

ICCMSE 2020 Conference

29 April 2020 – 3 May 2020

Virtual Presentations Program

30/4/2020

Zoom Virtual Room 1		
	Session: 4th Symposium on Computational Simulation and Experimental Analysis of Hygrothermal Phenomena in Building Envelopes	
	Chair: Jan Kočí	
HOUR	Paper Title	Authors
09.00-09.15	Computational Analysis of Energy Performance of Advanced Moisture Responsive Plasters	Jan Kočí and Robert Černý
09.15-09.30	Indoor Air Temperature Modelling: Thermal Retrofitting of Historical Building	Jan Kočí , Laura Ré Luisotto and Jiří Maděra
09.30-09.45	Interior Thermal Insulation Materials on Natural Basis: Evaluation of Heat Losses Reduction	Václav Kočí , Jan Kočí and Jiří Maděra
09.45-10.00	Composite material based on rape straw and environmentally friendly adhesive	Miloš Jerman , Jaroslav Dušek, Martin Böhm and Robert Černý
10.00-10.15	Microscopic analysis of composite boards made from rapeseed straw particles	Martin Böhm , Miloš Jerman, Jaroslav Dušek, Zuzana Hlaváčová, Robert Černý
10.15-10.30	Physical and Mathematical Models of Heat and Moisture Transport in a Tunnel Dryer	Jiří Maděra and Václav Kočí
10.30-10.45	The time lag in surface diffusion evaluated for the BET and BSB isotherms	Igor Medved' and Robert Černý
10.45-11.00	Frequency Equations for the Flexural Vibration of Samples with a Uniform Cross-Section	Anton Trník , Igor Štubňa and Libor Vozár
11.00-11.15	Comparison of Water Removal Methods from Cement Paste at Early Age	Lenka Scheinherrová , Vojtěch Pommer, Eva Vejmelková, Robert Černý
11.15-11.30	Influence of Aluminosilicate Fibers on Mechanical Properties of Composite Based on Portland Cement Exposed to High Temperatures	Magdaléna Doleželová , Dana Koňáková and Eva Vejmelková

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ZOOM Virtual Room 2		
Session: Allometry and correlations in medicine, biophysics and ecology		
Chair: Prof. Atanas Atanasov		
HOUR	Paper Title	Authors
09.30-10.00	Dose Distribution Prediction of Gamma Using Random Forest Regression-Retrospective Study.	S. Bozhikov, Ph. Vassileva, K. Mitarova, D. Aleksandrova, T. Hristova, K. Petrova, B. Tacheva, B. Parvaanova and <u>Miroslav Karabaliev</u> .
10.00-10.30	Principal Component Analysis of Hemoglonin Redox Reaction In Spectroelectrochemical Cell.	<u>Miroslav Karabaliev</u> , B. Tacheva, R. Georgieva, B. Paarvanova, R. Ginin and S. Atanasova.
10.30-11.00	Numerical Determination of Absorption Spectrum Peak Wavelengths.	M. Karabaliev, B. Paarvanova, S. Bozhikov, R. Ginin, S. Atanasova and <u>Bilyana Tacheva</u> .
11.00-11.30	Impact of Phenothiazine Drugs on RBC Membrane. Thermal Dielectroscopy Study.	<u>Boyana Paarvanova</u> , B. Tacheva, I.T. Ivanov.
11.30-12.00	Correlation Between the Organismal Radioresistence and Time of Appearance in Evolution.	<u>Atanas T. Atanasov</u> , Maria - Magdalena K. Ignatova.
12.0-12.30	Negative Correlation Between Lifespan of Mammalian Erythrocytes and Sodium-Potassium Ions Membrane Permeability Coefficeints.	<u>Atanas T. Atanasov</u> .
12.30-13.00	A Statistic Study of the Effectivness of Cooperatives in Bulgaria as a Successful Model of Social Enterprises.	<u>Ruslan Martinov</u> , E. Maslarova, K. Benkova.

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ZOOM Virtual Room		
	Session: Health, Exercise, Prevention and Technology	
	Chair: Peter Krska, Peter Macura	
Hour	Paper Title	Authors
13.30-13.50	PHYSICAL AND TECHNICAL READINESS COMPARISON WITH MODELS CONSTRUCTION IN FEMALE POLE VAULT	Krška P., Sedláček J.
13.50-14.10	SCREENING OF FLAT FEET IN PRESCHOOL CHILDREN AS PREVENTION OF POSTURAL DISORDERS	Šutvajová M., Bartík P., Buřáková K., Šagát P., Prieto-González P.
14.10-14.30	THE LEVEL OF STATISTICAL LITERACY IN FUTURE TEACHERS AND THE USE OF AVAILABLE TECHNOLOGY WITH THE AIM TO INCREASE IT	Almašiová A., Kohútová K., Fričová J.
14.30-14.50	HALLMARKS OF THE KINEMATIC STRUCTURE OF COMPETITIVE MOTOR ACTIVITIES IN ATHLETIC JUMPING EVENTS	Mačura P., Košťál J.
14.50-15.10	SPORT PARTICIPATION DIFFERENCES IN SELF- ESTEEM OF PEOPLE WITH PHYSICAL DISABILITIES USING ASSISTIVE TECHNOLOGY	Nemček D.
15.10-16.00	DISCUSSION	

1/5/2020

ZOOM Virtual Room 1		
	Session: MS15 Experimental and computational assessment of the nonlinear response of heterogeneous structures and multiphase systems, at different scales	
	Chair: Prof: Roberto FEDELE, Nicola CEFIS, Gabriele MILANI	
Hour	Paper Title	Authors
10:15-10:30	Presentation of the MS	
10:30-10:45	Three-dimensional analysis of masonry vaults subjected to differential settlements	Nicola Grillanda, Andrea Chiozzi, Gabriele Milani, Antonio Tralli
10:45-11:00	Adaptive NURBS based local failure analyses of retrofitted masonry aggregates	Nicola Grillanda, Marco Valente and Gabriele Milani
11:00-11:15	A Two-Step Procedure for the Numerical Analysis of Curved Masonry Structures	Jacopo Scacco, Nicola Grillanda, Marco Valente, Gabriele Milani
11:15-11:30	Numerical validation of a heterogeneous FE approach for the analysis of TRM debonding on curved masonry substrates	Jacopo Scacco, Gabriele Milani
11:30-11:45	A Novel Genetic Algorithm Homogeneous Approach for the In-Plane Analysis of Masonry Walls Subjected to Settlements	Simone Tiberti, Nicola Grillanda, Vincenzo Mallardo, Gabriele Milani
11:45-12:00	Modelling of Unreinforced Periodic Masonry Panels Tested Under Two-Way Bending Via a Non-Linear Discrete Homogenized Strategy	Satyadhrik Sharma, Luis C. Silva, Francesco Graziotti, Guido Magenes, Gabriele Milani
12:00-12:15	Mechanical characterization of hemp-lime blocks	Marco Caruso, Nicola Cefis, Giovanni Dotelli, Sergio Sabbadini
12:15-12:30	Coffee Break	
12:30-12:45	A novel implementation of surface tension and adhesion for Smoothed Particle Hydrodynamics (SPH)	Roberto Fedele
12:45-13:00	Assessment of advanced joint HfB ₂ /NiB/HfB ₂ by nanoindentation	Roberto Fedele, Dario Gastaldi, Fabrizio Valenza, Maria Luigia Muolo, Alberto Passerone
13:00-13:15	Analysis of a SiCf/SiC sample under in situ loading by synchrotron X-ray radiation	F. Hameed, R. Fedele, L. Mancini
13:15-13:30	Seismic vulnerability assessment of Longhu Pagoda, Sichuan, China	Peixuan Wang, Jacopo Scacco, Gabriele Milani, Shengcai Li
13:30-13:45	Experimental study on rubber compounds made of reactivated EPDM for fiber reinforced elastomeric isolator	Ahmad B. Habieb, Federico Milani, Gabriele Milani
13:45-14:00	Validation of a Detailed Micro-Modeling Approach for In-plane Loaded Partially-Grouted Reinforced Masonry Shear Walls	Sebastián Calderón, Gabriele Milani, Cristián Sandoval
14:00-14:15	Equivalent Stiffness of Non-symmetrical Cable Systems in Cable-Stayed Bridges	Deborah Briccola, Nicola Cefis

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ZOOM VIRTUAL ROOM 1		
Session: Plasmonics and Metamaterials		
Chair Prof. T. Gric		
Hour	Paper Title	Authors
23.00-23.20	Plasmonic enhanced upconversion	dr. Steve Smith
23.20-23.40	Absolute chiral sensing in metasurfaces with signal reversals	dr. Sotiris Droulias
23.40-00.00	Controlling surface plasmon polaritons propagating at the interface of low-dimensional acoustic metamaterials	Athanasios Ioannidis