



## Building Engineering Forum

### International Conference on Earthquake Engineering

20-21 October 2021, Sofia, Bulgaria

Online

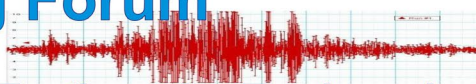
under the auspices

of Ministry of Regional Development and Public Works of Bulgaria

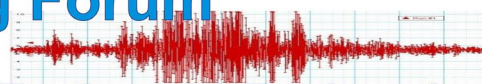
The motto is: *Turning seismic hazard awareness into risk mitigation.*  
*Seismic risk reduction through integrated design*

## PROGRAM

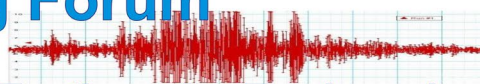
20.10.2021 Wednesday 09.00	<b>Opening online session</b>
09.15 – 9.30	<i>Welcome Greeting Message by Violeta Komitova, Minister of Regional Development and Public Works of the Republic of Bulgaria</i>
<b>PANEL 1</b> 20.10.2021 Wednesday	<b>Seismic risk reduction through proper design with Eurocode 8. Expected regulatory changes.</b> <i>Chairman: Assoc. Prof. Dr. Eng. Tzvetan Georgiev, UASEG</i>
9.30-9.50	<b>Evolution of EUROCOD 8. Expected changes in EN 1998-1-2 according to reinforced structures with ductile level DC</b> <b>Professor Ph.D. Eng. Vassil Kardjiev</b> University of Architecture, Civil Engineering and Geodesy, Sofia
9.50-10.10	<b>EUROCOD 8 evolution – seismic action</b> <b>Assoc. Prof. Ph.D. Eng. Mihaela Kouteva-Guentcheva</b> <b>Assoc. Prof. Ph.D. Eng. Tsvetan Georgiev</b> University of Architecture, Civil Engineering and Geodesy, Sofia, NEEC



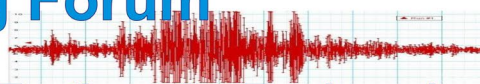
10.10-10.30	<p><b>Direction for the evolution of EUROCODE 8. Expected changes in EN 1998-1-2 related to steel structures</b>  <b>Assoc. Prof. Dr. Eng. Tzvetan Georgiev</b>            University of Architecture, Civil Engineering and Geodesy, Sofia - NEEC</p>
10.30-10.50	<p><b>The role of the Chamber – challenges in eliminate the consequences of two devastating earthquakes in Croatia</b>  <b>Eng. Nina Dražin Lovrec</b>            President of Chamber of Civil Engineers, Croatia</p>
10.50-11.10	<p><b>Building damage caused by devastating earthquakes in Croatia in 2020 with reference to Eurocodes limit states</b>  <b>Assoc. Prof. Ph.D. Eng. Mario Uroš</b>            Chair for Statics, Dynamics and Stability of Structures Faculty of Civil Engineering, University of Zagreb, Croatia</p>
11.10-11.30	<p><b>Damage assessments after the 2020 earthquakes in Croatia as a gathering point for engineers</b>  <b>Associate Professor Eng. Josip Atalić</b>            Department of Engineering Mechanics of Faculty of Civil Engineering University of Zagreb</p>
11.30-11.50	<p><b>Influence of earthquakes in geotechnics</b>  <b>Dipl.-Ing. Andreas M. Brandner, MSc</b>            Federal Chamber of Architects and Chartered Engineering Consultants, Austria</p>
11.50-12.10	<p><b>Guidelines for the seismic assessment and retrofitting of existing bridges in Greece</b>  <b>Ioannis N. Psycharis Ph.D</b>            Professor Emeritus N.T.U.A.            Vice President of E.P.P.O. Coordinator of the Committee for the Seismic Assessment and Retrofitting of existing bridges</p>
12.10-12.30	<p><b>Seismic behavior of plan irregular structures</b>  <b>Koce Todorov, Associate Professor</b>            Chair of Mechanics and Materials Faculty of Civil Engineering, Ss. Cyril and Methodius University in Skopje</p>
12.30-12.50	<p><b>The resource of experimental seismic engineering and its application to large panel residential buildings</b>  <b>Eng. Ognyan Ganchev, Assoc. Prof. Dr. Eng. Tzvetan Georgiev,</b>  <b>Prof. Dr. Eng. Petar Pavlov, Dr. Eng. Radoslav Orlinov</b>            University of Architecture, Civil Engineering and Geodesy, Sofia, NEEC</p>
12.50-13.30	Q&A



<b>PANEL 2</b> 20.10.2021 Wednesday	<b>Integrated techniques for the seismic strengthening and energy efficiency of existing buildings</b> <i>Chairman: Eng. Aris Chatzidakis, ECCE President</i>
14.30-14.50	<b>The challenge of the integrated seismic strengthening and energy upgrading of existing buildings</b> <b>Dr. Paolo Negro</b> Research officer at the European Commission, Joint Research Centre (JRC) Project leader at the European Laboratory for Structural Assessment (ELSA) JRC, Italy
14.50-15.10	<b>Innovative seismic and energy retrofitting of the existing building stock (iRESIST+)</b> <b>Dr. Dionysios Bournas</b> European Commission, Joint Research Centre (JRC), Italy
15.10-15.30	<b>Influence of RC walls on the energy efficiency of buildings</b> <b>Prof. Dr. Eng. Meri Cvetkovska</b> University Ss. Cyril and Methodius (UKIM) in Skopje Head of the Department of Civil Engineers in the Chamber of certified architects and certified engineers of R. N. Macedonia
15.30-15.50	<b>The need for assessment and seismic strengthening of existing buildings in parallel with energy efficiency improvements – a case study from Cyprus.</b> <b>Eur. Ing. Platonas Stylianou, MSc, CEng,</b> European Council of Civil Engineers (ECCE)
15.50-16.10	<b>Pre-earthquake vulnerability assessment of buildings of public use in Greece</b> <b>Katerina Tarnava -MSc Civil Engineer</b> <b>Dionyssia Panagiotopoulou – MSc Civil Engineer</b> Earthquake Planning and Protection Organization (EPPO)
16.10-16.50	Q&A



<p><b>PANEL 3</b> 21.10.2021 Thursday</p>	<p><b>Anti-seismic design in strengthening, reconstruction and renovation of buildings declared as cultural built heritage / immovable cultural values</b> <i>Chairman: Prof. Dr. Marina Traykova, UASEG</i></p>
<p>9.30-9.50</p>	<p><b>Monuments and structural safety. The lonely way of structural engineer.</b> <b>Eng. Aris Chatzidakis, ECCE President</b> European Council of Civil Engineers (ECCE)</p>
<p>9.50-10.10</p>	<p><b>Structural interventions on historic buildings - why, how and when</b> <b>Prof. Dr. Marina Traykova</b> University of Architecture, Civil Engineering and Geodesy, Sofia</p>
<p>10.10-10.30</p>	<p><b>Anti-seismic design in strengthening and reconstruction of cultural heritage buildings - Case study in Sintra, Portugal</b> <b>Prof. Dr. Rita Bento</b> Department of Civil Engineering, Architecture and Georesources of Instituto Superior Técnico, University of Lisbon, Portugal</p>
<p>10.30-10.50</p>	<p><b>IZIIS' integrated approach in seismic retrofitting of structures, historic buildings and monuments</b> <b>Prof. Dr. Veronika Shendova</b> University Ss. Cyril and Methodius (UKIM) in Skopje Institute of Earthquake Engineering and Engineering Seismology (IZIIS), Skopje</p>
<p>10.50-11.10</p>	<p><b>Limiting the environment impact during restoration of the individual structural elements, and ensuring the seismic safety of the load-bearing structural elements of Alexander Nevsky Cathedral</b> <b>Prof. Dr. Eng. Ivan Markov</b> <b>Prof. Dr. Eng. Bogomil Petrov</b> University of Architecture, Civil Engineering and Geodesy, Sofia</p>
<p>11.10-11.30</p>	<p><b>Dynamic Identification of Historic Masonry Structures by Operational Modal Analysis</b> <b>Eng. Dilek Okuyucu, PhD</b> Erzurum Technical University, Turkey</p>
<p>11.30-11.50</p>	<p><b>Vulnerability Assessment of a Historical City Center- The Case of Nafplio</b> <b>Dr. Linda-Evangelia Pelli, MSc Civ.Eng, Phd</b> Head of Earthquake Planning and Protection Organization (EPPO)-Greece Deputy Director of European Center on Preventing &amp; Forecasting of Earthquakes (ECPFE)</p>
<p>11.50-12.10</p>	<p><b>Conservation, restoration and exposure of archaeological structures in late antique fortress "Shishmanovo Kale". VI th century CATHEDRAL CHURCH</b> <b>Ivan Geshanov, MSc.Str.Eng, Phd</b> Charman of Civil Engineering Section, KIIP Sofia-city Chamber of Engineers in the Investment design, regional branch Sofia-city</p>





12.10-12.30	<p><b>“The character of the ruin should be preserved”. Application of contemporary antiseismic approaches to the anastylosis of ancient monumental dry stone constructions</b></p> <p><b>Dr. Eleni-Eva Toumbakari, Civ.Eng., Msc, Phd</b> Ministry of Culture, Greece</p>
12.30-12.50	<p><b>Renovation of public cultural heritage buildings after the Zagreb earthquake in 2020. – design, regulations and examples. PART 1</b></p> <p><b>mr.sc. Dragan Kovač, dipl.ing.grad. / M.Sc.C.E,</b> Croatian Chamber of Civil Engineers</p>
12.50-13.10	<p><b>Renovation of public cultural heritage buildings after the Zagreb earthquake in 2020. – design, regulations and examples. PART 2</b></p> <p><b>Krešimir Tarnik, dipl.ing.grad. / M.C.E</b> Croatian Chamber of Civil Engineers</p>
13.10-13.50	<p><b>Q&amp;A</b></p>
<p><b>PANEL</b> Discussion 21.10.2021 Thursday  15.00-16.30</p>	<p><b>Legislative frameworks for application of integrated techniques in reconstruction and renovation of the building stock and of the buildings declared as cultural built heritage / immovable cultural values</b></p> <p><b><i>Moderator: CEng. Dimitar Natchev, ECCE Vice-President</i></b></p>
	<p><b>Closure</b></p>

