

XIX INTERNATIONAL CONFERENCE ON BUILDING PATHOLOGY AND REHABILITATION

Sobral, 8th-10th June 2023

08/06/2023			Tecnical Section 1A - Digitalizations and documentation <i>Mediador: Profa. Kelvya Moreira, UVA</i>		
Hora	Trabalho	Autores			
13:30	Digitalization based on high-resolution scanning and HBIM tools for damage assessment of the José de Alencar house	Tallis Rubens, Gilmário Ribeiro, Renan Paulo, Maçon Bessa, Eugênio Moreira, Mylene Vieira, Esequiel Mesquita			
13:45	Update of the documentation of the José de Alencar theatre	Mylene Vieira, Gilmário Ribeiro, Karina Alves, José Ermerson Barbosa, Henrique Isidoro, Thiago Martins, Brendda Karen Magalhães, Francisco Emerson Almeida, Eugênio Moreira, Esequiel Mesquita			
14:00	Assessment of metric accuracy on data acquisition using point cloud: an application to the José de Alencar Theater	Bruna Tayna Macedo Fideles, Esequiel Mesquita, Eugênio Moreira, Mylene Melo Vieira			
14:15	Characterization of historic masonry of the 20th century: Casa Salinger, Blumenau-SC	Natália Salamoni, Gustavo Gutierrez de Oliveira Rodrigues, Abrahão Bernardo Rohden, Igor Guilherme Benevenuto, Luís Antônio da Rocha			
08/06/2023			Tecnical Section 2A - Diagnosis <i>Mediador: Profa. Mylene Vieira, UFC</i>		
Hora	Trabalho	Autores			
14:30	CLASSIFYING THE SEVERITY LEVELS OF CRACKING ANOMALY ON FAÇADES	Thália Raelly de Lima M. ROMEIRO ,Ana Luiza Rocha SOUZA , Melissa Lorraine Frazão LOPES , Matheus de Souza SILVA , Elton Bauer			
14:45	Seismic Damage Indices for the San Miguel Charo Ex-Convent in Michoacán, México	Guillermo MARTÍNEZ , José JARA , Bertha OLMOS , Adrià SÁNCHEZ			
15:00	Digital Survey Applied to the Assessment of Pathological Manifestations in the Architectural Heritage of Monte Alegre in Piracicaba/SP	Ana Laura Fragoso Favoreti , Karoline Borges , Pedro Henrique Gomes , Rafael Fernandes Dionizio , Mauro Menzori , Vitor Eduardo Molina Júnior ,Eloisa Dezen-Kempler			
15:15	Assessing the Fatigue Life of CFRP Post-Strengthened RC Elements	Leila Cristina MENEGETTI, Mônica Regina GARCEZ			
08/06/2023			Tecnical Section 2B - Diagnosis <i>Mediador: Profa. Lais Costa, UFC</i>		
Hora	Trabalho	Autores			
14:30	Evaluation of the structural degradation of a garage in a residential building using the GDE/UnB methodology - A case study	Marina Araujo MACHADO1, Darlan S. DUARTE JÚNIOR2, Priscilla V. Galdino FREITAS3, Vanessa Gomes GONÇALVES4, Vinicius Almeida COELHO5, Francisco G. Santos SILVA6			
14:45	Evaluation of Degrading Hysteresis on RC Structures Retrofitted with Energy Dissipating Systems	Jose M JARA 1, Bertha A OLMOS2, Guillermo MARTÍNEZ3			
15:00	Evaluation of the structural degradation of a garage in a residential building using the GDE/UnB methodology - A case study	Marina Araujo MACHADO1, Darlan S. DUARTE JÚNIOR2, Priscilla V. Galdino FREITAS3, Vanessa Gomes GONÇALVES4, Vinicius Almeida COELHO5, Francisco G. Santos SILVA6			
15:15	Low-cost optical interrogator system for Structural Health Monitoring	Camilo DIAZ, Israel SOUSA, Esequiel MESQUITA, Luis PEREIRA, Nélia ALBERTO, Paulo ANTUNES			
08/06/2023			Tecnical Section 2C - Diagnosis <i>Mediador: Profa. Maria Positieri, UTN</i>		
Hora	Trabalho	Autores			
14:30	Parametric modeling using BIM methodology for the process of pathology identification in buildings	José Carlos dos Santos Junior, Joab Manoel Almeida Santos, Mateus Rocha Almeida Santos			
14:45	Detection and stimulation of crack measurements in buildings using convolutional neural networks and ARUCO: a preliminary study	Alida Pires Mulato, Audeilis de Oliveira Marcelo Junior, Marcos Wesley Gonçalves de Meneses Junior, Ênio Pontes de Deus			
15:00	Diagnosis and Structural Intervention of an Old Estate Hull in the Tarimbaro County, Michoacán	Guillermo Martínez, José Jara, Bertha Olmos, Rodolfo Gaytan			
15:15	Analysis of red stains on building facades in Bahia – Brazil	Tiago Rocha, Vanessa Gonçalves, Darlan Duarte, Abraham Omoro, Marina Machado, Francisco Silva			
08/06/2023			Tecnical Section 3A - Materials <i>Mediador: Prof. Camilo Diaz, UFES</i>		
Hora	Trabalho	Autores			
15:30	Lime-based mortars with added silica fume and bioproducts for restoration and preservation of heritage buildings	Maria Teresa BARBOSA1, Camila de Rezende INNOCENCIO2, Lucca Oliveira SALZANI3, Thales da Silva PEREIRA4, Nelson Luis Gonçalves Dias de SOUZAS, Luiz Fernando Cappa de OLIVEIRA6			
15:45	Analysis of Concrete Mechanical Properties when adding Type-E Glass Fibers	Marialaura Herrera Rosas1, Nahúm Gamaliel Cayo Chileno2, Alejandra Araoz Campos3, Joaquin Humberto Aquino Rocha4			
16:00	Complex Modulus characterization of an optimized binder with SCMs: proposition of an enhanced cement formulation to improve stiffness behavior and durability of mortars and concretes	Daniel Lira Lopes TARGINO1, Ana Dulce de Castro HOLANDA2, Pablo Andrade Martinez HENRIQUEZ3, Ingrid Lourany Barreto FREITAS4, Fouad BOUKHELFI5, Yassine El MENDIL6, Lucas F.A.L. BABADOPULOS7			
16:15	Development of an Al system for characterization of fiber-reinforced polymer composite materials	Arthur GOMES1, Audeilis OLIVEIRA2, João NUNES3 and Enio DEUS4			
08/06/2023			Tecnical Section 3B - Materials <i>Mediador: Prof. Abrahão Rohden, FURB</i>		
Hora	Trabalho	Autores			
15:30	PROPERTIES OF COCONUT FIBER-REINFORCED MORTARS FOR SUSTAINABLE SOLUTIONS	Kétlin dos Santos ALBERTON 1, Carmelita Blodow do NASCIMENTO 2, Regina Brasil CAVALHEIRO3, Valeria Costa de OLIVEIRA4, Lidia Bruna Teles GONZAGAS, Rodrigo Cesar PIEROZAN6			
15:45	Study of the Morphological characteristics of Geopolymer concrete based on Eggshell and Bauxite powder	Nijagala Munilakshmi, Nijagala Munilakshmi			
16:00	INFLUENCE OF DIFFERENT BACTERIAL STRAINS ON CRACKS SELF-HEALING IN CEMENT-BASED MATRICES WITH AND WITHOUT INCORPORATED AIR	SHEILA KARINE LENZI1, EDNA POSSAN2, MICHEL RODRIGO ZAMBRANO PASSARINI3, POLYANA GHELLERE4			
16:15	Engineering Properties of Self-Compacting Concrete Incorporating Coal Bottom ash (CBA) as Sustainable Materials for Green Concrete: A Review	Mohammad I. Al Biajawi a, Rahimah Embong a,*,			
08/06/2023			Tecnical Section 3C - Materials <i>Mediador: Prof. Paulo Antunes, UA</i>		
Hora	Trabalho	Autores			
15:30	Thermal modeling and monitoring of massive concrete foundations to prevent pathological manifestations	Alexandre Conrado Maia VIDAL1, Amanda Moreira Lima MACHADO2, Lucas Feitosa de Albuquerque Lima BABADOPULOS3, Raquel MAGALHÃES4			
15:45	Numerical modeling of steel fiber reinforced concrete using cohesive elements	Thiago RODRIGUES 1, Raul DURAND2			
16:00	An electrical modeling approach for analysis of the behavior of carbon nanotubes cement-based composite	Ryan A. MATOS1, Luis Carlos NASCIMENTO FILHO1, Isabela GUILHEMI1, Vytória FREITAS1, Jerfson MOURA1 and Esequiel MESQUITA1			
16:15	Performance evaluation of calcined clays as a supplementary cementitious material	Gustavo Gutierrez Oliveira RODRIGUES, Natália SALAMONI, Abrahão Bernardo ROHDEN, Guilherme CARRARA			

08/06/2023			Tecnical Section 4A - Durability		
			Mediador: Profa. Lais Costa, UFC		
Hora	Trabalho	Autores			
16:30	Durability analysis of partial replacement of ordinary Portland cement by white glass waste concrete	Mauro José da SILVA FILHO 1, Madson Lucas DE SOUZA2, Vinícius Capistrano de Paiva VERAS3, Antônio Eduardo Bezerra CABRAL			
16:45	Theoretical model of correlation between ductility, degree of corrosion, and critical diameter of reinforcing bars under natural degradation	Thiago Alessi REICHERT1, Carlos Eduardo Tino BALESTRA2, Wagner Alessandro PANSERA3, Daniele Alves Oliveira BALESTRA4, Gustavo SAVARIS5			
17:00	Laboratory procedure for obtaining chloride profiles from concrete structures cores: a mathematical approach	Thiago Alessi REICHERT1, Carlos Eduardo Tino BALESTRA2, Daniele Alves Oliveira BALESTRA3, Ronaldo Alves de MEDEIROS-JUNIOR4			
17:15	Laboratory induction of accelerated corrosion in rebars of reinforced concrete structures	Leonardo COVATTI1, Arthur MEDEIROS2, Luiz Carlos Pinto da SILVA FILHO3, Catarina BAPTISTA-PEREIRA4, Matheus Pontes de OLIVEIRAS5			
17:30	The durability of alkali-activated mortars based on sugarcane bagasse ash with different content of Na2O	Sâmara FRANÇA1, Mariana Nunes CIRIACO1, Leila Nóbrega SOUSA1, Marcos Vinício de Moura Solar SILVA2, Paulo Henrique Ribeiro BORGES1, Augusto Cesar da Silva BEZERRA1			
09/06/2023			Tecnical Section 5A - Digitalization and documentation		
			Mediador: Profa. Monica Garcez, UFRGS		
Hora	Trabalho	Autores			
18:00	Fortresses in Portugal. Conservation and basis for new uses	Esmeralda Paupério, Antonio Arede, Xavier Romão			
18:15	Evolution of bridges' pathological manifestations for a period of six years: A case study in Rio Grande do Sul - Brazil	Helena Szortika Quadros1,a,*, Jéssica Deise Bersch1,b, Luigi Pelizzoli1,c, Marciel Monique Lazzari Klein1,d, Francisco Roger Carneiro Ribeiro1,e, Ângela Gaio Graeff1,f and Luiz Carlos Pinto da Silva Filho1,g			
18:30	Digitization of Historical Heritage: Nossa Senhora do Rosário Church, Aracati-CE	Tallis RUBENS, Gilmarírio RIBEIRO, Eugênio MOREIRA, Mylene VIEIRA, Esequiel MESQUITA			
10/06/2023			Tecnical Section 6A - Safety, Risk and Maintenance		
			Mediador: Profa. Mylene Vieira, UFC		
Hora	Trabalho	Autores			
15:30	Analysis of the Contribution of Building Rehabilitation to the Achievement of SDG 11	Thays Maria da Silva COSTA 1, Nájila Rejanne Alencar Julião CABRAL2, Adeildo Cabral da SILVA3, Fernanda Sousa Gomes MOTA4, Leandro da Silva DIÓGENES5			
15:45	METHOD OF ASSESSMENT BY INTEGRITY AND SAFETY – A Comprehensive Approach to Evaluating the Integrity and Safety of Reinforced Concrete Structures	Ana Luiza OLIVEIRA, João PANTOJA, Humberto VARUM, Sara PRADO, Rafael MORAIS			
16:00	BIM methodology applied to built heritage maintenance management	Hebert Martins Pires, Leonardo Inojo			
16:15	Simplified methodological approach for estimating the mean repair time of building portfolios directed to the development of seismic resilience policies, based on the distribution of resources	Hector AROQUIPA1, 2*, Alvaro HURTADO3, Francisco LEON4, Adriel GAMARRAS, Christiam ANGEL6, Andrés OLIVERA7, Luis A. MASSAS, Rodolfo PAZ9			
10/06/2023			Tecnical Section 7A - Proceedings		
			Mediador: Profa. Lais Costa, UFC		
Hora	Trabalho	Autores			
15:30	Analysis of cracks in family houses buildings in the city of Erechim - RS	Mariana KROGEL1, Marinês LANGOSKI2, Rodrigo Gazolla FERRARESE3			
15:45	Comparison of water absorption rates in roofing substrates treated with different surface coatings	Antonia Janaína Silva MARTINS1, Gabriela Gomes FONSECA2, Aline Rodrigues SILVA3, Lídia Bruna Teles GONZAGA4, Valeria Costa de OLIVEIRAS5, Carlos Drumond Nascimento MORAIS6, Daniela Giovanini Manuel PIREZ7, and Rodrigo Cesar PIEROZAN8			
16:00	Analysis of pathological manifestations through damage map: case study in Buildings I and K of the Polytechnic School of Pernambuco	Vinicius Francis Braga de AZEVEDO1, José Maria de MOURA JÚNIOR2, Bruna Letícia Costa SANTOS3, Wildson Wellington SILVA4, José Maria de MOURAS5 e Yeda Vieira PÓVOAS6			
16:15	Characterization of damage to Brazilian built Heritage: case study in the old electoral justice building, in Teixeira, Paraíba	J. P. M. de SOUZA1, V. da S. VIEIRA 2, L. D. de F. FERREIRA3, R. M. G. DAVI4, L. E. L. MEDEIROS5, M. C. A. LEITE6			
10/06/2023			Tecnical Section 7B - Proceedings		
			Mediador: Profa. Monica Garcez, UFRGS		
Hora	Trabalho	Autores			
15:30	Analysis of the pathological manifestations of the Casa Grande Foundation - Meemorial of the Kariri Man in Nova Olinda - Ceará	Allefy Teles SAMPAIO1, Karla TEIXEIRA2, Paulo Robson Parente LINHARES3, Jamilyly Kettyly Da Costa MAGALHÃES4, Luís ANDERSON5			
15:45	Corrosion in structural elements of the satellite unit of a reference hospital in Ceará, Brazil	Francisca Larah Vasconcelos Araújo PAZ1, Kelyva Maria de Vasconcelos MOREIRA2			
16:00	Thermal evaluation of the use of liquid nitrogen as a pre-cooling methodology for mass concrete for use in an onshore wind tower	Wanner Kelly Damasceno da SILVA1, Leonária Araújo SILVA2, Antônio Eduardo Bezerra CABRAL3, Marcelo Silva MEDEIROS JÚNIOR4, Gustavo de Medeiros PINHEIROS, Antônio Medeiros de OLIVEIRA6			
16:15	Analysis of Pathological Manifestations in the Municipal Public Market of the City of Frecheirinha – CE: Case Study	Ana Jéssica Farias da SILVA1, Pammela Conceição Pontes FEITOSA2, Ana Jéssica Farias da SILVA2, Juscelino Chaves SALES3			
16,30	Use of Thermography in the Analysis of Pathological Manifestations of Historical and Artistic Building Facades in the City of Sobral - Ceará	Ana Jéssica Farias da SILVA1, Luiz André Brasileiro FROTA2, Gerson Luiz Apoliano ALBUQUERQUE3, Juscelino Chaves SALES4			