
PROGRAMME OF THE RE-BUILT MULTIPLIER EVENT IN THE FORM OF THE KNOW-RE-BUILT INTERNATIONAL CONFERENCE DECEMBER 15-16, 2021 **ONLINE**

Day 1: December 15th, 2021

11:00 - 11:15 Technical check of participants' MS Teams connections

11:15 - 11:30 Welcome speech by Prof. Dorina-Nicolina ISOPESCU, Ph.D. - Dean of the Faculty of Civil Engineering and Building Services, TUIASI, Romania

Brief presentation of the RE-BUILT Project by Assoc. Prof. Ancuța ROTARU - RE-BUILT Project Manager, TUIASI, Romania

Chairpersons:

11:30 - 13:15

PANEL 1

Prof. Maura IMBIMBO (University of Cassino and Southern Lazio, Italy),
Dr. Ionuț-Ovidiu TOMA ("Gheorghe Asachi" Technical University of Iași, Romania)
Dr. Vera GLISNIKOVA (Brno University of Technology, Czech Republic)

TOPIC 1: Vulnerability, seismic survey and HBIM-based structural analysis

Time slot	Title / Authors	Presenting author / Affiliation
11:30 - 11:45	Seismic capacity assessment and rehabilitation of railway masonry arch bridges <i>Andrea Caporale</i>	Andrea CAPORALE <i>University of Cassino and Southern Lazio, Italy</i>

11:45 - 12:00	The current worrying situation of technical expertise and rehabilitation of existing buildings in Romania <i>Vitalie Florea, Fideliu Păuleț-Crăiniceanu, Septimiu - George Luca, Cristian Pastia, Octavian - Victor Roșca</i>	Vitalie FLOREA <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
12:00 - 12:15	Mitigate seismic liquefaction with nanosilica grout injection: engineering principle and sustainability assessment at the urban scale <i>Luca Paoella, Erminio Salvatore, Giuseppe Modoni</i>	Luca PAOLELLA <i>University of Cassino and Southern Lazio, Italy</i>
12:15 - 12:30	Masonry Structures FE Simulations for Technical Assessment According to Romanian Design Codes <i>Vasile-Mircea Venghiac, Cerasela-Panseluța Neagu</i>	Vasile-Mircea VENGHIAÇ <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
12:30 - 12:45	Influence of the "aggregate effect" on the seismic vulnerability of Italian historical centers <i>Valentina Cima, Chiara Bartolomeo, Ernesto Grande, Maura Imbimbo</i>	Valentina CIMA <i>University of Cassino and Southern Lazio, Italy</i>
12:45 - 13:00	Case study on shear walls placement in the rehabilitation of a multistorey residential building <i>Ioana Olteanu-Donțov, Andrei-Samuel Iacoviță</i>	Andrei-Samuel IACOVIȚĂ <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
13:00 - 13:15	Advanced finite element analysis to investigate the soil-structure interaction of the new railway station Stuttgart 21 <i>Roberto Cudmani</i>	Roberto CUDMANI <i>Technical University of Munich, Germany</i>

13:15 - 15:00 Lunch Break

Chairpersons:

15:00 - 18:30 **PANEL 2**

Prof. Dashnor HOXHA (University of Orleans, France),

Prof. Wynand STEYN (University of Pretoria, South Africa)

Dr Ioana OLTEANU-DONȚOV ("Gheorghe Asachi" Technical University Iași, Romania)

TOPIC 2: The Durability of Sustainable Materials and Structures

Time slot	Title / Authors	Presenting author / Affiliation
15:00 - 15:15	Numerical optimization of the mixture proportions of concentrated suspensions for sustainable concrete design <i>Sébastien Rémond, Mohamed El Karim Bouarroudj, Dashnor Hoxha</i>	Karim BOUARROUDJ <i>University of Orleans, France</i>
15:15 - 15:30	Assessment of thermal conductivity of mortar with a novel carbon based nano-material	Mihai-Sergiu ALEXA-STRATULAT

15:30 - 15:45	<i>Mihai-Sergiu Alexa-Stratulat, Daniel Covatariu, Ana-Maria Toma, Ancuța Rotaru, Gabriela Covatariu, Ionuț-Ovidiu Toma</i> Calculation of Textile Membrane Cover Tetrapod Footing for the Prehistoric Site Yunatsite <i>Nikolay Kerenchev</i>	"Gheorghe Asachi" Technical University of Iași, Romania Nikolay KERENCHEV "Todor Kableshkov" University of Transport Sofia, Bulgaria
15:45 - 16:00	Experimental tests of T joints made of thin-walled steel profiles assembled with steel rivets <i>George Țăranu, Vasile-Mircea Venghiac, Ancuța Rotaru, Ionuț-Ovidiu Toma</i>	George ȚĂRANU "Gheorghe Asachi" Technical University of Iași, Romania
16:00 - 16:15	Time-dependent behavior of Callovo-Oxfordian claystone for nuclear waste disposal: uncertainty quantification from in-situ convergence measurements <i>Duc Phi Do, Ngoc Tuyen Tran, Dashnor Hoxha, Minh Ngoc Vu, Gilles Armand</i>	Duc Phi DO University of Orleans, France
16:15 - 16:30	Modeling of sustainable composite materials for strengthening applications of masonry structures <i>Chiara Bartolomeo, Valentina Cima, Ernesto Grande, Maura Imbimbo</i>	Chiara BARTOLOMEO University of Cassino and Southern Lazio, Italy
16:30 - 16:45	Research and optimization of the vibration-insulating characteristics of the filler material in the construction of vertical partitions for the foundations of buildings and facilities <i>Chavdar Kolev</i>	Chavdar KOLEV "Todor Kableshkov" University of Transport Sofia, Bulgaria

16:45 – 17:00 Break

TOPIC 3: Geoenergy

Time slot	Title / Authors	Presenting author / Affiliation
17:00 - 17:15	A coupled distinct element modeling method for gas production on methane hydrate bearing sediments <i>Yiru Chen, Wei Wu, Mingjing Jiang</i>	Yiru CHEN BOKU Vienna, Austria
17:15 - 17:30	Geothermal Energostructures <i>Augustin Leiter</i>	Augustin LEITER Brno University of Technology, Czech Republic
17:30 - 17:45	Structural response of renewable energy storage pile foundations <i>Dichuan Zhang</i>	Dichuan ZHANG Nazarbayev University, Kazakhstan

TOPIC 4: Transformation of the built environment for the rehabilitation of socially disadvantaged city districts

Time slot	Title / Authors	Presenting author / Affiliation
17:45 - 18:00	Hydrogeology framework of Gardunha Mountain	Paulo Eduardo MAIA DE CARVALHO

18:00 - 18:15	<i>Paulo Eduardo Maia de Carvalho</i> Costa Rican social housing, 10 years' technical experience	<i>University of Beira Interior, Portugal</i>
	<i>Francisco Villalobos Ramirez</i>	Francisco VILLALOBOS RAMIREZ
18:15 - 18:30	Space tourism planning: a river beach as an example of an integrated sustainable tourism plan - the case of Ameixiosa in São Pedro do Sul – Portugal	<i>Fidelitas University, Costa Rica</i>
	<i>Cláudia Sofia São Marcos Beato</i>	Cláudia Sofia SÃO MARCOS BEATO
		<i>University of Beira Interior, Portugal</i>

Day 2: December 16th, 2021

Chairpersons:

10:00 - 13:15

PANEL 3

Dr. Anuța ROTARU ("Gheorghe Asachi" Technical University of Iași, Romania)

Dr. Andrea SEGALINI (University of Parma, Italy)

TOPIC 5: Hazard Risk Mitigation for a Sustainable Built Environment

Time slot	Title / Authors	Presenting author / Affiliation
10:00 - 10:15	Assessing the near-future behavior of a landslide: development and preliminary results of a Machine Learning algorithm <i>Andrea Segalini, Marco Conciatori, Alessandro Valletta, Andrea Carri</i>	Andrea SEGALINI <i>University of Parma, Italy</i>
10:15 - 10:30	A study regarding the human evacuation from a hotel in case of a fire drill <i>Zeno-Cosmin Grigoraș, Mihaela Ibanescu</i>	Zeno-Cosmin GRIGORAȘ <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
10:30 - 10:45	Landslide displacement prediction with machine learning techniques <i>Carlotta Guardiani, Enrico Soranzo, Birgit Jochum, David Ottowitz, Wei Wu</i>	Carlotta GUARDIANI <i>BOKU Vienna, Austria</i>
10:45 - 11:00	Sustainable operation of Belgrade landfill - assessment of the composite liner by numerical calculation <i>Jan Štefaňák</i>	Jan ŠTEFAŇÁK <i>Brno University of Technology, Czech Republic</i>
11:00 - 11:15	Transportation infrastructures exposed to seismic risk: evaluation of social costs for resilience design <i>Azzurra Evangelisti</i>	Azzurra EVANGELISTI <i>University of Cassino and Southern Lazio, Italy</i>
11:15 - 11:30	Remedial measures for a rainfall-induced creeping landslide: A case study <i>Xuan Kang, Shun Wang, Wei Wu, Guangli Xu</i>	Xuan KANG <i>BOKU Vienna, Austria</i>

11:30 - 11:45 Break

TOPIC 6: Sustainable Infrastructure Design and Maintenance

Time slot	Title / Authors	Presenting author / Affiliation
11:45 - 12:00	The use of Smart Alternative Transportation Platforms (SATP) in infrastructure evaluation and management <i>Wynand JvdM Steyn, Johannes LP Steyn</i>	Wynand JvdM STEYN <i>University of Pretoria, South Africa</i>
12:00 - 12:15	Sustainable retrofitting of urban streets for mitigation of traffic vibration by means of Anti-vibrating trenches <i>Mauro D'Apuzzo</i>	Mauro D'APUZZO <i>University of Cassino and Southern Lazio, Italy</i>
12:15 - 12:30	Influence of the Reconstruction of the Sofia Ring Road on the Travel Time of Fire and Rescue Service Vehicles <i>Teodor Berov</i>	Teodor BEROV <i>"Todor Kableshkov" University of Transport Sofia, Bulgaria</i>
12:30 - 12:45	Geostatistical analysis for mapping of soil properties <i>Alfredo Satyanaga, Sung-Woo Moon, Dichuan Zhang, Jong Kim</i>	Alfredo SATYANAGA <i>Nazarbayev University, Kazakhstan</i>
12:45 - 13:00	Semming base tunnel, Austria <i>Michael Proprenter</i>	Michael PROPRENTER <i>iC Consulanten, Austria</i>
13:00 - 13:15	Laboratory determination of cement consumption by grouting with tube a manchette on a site in town Pernik, Bulgaria <i>Mariya Ruseva, Andrey Totsev</i>	Mariya RUSEVA <i>University of Architecture, Construction and Geodesy, Bulgaria</i>

13:15 - 15:00 Lunch Break

15:00 - 17:45

PANEL 4

Chairpersons:

Prof. Wei WU (BOKU, Austria)

Prof. Chavdar KOLEV ("Todor Kableshkov" University of Transport Sofia, Bulgaria)

Dr. Kaja POGAČAR (University of Maribor, Slovenia)

TOPIC 7: Sustainable rehabilitation in architecture and urban development

Time slot	Title / Authors	Presenting author / Affiliation
15:00 - 15:15	Sustainable rehabilitation of open public spaces: The transformative potential of city streets <i>Kaja Pogačar, Andrej Žižek, Peter Šenk</i>	Kaja POGAČAR <i>University of Maribor, Slovenia</i>

15:15 - 15:30	Sustainable rehabilitation in urban environment and social sustainability: A selection of contemporary city concepts to be considered <i>Peter Šenk, Kaja Pogačar</i>	Peter ŠENK <i>University of Maribor, Slovenia</i>
15:30 - 15:45	Semantic modelling for the Heritage Building Domain: conceptualising and detailing rehabilitation interventions <i>Sara Guerra de Oliveira, Andrej Tibaut and Nenad Čuš Babič</i>	Sara GUERRA DE OLIVEIRA <i>University of Maribor, Slovenia</i>
15:45 - 16:00	Potential of underground industrial heritage spaces for urban rehabilitation: case study Maribor Tezno <i>Uroš Lobnik, Peter Šenk</i>	Uroš LOBNIK <i>University of Maribor, Slovenia</i>
16:00 - 16:15	Sustainable Rehabilitation of urban cities: a new design method for pedestrian areas <i>Giuseppe Cappelli</i>	Giuseppe CAPPELLI <i>University of Cassino and Southern Lazio, Italy</i>
16:30 - 16:45	Break	

TOPIC 8: Conservation, rehabilitation and integration of cultural heritage

Time slot	Title / Authors	Presenting author / Affiliation
16:45 - 17:00	A study on temporal health of mangrove forest to identify the pattern of degradation and subsequent management options for Indian Sundarbans using geoinformatics <i>Sweta Chatterjee, Gupinath Bhandari</i>	Sweta CHATTERJEE <i>Jadavpur University, Kolkata, India</i>
17:00 - 17:15	Current rehabilitating of a church from Romania <i>Ioana Olteanu-Donțov, Gavrilă (Ilaș-Ion) Irina</i>	Ioana OLTEANU-DONȚOV <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
17:15 - 17:30	Rehabilitation of historical buildings in Africa <i>Zakaria Owusu-Yeboah, Ioana Olteanu-Donțov</i>	Zakaria OWUSU-YEBOAH <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>
17:30 - 17:45	Criteria for a primary assessment of buildings for soft story existence: the case of Sofia Center <i>Teodor Todorov</i>	Teodor TODOROV <i>Renoviray Ltd., Bulgaria</i>
17:45 - 18:00	Sustainable rehabilitation works for a heritage building placed in Iași, Romania <i>Ioana Olteanu-Donțov, Bogdan Petru Ursu</i>	Ioana OLTEANU-DONȚOV <i>"Gheorghe Asachi" Technical University of Iași, Romania</i>

18:00 - 18:30 Discussions, closing remarks