

Organizers



Advanced Research Center for Ambient Quality
and Building Physics



Technical University of Civil Engineering Bucharest



Romanian Association for Wind Engineering



EENVIRO 2020

21 - 23 October

Bucharest

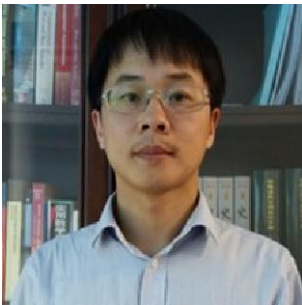
CONFERENCE PROGRAM

Keynotes Speakers



Prof. Richard de Dear
University of Sidney, Australia

Over the last 35 years, Professor **Richard de Dear** has focused his research career on defining what occupants want and need from their built environments and assessing the performance of buildings in terms of meeting those requirements. He is currently the most highly cited living researcher in the domain of thermal comfort, with over 250 peer-reviewed papers plus several monographs on the subject. Within that body of research, it is his adaptive model of thermal comfort that's had the greatest impact, not just on the research community but also on the design and operation of actual buildings. De Dear's adaptive model underpins the American Society of Heating and the Refrigerating and Air Conditioning Engineers' thermal comfort standard, ASHRAE 55-2004, 2010, 2013, which in turn, informs several national thermal comfort standards around the world.



Prof. Tengfei (Tim) Zhang
Tianjin University and Dalian University, China

Professor **Tengfei (Tim) Zhang** is vice dean of School of Environmental Science and Engineering, Tianjin University, China. He obtained the bachelor's degree from Southeast University in 2000, master's degree from Tsinghua University of China in 2003, and Ph.D. degree from Purdue University in 2007. He has been conducting built environment research for over 17 years. Dr. Zhang is the PI of the research projects/subprojects of the national Key Basic Research and Development Program, national Natural Science Foundation of China (NSFC), Chinese Ministry of Education, Boeing Commercial Airplane, COMAC, etc. Dr. Zhang has published more than 140 papers and these papers have been cited more than 1800 times (based on the Google database). His H-Index is 20 (Google) and I10-Index is 37 (Google). He was recognized as one of the national distinguished young scholars of China in 2016.



Prof. Cao Guangyu
Norwegian University of Science and Technology, Norway

Professor **Guangyu Cao** is from Norwegian University of Science and Technology. He received his PhD degree in 2009 in Helsinki University of Technology. From 2009 till 2014, he worked at VTT Technical Research Centre of Finland as senior scientist. Since October 2014, he has worked as professor at Department of Energy and Process Engineering, Norwegian University of Science and Technology. His research interests are ventilation in hospitals, indoor airflow distribution, thermal comfort, indoor air quality, built environment quality and protected zone ventilation. Since 2005, Dr. Cao has completed over 70 scientific publications regarding ventilation, airflow distribution and indoor air quality in international journals and international conferences. Currently, he is a Norwegian national representative in the European standard working group CEN TC156 WG18 Ventilation in hospitals.



Dr. Leon Wang
Associate Professor and member of the Centre for Zero Energy Building Studies, Quebec

Dr. **Leon Wang** is currently an Associate Professor and member of the Centre for Zero Energy Building Studies (CZEBS) at Concordia. He joined Concordia in August 2010 and has been the Concordia University Research Chair in Building Airflow and Thermal Management. He earned the Ph.D. degree in Mechanical Engineering from the School of Mechanical Engineering at Purdue University, West Lafayette, Indiana, the USA in 2007. He then worked as a postdoctoral research associate at the Indoor Air Quality and Ventilation Group, Building and Fire Research Laboratory (BFRL) of the National Institute of Standards and Technology (NIST) as one of the developers of the CONTAM Multizone airflow and contaminant transport simulation model. Dr. Wang is a voting member and secretary of the Indoor Environmental Modeling of ASHRAE.

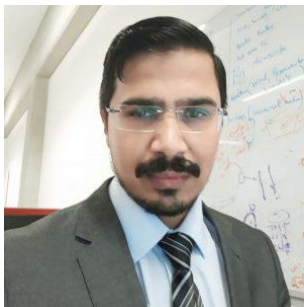


Prof. Manuel Carlos Gameiro da Silva

Faculty of Science and Technology of the University of Coimbra, Portugal

Manuel Carlos Gameiro da Silva, is full Professor at the Department of Mechanical Engineering, Faculty of Science and Technology of the University of Coimbra. Coordinator of the Energy for Sustainability Initiative of the University of Coimbra (www.uc.pt/efs). Scholar and Coordinator of the Sustainable Cities Area of the MIT-Portugal Program. Coordinator of the Sustainable Energy Thematic Line of LAETA (Associated Laboratory of Energy, Transports and Aeronautics), a R&D laboratory with more than 250 senior investigators from the Universities of, Lisbon, Porto, Coimbra and Beira Interior.

Vice-President of Rehva and Chair of the Education Committee of Rehva (www.rehva.eu). Vice-President of ADAI, a non-profitable research association connected to the Department of Mechanical Engineering of the University of Coimbra. papers, book chapters, conference papers and technical reports.



Dr. Ashish Shukla

Coventry University, England

Dr **Ashish Shukla** completed his PhD from the Indian Institute of Technology, Delhi (ITT Delhi), followed by award of prestigious FCS fellowship to work at the Swiss Federal Institute of Technology (ETH), Zurich, in the Department of Architecture. Currently he is Assistant Professor in Building Engineering Physics at Coventry University, UK. He is an accomplished building physicist and a sustainability professional with research interest in building engineering physics, energy management, energy generating building envelopes and energy storage. His vision is to design self-evolving climate responsive sustainable buildings, which can be achieved by integrated building design aiming to bring new low carbon innovation and improvement to on-site construction practice. He is also fellow member of UK Higher Education Academy.



Dr. Laura Aelenei

National Laboratory of Energy and Geology (LNEG), Portugal

Dr. **Laura Aelenei** is senior researcher and Scientific Coordinator of the Research Area Energy in Built Environment at National Laboratory of Energy and Geology (LNEG). She holds a PhD in Civil Engineering, sub-field Building Physics (heat transfer, fluid dynamics), from Technical University of Lisbon (IST-UTL). She has more than fifteen years of experience in energy efficiency and sustainable design strategies for buildings, including passive solutions and renewable energy systems integration. Her expertise relates to buildings energy performance, Net Zero Energy Buildings concept and methodology, buildings physics, buildings Energy Flexibility, Positive Energy Districts and climate-resilience of the built environment. With an active role in EU founded projects and networks as IEA, EERA, eseia, Laura is coordinator of strategic Module 2 Positive Energy Districts Laboratories (PED-Lab) in the framework of European Energy Research Alliance Joint Programme on Smart Cities (EERA JPSC) regarding implementation of the Set Plan Action 3.2 Positive Energy Districts.

WEDNESDAY 21st of October 2020

Location - Microsoft Teams

17 ⁰⁰	EENVIRO – OPENING CEREMONY
17 ⁰⁰ - 17 ¹⁰	Mihnea SANDU <i>Technical University of Civil Engineering Bucharest, Romania</i> EENVIRO President
17 ¹⁰ – 17 ²⁰	Radu-Sorin VĂCĂREANU <i>Rector of the Technical University of Civil Engineering Bucharest, Romania</i>
17 ²⁰ – 17 ³⁰	Florin BĂLTĂREȚU <i>Research ViceRector of the Technical University of Civil Engineering Bucharest, Romania</i>
17 ³⁰ - 19 ⁰⁰	KEYNOTES SPEAKERS <i>Chairperson: Ilinca NĂSTASE</i> <i>Technical University of Civil Engineering Bucharest, Romania</i>
17 ³⁰ – 18 ¹⁵	Keynote Lecture - Manuel Carlos Gameiro da SILVA <i>Faculty of Science and Technology of the University of Coimbra, Portugal</i> The transmission modes of COVID-19
18 ¹⁵ – 19 ⁰⁰	Keynote Lecture - Leon WANG <i>Associate Professor and member of the Centre for Zero Energy Building Studies (CZEBS) at Concordia, Canada, Quebec</i> Global Environmental Multiscale and Urban Microclimate Modeling of Extreme Events and Their Impacts on Buildings
19 ⁰⁰	END OF FIRST DAY

THURSDAY 22nd of October 2020

Location - Microsoft Teams

09³⁰ - 11⁰⁰	KEYNOTES SPEAKERS <i>Chairperson: Cristiana CROITORU, Florin BODE</i> <i>Technical University of Civil Engineering Bucharest, Romania</i> <i>Technical University of Cluj-Napoca, Romania</i>		
09³⁰ - 10¹⁵	Keynote Lecture - Richard de DEAR <i>University of Sidney, Australia</i> Nudging the adaptive thermal comfort model		
10¹⁵ - 11⁰⁰	Keynote Lecture – Tengfei (Tim) ZHANG <i>Tianjin University and Dalian University, China</i> COVID-19 exposure risk in lavatories of aircraft or high-speed rail during the pandemic		
11⁰⁰ - 11⁴⁵	Keynote Lecture – Guangyu CAO <i>Norwegian University of Science and Technology, Norway</i> Protected occupied zone ventilation reducing personal exposure to airborne pollutant		
11⁴⁵ - 12⁰⁰	BREAK		
12⁰⁰ - 13⁰⁰	SESSION I - Indoor Air Quality <i>Chairpersons: Ilinca NĂSTASE, Cătălin TEODOSIU</i>		
12⁰⁰ - 12¹⁰	9. Matei Răzvan Georgescu, Amina Meslem, Ilinca Năstase, Mihnea Sandu, Florin Bode	University of Rennes, France Technical University of Civil Engineering Bucharest, Romania Technical University of Cluj-Napoca, Romania	Human CO ₂ generation rates in small enclosures for different test cases
12¹⁰ - 12²⁰	20. Amaury Jamin	Royal Military Academy, United Kingdom	Overview of the existing state of the art regarding the use of CFD and thermophysiological models for the vehicular thermal comfort assessment
12²⁰ - 12³⁰	74. Tiberiu Catalina, Cătălin Lungu	Technical University of Civil Engineering Bucharest, Romania	Influence of a decentralized ventilation system on the indoor air quality of a primary school classroom
12³⁰ - 12⁴⁰	88. Valeru Friedemann Kraus, Ioana Udrea	ASC-Romania Politechnica University of Bucharest, Romania	Advanced workplace management platform for monitoring and management of indoor climate parameters
12⁴⁰ - 12⁵⁰	90. Martin Ivanov, Sergey Mijorski	Technical University of Sofia, Bulgaria SoftSim Consult Ltd.	Analyses of wall surface condensation risk, based on CFD model with conventional room radiator

12 ⁵⁰ – 13 ⁰⁰	Questions & Answers Session		
13 ⁰⁰ – 14 ⁰⁰	BREAK		
14 ⁰⁰ – 15 ⁰⁵	SESSION II - Fluid Mechanics <i>Chairperson: Corneliu BĂLAN, Razvan CALOTĂ</i>		
14 ⁰⁰ - 14 ¹⁰	2. Claudiu Pătrașcu, Francisca Neagu, Corneliu Bălan	Politehnica University of Bucharest, Romania	Impinging liquid jets on flat fluid interfaces
14 ¹⁰ – 14 ²⁰	3. Ioana Răsuceanu, Claudiu Pătrașcu, Istvan Magoș, Nicoleta Trandas, Corneliu Bălan	Politehnica University of Bucharest, Romania	Liquid-liquid capillary rise
14 ²⁰ – 14 ³⁰	5. Diana Broboană, Cristina Sorana Ionescu, Corneliu Bălan	Politehnica University of Bucharest, Romania REOROM Laboratory	The fracture of yield stress fluid jet in a viscous liquid
14 ³⁰ – 14 ⁴⁰	22. Nicoleta - Octavia Tănase, Diana Broboană, Corneliu Bălan	Politehnica University of Bucharest, Romania	Flow investigation around cylinders assembled in a confined straight channel geometry
14 ⁴⁰ – 14 ⁵⁰	23. Nicoleta - Octavia Tănase, Ștefan – Mugur Simionescu, Mădălina Maria Păduroiu, Corneliu Bălan	Politehnica University of Bucharest, Romania	Determination of the separation points for the flow around blunt bodies: experimental and numerical studies
14 ⁵⁰ – 15 ⁰⁰	100. Eugen Chiriac, Ana-Maria Bratu, Mărioara Avram, Corneliu Bălan	National Institute for R&D – IMT Bucharest, Romania Politehnica University of Bucharest, Romania	Alcohol jets investigations in a microchannel in a viscous outer medium
15 ⁰⁰ – 15 ⁰⁵	Questions & Answers Session		
15 ⁰⁵ – 16 ⁰⁰	SESSION III - Wind Energy <i>Chairperson: Andrei GEORGESCU, Costin COȘOIU</i>		
15 ⁰⁵ – 15 ¹⁵	27. Elena-Alexandra Chiulan, Anton Anton	Technical University of Civil Engineering Bucharest, Romania	The (r)evolution of wind energy systems in Romania: state-of-the-art, new trends and challenges
15 ¹⁵ – 15 ²⁵	80. Angel Terziev, Iliya Iliev, Hristo Beloev, Yancho Panteleev	Technical University of Sofia, Bulgaria Ruse University, Bulgaria	Impact assessment of terrain specifics on wind energy production over semi-complex terrains
15 ²⁵ – 15 ³⁵	47. Ioana Octavia Bucur, Ion Mălael, Dragoș Preda	Romanian Research and Development Institute for Gas Turbine - COMOTI, Romania S.C. ROLIX IMPEX SERIES S.R.L. Romania	Numerical investigation of a reduced scale Lenz wind turbine model for aerodynamic tunnel applications
15 ³⁵ – 15 ⁴⁵	37. Bianca Iustina Florea, Oana Alexandra Iagăr, Alexandru Cezar Vlăduț, Costin Ioan Cosoiu, Andrei-Mugur Georgescu, Liviu Valer Hașegan, Mircea Degeratu	Technical University of Civil Engineering Bucharest, Romania	Wind tunnel modeling of a residential ensemble in a high rise building urban area
15 ⁴⁵ – 15 ⁵⁵	38. Oana-Alexandra Iagăr, Bianca Iustina Florea, Alexandru Cezar Vlăduț, Costin Ioan Cosoiu, Ovidiu Popescu, Andrei-Mugur Georgescu	Technical University of Civil Engineering Bucharest, Romania	Response of the Boundary layer wind tunnel to small variations of the fan rotational speed
15 ⁵⁵ – 16 ⁰⁰	Questions & Answers Session		

16⁰⁰ – 16¹⁵	BREAK		
16¹⁵ – 17¹⁵	SESSION IV - Environment <i>Chairperson: George DARIE, Rodica FRUNZULICĂ</i>		
16¹⁵ – 16²⁵	16. Victorița Rădulescu	Politehnica University of Bucharest, Romania	Complex solution of interconnection the wind and solar power plants for rehabilitation an old small hydropower plant
16²⁵ – 16³⁵	84. Mădalina Barbu, George Darie	Politehnica University of Bucharest, Romania	A technical analysis and comparison of tubular and lattice wind turbine towers
16³⁵ – 16⁴⁵	52. Aida Delcea, Ioan Bițir-Istrate	Politehnica University of Bucharest, Romania	Renewable energy sources for industrial consumers - a past to present analysis of technical and financial efficiency
16⁴⁵ – 16⁵⁵	57. Adrian Ciocănea, Sanda Budea, Ștefan Simionescu, Octavian Lambescu	Politehnica University of Bucharest, Romania	Experimental research on increasing the static torque for a small Savonius rotor of helical type
16⁵⁵ – 17⁰⁵	66. Andrei Dragomirescu	Politehnica University of Bucharest, Romania	Design considerations for an Archimedean screw hydro turbine
17⁰⁵ – 17¹⁵	Questions & Answers Session		
17¹⁵ – 18⁰⁰	SESSION V – Other Topics in Built Environment <i>Chairperson: Carmen GEORGESCU, Paul DANCĂ</i>		
17¹⁵ – 17²⁵	77. Lucian George Primejdie, Andrei Valentin Achim, Diana Maria Bucur, Georgiana Duncă, Sanda-Carmen Georgescu	Politehnica University of Bucharest, Romania	Rural water distribution system with groundwater supply and water tower: Numerical modelling in EPANET 2.2
17²⁵ – 17³⁵	78. Alexandru Constantin Săvulete, Vlad Florin Pirăianu, Sanda-Carmen Georgescu, Andrei-Mugur Georgescu	Politehnica University of Bucharest, Romania Technical University of Civil Engineering Bucharest, Romania	Modelling of a drip irrigation system operation for greenhouses rose cultivation using PDD in EPANET 2.2
17³⁵ – 17⁴⁵	35. Adrian Lungu	"Dunărea de Jos" University of Galați, Romania	CFD Prediction of ship-bank interaction
17⁴⁵ – 17⁵⁵	36. Adrian Lungu	"Dunărea de Jos" University of Galați, Romania	Numerical assessment of twin-propeller performances
17⁵⁵ – 18⁰⁰	Questions & Answers Session		
18⁰⁰	END OF SECOND DAY		

FRIDAY 23rd of October 2020

Location - Microsoft Teams

09³⁰ - 10⁰⁰	EENVIRO - REGISTRATION		
10⁰⁰ - 11³⁰	KEYNOTES SPEAKERS <i>Chairperson: Mihnea SANDU</i> <i>Technical University of Civil Engineering Bucharest, Romania</i>		
10⁰⁰ - 10⁴⁵	Keynote Lecture – Laura AELENEI <i>National Laboratory of Energy and Geology (LNEG), Portugal</i> Positive Energy Districts for Urban Energy Transitions		
10⁴⁵ - 11³⁰	Keynote Lecture – Ashish SHUKLA <i>Coventry University, England</i> Sustainability – Choices or lifestyle		
11³⁰ - 11⁴⁵	BREAK		
11⁴⁵ - 13⁰⁵	SESSION VI – Environment / CIA-CLIM Project Part 1 <i>Chairperson: Viorel UNGUREANU, Nicolae ANTONESCU</i>		
11⁴⁵ - 11⁵⁵	6. Nicolae Antonescu, Dan-Paul Stănescu	Technical University of Civil Engineering Bucharest, Romania	Experimental study regarding the implications of "Eco-Design" Directive over conception and performances of small boilers
11⁵⁵ - 12⁰⁵	7. Nicolae Antonescu, Dan-Paul Stănescu	Technical University of Civil Engineering Bucharest, Romania	Carbon dioxide footprint reduction by retrofitting regional heating boilers from gaseous to biogenic fuels
12⁰⁵ - 12¹⁵	89. Dragoș Iulian Pavel, Puiu Cozma, Sorin Dimitriu, Alexandru Chisacof, Carmen-Anca Safta	Police Academy, Firefighter Faculty, Bucharest, Romania Politehnica University of Bucharest, Romania	Mixture between fire and mist jets characteristics for flame extinguish
12¹⁵ - 12²⁵	70. Daniel Vasile Banyai, Dan Opruta, Ioan-Lucian Marcu, Cristian Gabriel Merca	Technical University of Cluj-Napoca, Romania	Thermal energy storage system applicable to vehicles
12²⁵ - 12³⁵	72. Viorel Ungureanu, Adrian Ciutină, Nicolae Muntean, Daniel Muntean, Raluca Legian, Dan Vitan	Politehnica University of Bucharest, Romania	Energetic efficiency of modern steel-intensive buildings using recycled-PET thermal wadding
12³⁵ - 12⁴⁵	51. Valentin Nicolae Cococi, Carmen-Anca Safta, Constantin Călinoiu	Politehnica University of Bucharest, Romania	Parameter tuning process for a closed-loop pneumatic actuator
12⁴⁵ - 12⁵⁵	56. Sanda Budea, Carmen Safta	Politehnica University of Bucharest, Romania	Review on modern photovoltaic panels – technologies and performances
12⁵⁵ - 13⁰⁵	Questions & Answers Session		

13⁰⁵ – 14⁰⁰	BREAK		
14⁰⁰ – 15¹⁵	SESSION VII – Other Topics in Built Environment / CIA-CLIM Project Part 2 <i>Chairperson: Cristiana CROITORU, Florin BODE</i>		
14⁰⁰ – 14⁰³	10. Cătălin Sima, Cătălin Teodosiu, Cristiana Croitoru, Florin Bode	Technical University of Civil Engineering Bucharest, Romania Technical University of Cluj-Napoca, Romania	Experimental study of heat transfer inside a real scale innovative air solar collector
14⁰³ – 14⁰⁶	11. Cătălin Teodosiu, Cătălin Sima, Cristiana Croitoru, Florin Bode	Technical University of Civil Engineering Bucharest, Romania Technical University of Cluj-Napoca, Romania	Analysis of velocity and temperature fields inside an air solar collector – A numerical approach
14⁰⁶ – 14⁰⁹	105. Paul Alexandru Danca, Corina Alice Babutanu, Florentina Bunea and Adrian Nedelcu	INCDIE ICPE-CA, Romania	Mixing Flow Characteristics in cylindrical tank
14⁰⁹ – 14¹²	21. Dan Burlacu, Andrei-Mugur Georgescu, Ștefan-Nicolae Trache	Technical University of Civil Engineering Bucharest, Romania "Alexandru Ioan Cuza" Police Academy Bucharest, Romania	Small scale measurement of artificial smoke optical properties
14¹² – 14¹⁵	34. Laurențiu Tăcutu, Nicolae Antonescu	Technical University of Civil Engineering Bucharest, Romania	An alternative solution for insulating a burning chamber with high temperature walls
14¹⁵ – 14¹⁸	43. Valeriu Sebastian Hudișteanu, Vasilică Ciocan, Marina Verdeș, Cătălin George Popovici, Nelu-Cristian Cherecheș, Florin-Emilian Țurcanu, Marius Costel Bălan	"Gheorghe Asachi" Technical University of Iași, Romania	Analysis of an innovative water-cooling solution for photovoltaic-thermal systems
14¹⁸ – 14²¹	83. Mihail-Bogdan Carutasiu, Alin Ionescu, Constantin Ionescu, Horia Necula	Politehnica University of Bucharest, Romania	Forecasting solar radiation using a deep long short-term memory artificial neural network
14²¹ – 14²⁴	92. Ion Cernica, Mircea Bologa, Igor Kozhevnikov, Oleg Motorin, Tudor Cuciu	Institute of Applied Physics, Chișinău, Moldova	Heat transfer at boiling of hexane in an electrohydrodynamic flow
14²⁴ – 14²⁷	95. Pablo Garrido-Pérez, Manuel Botejara-Antúnez, Gonzalo Sánchez-Barroso, Jaime González-Domínguez, Justo Garcia Sanz-Calcedo	University of Extremadura, Extremadura	Overview of resilience: a concept to assess healthcare infrastructure preparedness against disasters. Evaluation of existing models and applicability to HVAC system
14²⁷ – 14³⁰	96. Manuel Botejara-Antúnez, Pablo Garrido-Pérez, Jaime González-Domínguez, Gonzalo Sánchez-Barroso and Justo Garcia Sanz-Calcedo	University of Extremadura, Extremadura	Life Cycle Assessment (LCA) in the construction of healthcare buildings. Analysis of environmental impact
14³⁰ – 14³³	101. Marius Bălan, Marina Verdeș, Vasilică Ciocan, Cătălin George Popovici, Sebastian Valeriu Hudișteanu, Emilian Florin Turcanu	"Gheorghe Asachi" Technical University of Iași, Romania	Study regarding the implementation of renewable energy in administrative buildings
14³³ – 14³⁶	102. Ancuța Maria Măgurean	Technical University of Cluj-Napoca, Romania	NZEB into the existing building fund as an affordable solution
14³⁶ – 14³⁹	104. Charles Berville, Abraham Tetang Fokone, Catalin-Ionut Sima, Cristiana Verona Croitoru	Technical University of Civil Engineering Bucharest, Romania	Mesh independency study for an unglazed transpired solar collector

		University of Ngaoundere, Cameroon	
14 ³⁹ – 14 ⁴²	31. Carmen Elena Stoenoiu, Mugur Ciprian Bălan, Ciprian Cristea, Florica Mioara Șerban	Technical University of Cluj-Napoca, Romania	Evolution of renewable energy consumption in the EU
14 ⁴² – 14 ⁴⁵	32. Carmen Elena Stoenoiu, Iulian Birou, Ciprian Cristea, Florica Mioara Șerban	Technical University of Cluj-Napoca, Romania	Renewable energy in European countries, retrospective analysis
14 ⁴⁵ – 14 ⁴⁸	73. Tiberiu Catalina, Ștefan Alexandru Ghiță, Cătălin Lungu	Technical University of Civil Engineering Bucharest, Romania EY Parthenon, Melbourne, Australia	Health assessment and indoor environmental quality in multiple Romanian rural schools
14 ⁴⁸ – 14 ⁵¹	98. Eleonora Darie, R. Pecs, M Culcea	Technical University of Civil Engineering Bucharest, Romania	Speed control of the direct current servomotor and the stepper motor with Arduino UNO Platform
14 ⁵¹ – 14 ⁵⁴	103. Diana Tutică, Mihai Rareș Sandu, Roxana Pătrașcu, Constantin Ionescu	Politehnica University of Bucharest, Romania	Identification of Key Performance Indicators related to the implementation of a hybrid energy supply system based on renewable energy sources
14 ⁵⁴ – 15 ¹⁵	Questions & Answers Session		
14 ⁰⁰ – 15 ¹⁵	SESSION VIII – Other Topics in Built Environment <i>Chairperson: Ilinca NĂSTASE, Mihnea SANDU</i>		
14 ⁰⁰ – 14 ⁰³	18. Ion Popa, Ionuț Daniel Ungureanu, Sorin Perju, Florian Marian Martan	Technical University of Civil Engineering Bucharest, Romania	Behaviour simulation of a main pipe depending on its execution material, in a non-steady flowing state (water hammer)
14 ⁰³ – 14 ⁰⁶	46. Daniela Elena Gogoșe Nistoran, Ioana Opris, Cristina Sorana Ionescu, Ionela Enache	Politehnica University of Bucharest, Romania	Extreme heatwave scenarios with impact on thermal regime of Dâmbovița River in Bucharest, Romania
14 ⁰⁶ – 14 ⁰⁹	81. Rositsa Velichkova, Radostina Angelova, Iskra Simova	Technical University of Sofia, Bulgaria	Integrated system for wave energy harvesting
14 ⁰⁹ – 14 ¹²	108. Amjed M.S. Albaiyati	Technical University of Civil Engineering Bucharest, Romania	Improving the efficiency of energy recovery from wastewater by using a double heat exchanger to protect the environment
14 ¹² – 14 ¹⁵	93. Anca Hotupan, Adriana Hadarean	Technical University of Cluj-Napoca, Romania	Experimental study of water losses through a circular leakage hole in PVC pipes
14 ¹⁵ – 14 ¹⁸	91. Sorina Constantinescu	Technical University of Civil Engineering Bucharest, Romania	Study on the behavior of a high reinforced concrete building with different kinds of partitioning masonry walls
14 ¹⁸ – 14 ²¹	106. Adrian Nedelcu, Florentina Bunea, Paul Alexandru Danca, Rares Andrei Chihaiia, Marin Dorian, Corina Alice Babutanu, and Gabriel Dan Ciocan	INCDIE ICPE-Ca, Romania Laval University, Québec, Canada	Experimental research on a hydrokinetic turbine model
14 ²¹ – 14 ²⁴	39. Alexandru Matei, Gabriel Racovițeanu	Technical University of Civil Engineering Bucharest, Romania	Review of the technologies for nitrates removal from water intended for human consumption
14 ²⁴ – 14 ²⁷	12. Florin Bode, Mihnea Sandu, Ilinca Năstase, Răzvan Calotă	Technical University of Cluj-Napoca, Romania	Optimization of a ventilating system to ensure good indoor air quality and

		Technical University of Civil Engineering Bucharest, Romania	smoke exhaust during fire inside an underground parking
14 ²⁷ – 14 ³⁰	40. Florin-Emilian Țurcanu, Marina Verdeș, Cătălin-George Popovici, Vasiliică Ciocan, Nelu-Cristian Cherecheș, Valeriu-Sebastian Hudișteanu	“Gheorghe Asachi” Technical University of Iași, Romania “Grigore T. Popa” University of Medicine and Pharmacy, Romania	Dispersion of infectious aerosols through different mechanical system in a cardiac intensive care unit
14 ³⁰ – 14 ³³	48. Adrian Andrei Stănescu, Octavian Lalu, Oana Luca, Florian Gaman	Technical University of Civil Engineering Bucharest, Romania 2BRE Global Ltd, Bucknalls Lane, Garston, Watford, Herts	Performance of autoclaved aerated concrete (AAC) exposed to standard fire
14 ³³ – 14 ³⁶	50. Gheorghe Radu, Gabriel Racovițeanu	Technical University of Civil Engineering Bucharest, Romania	Removing ammonium from water intended for human consumption. A review of existing technologies
14 ³⁶ – 14 ³⁹	97. Corina Boncescu, Lăcrămioara Diana Robescu, Dana Andreyă Bondrea, Magdalena Elena Măcinic	Politehnica University of Bucharest, Romania	Study of energy consumption in a wastewater treatment plant using logistic regression
14 ³⁹ – 14 ⁴²	14. Andrei Forton, Adrian Ciutină, Paul Marc	University Politehnica Timisoara, Romania University of Lyon, ENTPE, France	Environmental impact of bituminous mixtures produced with reclaimed asphalt pavement and rejuvenator
14 ⁴² – 14 ⁴⁵	29. Ioana Teodorescu, Ruxandra Erbașu, Jorge Branco, Daniela Tapuși	Technical University of Civil Engineering Bucharest University of Minho	Study on the changes in the moisture content of wood
14 ⁴⁵ – 14 ⁴⁸	71. Adrian Ciutină, Monica Mirea, Alexandra Boldurean, Viorel Ungureanu, Raul Morovan, Raluca Legian	University Politehnica Timișoara, Romania	Behavior of wedge foundations under axial compression
14 ⁴⁸ – 14 ⁵¹	85. Florin Nicolescu, Dan Niculae Robescu	University Maritimă, Constanța, Romania Politehnica University of Bucharest, Romania	Fault analysis for wastewater treatment plant equipment using thermography
14 ⁵¹ – 14 ⁴⁵	87. Marian Dordescu, Florin Nicolescu	University Maritimă, Constanța, Romania	Modeling the active sludge treatment process in recirculation basins using the Simulink environment
14 ⁵¹ – 15 ¹⁵	Questions & Answers Session		
15 ¹⁵	EENVIRO CLOSING CEREMONY		