

## Third International Conference on Construction Materials and Structures



			II.	hird International	Conference on C	onstruction Mate	rials and Structur	es			ICCMS	
TIRUPATI				or	Synergy of Mate	erials and Structur	es				Syntrey of Motoricia and Structures	
Time		Day 3, 5th July 2025										
8:00-9:00 Session-1 (09:00-10:20)		Registration Plenary Talks (7 & 8) (LHC CR 211), Prof. Ravi Sinha - Chair										
09:00-09:40	Plenary Talk (7)											
09:40-10:20	Plenary Talk (8)	Prof. Martin Mensinger, Topic: Buckling behaviour of longitudinal stiffened plates under biaxial loading - Recent research at TUM										
10:20-10:50					, and the second	High Tea  (eynote Lectures and Technical Session	15					
Session-2 (10:50-12:30)		LHC CR002	LHC CR003	LHC CR004	LHC CR005	LHC CR105	LHC CR103	LHC CR104	LHC CR201	LHC CR202	LHC CR203	
10:50-11:25	Keynote Lectures	Prof. Vasant Matsagar, Topic: Respo	nse of Structures with Biocomposites u CR001)	f Structures with Biocomposites under Multiple Loading Scenarios. (LHC CR001)		Dr. Jittin Varghese, Topic: Beyond portland cement: Alternative binders for low-carbon construction	Prof. Radhakrishna G Pillai, Topic: Corrosion and its control in concrete structures (LHC CR101)		Prof. Pradip Sarkar, Topic: Learning from failure: Forensic assessment and retrofit of a critical steel structure in a power plant (LHC CR201)			
	Themes	Theme 2: Computational mechanics , Numerical simulation	/ Theme 3: Al and Machine Learning in structural applications	Theme 2: Computational mechanics / Numerical simulation	Theme 1: Advances in characterization	Theme 1: Advances in characterization	Theme 3:Corrosion science & Durability issues	Theme 3:Corrosion science & Durability issues	Theme 3:Strengthening / Retrofitting techniques	Theme 3:Strengthening / Retrofitting techniques	Theme 3:Strengthening / Retrofitting techniques/ Structure under hazardous loading	
	Session Chair	Dr. Kondalraj, NIT Calicut	Dr. Himasree P.R, NATPAC	Dr. Arun C O, IIT Palakkad	Dr. Souradeep Gupta, IISc Bangalore	Dr. Prabha Mohandoss, NIT Trichy	Dr. Sachin Paul, MACE	Dr. Paul Shaji, MACE	Dr. Komathi Murugan, Anna University	Dr. M Nithyadharan, IIT Tirupati	Dr. Maganti Janardhan Yadav, JNTU Hyderabad	
11:25-11:38	Technical Session 5	Abstract ID: 6648 (A comparative study of modulus methods and exact solutions: Application to real-life prestressed concrete box girder bridges)	for Effective Implementation of	Abstract ID: 9699 (Comparative study of Single-story frame with software's and manual calculation using stiffness matrix method)	Impact of Triple Blending on the Mechanical and Flastic Properties of	Abstract ID: 8026 (Impact of construction demolition waste as fine aggregate replacement on the mechanical and acoustic emission characteristics of cement mortar)	Abstract ID: 1464 (Assessment of long term corrosion effects on flexural strength of footbridge beams: Experimental investigation and service life estimation)	Abstract ID: 9043 (Corrosion behaviour of galvanized steel and normal steel in relation to their length and size of the specimen)	Abstract ID: 2887 (Enhancing compressive strength of AAC masonry walls using NSM steel welded wire mesh and barbed wire)	Abstract ID: 9386 (Performance / Evaluation of Retrofitted RC Building Using Site-specific Response Spectrum and Time History Analysis)	Abstract ID: 907 (Shear behaviour of masonry panels strengthened by bamboo sticks)	
11:38-11:51		Abstract ID: 5792 (Computationally efficient analysis of laminated composites: A new higher-order zigzag theory)	Abstract ID: 5468 (Machine learning approach to predict the concrete compressive strength incorporating marble slurry and fly ash: An innovative recycling technology)	Abstract ID: 2428 (Response of Lateral Bearing Capacity of Monopile Foundation for Offshore Wind Turbine under Ground Improvement Technique)	Abstract ID: 0173 (Experimental evaluation of thermo-hydro coupled mechanisms influencing spalling behaviour of UHPC at elevated temperatures)	Abstract ID: 9927 (The durability of high-performance fibre reinforced concrete using rapid migration test)	Abstract ID: 2379 (Experimental evaluation of organic corrosion inhibitors in repair mortars for enhanced durability of reinforced concrete structures)	Abstract ID: 1435 (Repair and service life extension of grouted, post-tensioned concrete bridges)	Abstract ID: 6144 (Optimizing concrete surface preparation for enhanced fiber bonding in structural strengthening)	Abstract ID: 4619 (Effect of steel fiber and opening location on the behaviour of deep beam)	Abstract ID: 9404 (Development of Fibrous mortar for retrofitting applications using Alcofine and AR- Glass fibre)	
11:51-12:03		Abstract ID: 6501 (Static and synamic analysis of axially loaded beam-column members)	Abstract ID: 6095 (Machine learning approach to predict carbonation depth in recycled aggregate self-compacting concrete contains supplementary cementitious materials)	Abstract ID: 1458 (Investigation on the composite behaviour of steel- framed framed Glass-Façade structure)	Abstract ID: 6347 (A Review on Biochar-Concrete Composites : Production, Properties, and Sustainability)	Abstract ID: 0319 (Effect of sucrose on bio-stabilization of earth-based 3D printable geopolymer)	Abstract ID: 2423 (Assessment of lateral capacity and ductility of corroded RC structures using pushover analysis)	Abstract ID: 1752 (Seismic vulnerability assessment of a corroded G+4 reinforced concrete building using nonlinear static and dynamic analyses: A case study)	Abstract ID: 6489 (Experimental and numerical study on textile reinforced concrete for enhancing structural performance of preloaded and unloaded RC beams)		Abstract ID: 3767 (Seismic Vulnerability Assessment of a Symmetrical RC Building with Soil Amplification Effects )	
12:03-12:16		Abstract ID: 0358 (Incorporation of stress-based formulations of Poisson's and shear-extension coupling effects in the softened membrane model)	Abstract ID: 1515 (Al and Machine Learning in Concrete Strength Prediction: A Review of Modern Prediction Models)	Abstract ID: 6944 (Numerical flexural analysis of honeycomb sandwich structure under quasi-static threepoint loading)	Abstract ID: 2069 (Experimental study on bio-bricks using biocementation process)	Abstract ID: 0814 (Tensile constitutive relationship for UHPC through inverse analysis of flexural test results)	Abstract ID: 2645 (Enhancing the durability of one-part geopolymer cement: The role of superplasticizers)	Abstract ID: 5184 (Crack classification and damage evaluation in reinforced concrete beams using acoustic emission technique)		Abstract ID: 5425 (Flexural Behaviour of RC Beam Externally Strengthened Using High Performance Fiber Grid Reinforced Mortar System)	Abstract ID: 6776 (Analytical and experimental study of structural performance of CFRP strengthened RC square columns with variable sizes)	
12:16-12:29		Abstract ID: 7354 (Buckling, transient and harmonic response of cross-ply and angle-ply laminated composite plates)	Abstract ID: 3565 (Flexural strength prediction of steel fiber reinforced concrete with machine learning)	Abstract ID: 3851(A Neural Network- Based Meta-Learner Framework for Concrete Compressive Strength Prediction)	Abstract ID: 4981 (Influence of construction and demolition waste in geopolymer concrete for sustainable assessment)	Abstract ID: 1856 (Incorporating Jute Biochar in Cement Mortar for Improved Mechanical Properties and Carbon Footprint Reduction)		Abstract ID: 2200 (Test method to assess the passivation of steel in cementitious systems with low-carbon binders)	Abstract ID: 8998 (Comprehensive review on recent development of hybrid fiber reinforced polymer system for civil engineering)	Abstract ID: 5625 (A Review of Strengthening Strategies for Progressive Collapse Mitigation in Precast and RC Structures: The Potential of Stainless-Steel Wire Mesh)		
12:30-12:40						Photo Session (LHC Ground Floor)						
12:40-14:00 Session-3 (14:00-15:20)						Lunch Special Talks						
14:00-14:40					Special Talk 1: Prof. Ravi Sinha,	, Topic : Resilience-based Seismic Design	n of Buildings - The Way Forward					
14:40-15:20		Special talk 2: Prof. Balthasar Novak, Topic: Structural health monitoring towards more sustainability										
15:20-16:00 16:00-16:30						High Tea Valedictory						
20.00 10.00												