

DR. J. A. BHAT

Professor

RESEARCH INTEREST

Earthquake Engineering, Multi-story Buildings, Materials

CONTACT

PHONE:09419520381
EMAIL:
bhat_javed@nitsri.net

EDUCATION

IIT Delhi
M.Tech
Structural Engineering

IIT Delhi
Ph.D
Structural Engineering

RESEARCH WORK

Performance of geopolymer concrete at elevated temperature– A critical review T Manzoor, JA Bhat, AH Shah Construction and Building Materials 420, 135578	2024
Experimentally and numerically verified behaviour of splice joints under multiple loading conditions and their capacity predictions using artificial neural networks SA Kumar, JA Bhat, FA Sofi, MA Dar Structures 60, 105917	2024
Equivalent flat-web thicknesses and modified flange-based moment resistance for corrugated-web steel I-girders SA Kumar, FA Sofi, JA Bhat Journal of Constructional Steel Research 207, 107946	2023
Effectiveness of Stiffeners in CFDST Columns: Comparative Study A Hassan, J Ahmad Bhat Practice Periodical on Structural Design and Construction 28 (2), 04023004	2023
Estimation of patch-loading resistance of steel girders with unequal trapezoidal web-corrugation folds using nonlinear FE models and artificial neural networks SA Kumar, FA Sofi, JA Bhat	2023

Structures 48, 1651-1669	
Advancements in Geopolymer Concrete: A State-of-the-Art Analysis of Its Mechanical and Durability Features T Manzoor, JA Bhat, AH Shah Iranian Journal of Science and Technology, Transactions of Civil Engineering …	2023
Laboratory study on pressure settlement behavior of shallow foundation on bitumen coated geogrid reinforced soil bed with varying percentage of prestress A Akbar, JA Bhat, BA Mir International Journal of Pavement Research and Technology 16 (3), 544-562	2023
Effect of Steel Hose Clamp Stiffeners on the Load-Carrying Capacity of Bamboo Members SA Rather, JA Bhat Practice Periodical on Structural Design and Construction 28 (4), 04023045	2023
Bearing Capacity of a Model Square Footing on Geocomposite Reinforced Layered Soil A Akbar, JA Bhat, BA Mir Geotechnical and Geological Engineering, 1-20	2023
Experimental Investigation of a Reduced-Scale Square Footing Model on the Geocomposite Reinforced Layered Soil A Akbar, JA Bhat, BA Mir Indian Geotechnical Journal 53 (4), 887-903	2023
Behavior of partial-length stiffened and full-length stiffened CFDST columns under axial load A Hassan, JA Bhat World Journal of Engineering	2023
An experimental investigation into the behavior of steel-timber composite beams SA Waseem, Z Manzoor, JA Bhat Practice Periodical on Structural Design and Construction 27 (1), 04021055	2022
An innovative technique of anchoring lacing bars with CFS sections for shear strengthening of RC beams JA Bhat Innovative Infrastructure Solutions 7 (1), 125	2022
Strengthening of RC beams with CFS angle sections: performance assessment of various anchoring solutions M Rashid, JA Bhat, SA Waseem Innovative Infrastructure Solutions 7 (5), 284	2022
Moment and shear estimations in steel girder highway bridges using committees of artificial neural networks and finite element models JA Bhat Innovative Infrastructure Solutions 7 (3), 201	2022
Quantifying the Sensitivity of Input Parameters in an ANN-Based Committee Networks Model for Estimation of Steel Girder Bridge Load-Ratings FA Sofi, I Farooq, JA Bhat, MA Tantray Machine Learning Applied to Composite Materials, 149-166	2022
Effect of torsional ground motion on seismic response of symmetric multistorey buildings incorporating soil–structure interaction JA Bhat, GV Ramana, AK Nagpal Sādhanā 47 (4), 200	2022
Effect of strength of parent concrete on the mechanical properties of recycled aggregate concrete JA Bhat Materials Today: Proceedings 42, 1462-1469	2021
Mechanical behaviour of self compacting concrete: Effect of wood ash and coal ash as partial cement replacement JA Bhat Materials Today: Proceedings 42, 1470-1476	2021
Experimental investigation of Rice Husk Ash on compressive strength, carbonation and corrosion resistance of reinforced concrete	2021

N Nisar, JA Bhat Australian Journal of Civil Engineering 19 (2), 155-163	
Effect of rice husk ash on the carbonation depth of concrete under different curing ages and humidity levels N Nisar, JA Bhat Journal of Materials in Civil Engineering 33 (1), 04020427	2021
Plate load tests for investigation of the load–settlement behaviour of shallow foundation on bitumen-coated geogrid reinforced soil bed A Akbar, JA Bhat, BA Mir Innovative Infrastructure Solutions 6 (2), 80	2021
Buckling behavior of cross laminated poplar timber columns using various performance improvement techniques JA Bhat Materials Today: Proceedings 44, 2792-2796	2021
Effect of CFRP-Reinforcement variation on the strength parameters of different timber beams JA Bhat Materials Today: Proceedings 44, 2785-2791	2021
Improved strength and stiffness characteristics of cross-laminated poplar timber columns JA Bhat International Journal of Engineering 34 (4), 803-810	2021
Numerical study on the nonlinear behavior of full-scale timber framed joints SA Aejaz, AR Dar, JA Bhat Practice Periodical on Structural Design and Construction 26 (1), 04020055	2021
Effect of Coupled Deterioration Mechanisms on Corrosion of Steel Reinforcement: The Role of Chloride Ion Ingress, Freeze–Thaw Cycles and Green Corrosion Inhibitor N Nisar, JA Bhat Journal of Bio-and Tribo-Corrosion 7, 1-9	2021
Behaviour of various framed timber joints: Capacity and improved design rules SA Aejaz, MA Dar, AR Dar, JA Bhat, H Carvalho Journal of Building Engineering 44, 103417	2021
Behaviour of CFDST and RCC member hybrid frames A Hassan, JA Bhat Asian Journal of Civil Engineering 22 (6), 1045-1058	2021
Effect of Adhesives on the Structural Performance of Timber-Framed Joints for Sustainable Civil Engineering Construction SA Aejaz, AR Dar, JA Bhat 3rd International Conference on Innovative Technologies for Clean and …	2021
Structural performance of timber frame joints-full scale tests and numerical validation SA Aejaz, AR Dar, JA Bhat Structural Engineering and Mechanics, An Int'l Journal 74 (4), 457-470	2020
Laboratory investigation for development of local scour depth model for varying shapes of obstruction BH Mir, MA Lone, JA Bhat International Journal of Hydrology Science and Technology 9 (3), 303-312	2019
Effect of gradation of bed material on local scour depth BH Mir, MA Lone, JA Bhat, NA Rather Geotechnical and Geological Engineering 36, 2505-2516	2018
Effect of obstacle material type on local scour BH Mir, MA Lone, JA Bhat Int J Adv Struct Geotech Eng 6 (3), 114-119	2017
Low Cost Confinement of Masonry Columns TA Mir, JA Bhat, SM Hussain International Journal of Mechanics and Solids 9 (1), 89-95	2017
Dynamic to static eccentricity ratio for site-specific earthquakes P Kamatchi, GV Ramana, AK Nagpal, NR Iyer, JA Bhat Earthquakes and Structures 9 (2), 391-413	2015

ANN-based Methodology to Determine Dynamic to Static Eccentricity Ratio of Torsionally Coupled Buildings for Site-Specific Earthquakes P Kamatchi, GV Ramana, AK Nagpal, NR Iyer, JA Bhat Journal of Earthquake Engineering 19 (1), 107-136	2015
Glass grid as high tensile strength layer in rigid pavements/overlays of runway–An experimental studies on Srinagar international airport Jammu and Kashmir India MR Dar, JA Bhat	2015
Crack Repair Methodology on the Basis of Various Crack Widths of Runway for Srinagar International Airport Jammu and Kashmir India JAB Mubashir Rasool Dar Elixir 80, 31180-31184	2015
Conductive concrete (snow melting and heating system technology) JAB Mohd Hanief Dar Elixir 80, 30857-30859	2015
Ductility of timber beams strengthened using CFRP plates J Ahmad, DJA Bhat International Journal of Civil Engineering & Technology (IJCIET) 4 (5), 42-54	2013
Flexural strengthening of timber beams using carbon fiber reinforced polymer plates J Ahmad, DJA Bhat International Journal of Civil Engineering & Technology (IJCIET) 4 (5), 61-77	2013
Behavior of Timber Beams Provided with Flexural as Well as Shear Reinforcement in the Form of CFRP Strips J Ahmad, DJA Bhat, U Salam International Journal of Advanced Research In Engineering and Technology …	2013
Machine crushed animal bones as partial replacement of coarse aggregates in lightweight concrete JA Bhat, RA Qasab, AR Dar ARPN Journal of Engineering and Applied Sciences 7 (9), 1202-1207	2012
Development of Economized Shaking Platforms for Seismic Testing of Scaled Models W Ahmad, S Amarpreet, I Sana, L Nawaf, B Javed International Journal of Advanced Research in Engineering and Technology …	2012
Coal Accident Analysis, Risk Quantification and Suggestive Scheme Improvements in Coal Bunkers of Abstract Thermal Power Plants W Ahmad, MSK Prasad, B Javed, V Thangapandian International Journal of Industrial Engineering Research and Development …	2012
In-Plane Behavior of Masonry Infilled Reinforced Concrete Frames with Wooden Choh-kat Openings SH Buch, JA Bhat	2012
Pre-Tensioned Precast Elements as A Replacement to Wooden Bracings in the Armature Cross Wall System: An Abstract Attempt to Revive the Forgotten Heritage W Ahmad, JA Bhat International Journal of Civil Engineering & Technology (IJCIET), Volume3 …	2012
Evaluation of load distribution factors for curved box girder bridges J Rubeena, JA Bhat International journal of earth sciences and engineering 3, 710-719	2010