputu (UTCB), Constantin Ungureanu &amp; Ion Pencea (Univ. București) (RO)</i>
15:35-15:45	Dr. eng. Cătălin Căpraru (VCE Vienna Consulting Engineers ZT)	<i>Assessment of ground borne noise and vibration through numerical modelling (RO)</i>
15:45-16:00	Q&A and discussion session	
<b>16:00-16:15</b>	<b>CLOSING</b>	
16:15-16:30	Coffee break / Exhibition visit	
<b>16 :30-18 :30</b>	<b>GENERAL ASSEMBLY SRGF</b>	