

Editors

Nagesh R. Iyer
N. Gopalakrishnan

K. Balaji Rao
B.H. Bharatkumar

Contents

40-25 Preliminary design of double layer grids using ANN G. S. Deshmukh	215
40-26 Structural stability and spatial increase of ash pond dykes in thermal power stations Satyendra Mittal and Vaishali Wayal	228
40-27 3-D Finite element analysis for dynamic response of rigid pavement subjected to moving load V.A. Patil, V.A. Sawant and Kousik Deb	236
40-28 Prediction of critical stress intensity factor for high strength and ultra high strength concrete beams using support vector regression P. Yuvaraj, A. Ramachandra Murthy, Nagesh R. Iyer, Pijush Samui and S.K. Sekar	245
40-29 Modeling of steel beam-column connections under dynamic excitation Ikhlas S. Sheet, Umarani Gunasekaran and Gregory A. MacRae	254
40-30 Flexural strengthening of reinforced concrete beams using precast SIFCON laminates S. Balaji and G.S. Thirugnanam	262
40-31 Experimental study on behavior of SIFCON beam-column joints subjected to cyclic loading S. Balaji and G.S. Thirugnanam	268
40-32 Mechanical properties of high strength reinforcing bars exposed to elevated temperatures K.A. Zaidi, U.K. Sharma and N.M. Bhandari	274
40-33 Exterior beam-column joint seismic behavior study using different joint core details with mechanical anchorage under reversal loading S. Rajagopal and S. Prabavathy	281
40-T3 Effect of bay and storey on the forces of space frame due to interaction D. Daniel Thangaraj and K. Ilamparuthi	292
40-T4 Experimental investigation on FRP confined HSS tubular members under compression M.C. Sundarraja and S. Sivasankar	298
40-T5 Inverse technique - an approach to optimize shape of shell structures for deflections under free vibrations A. Mallika and N.V. Ramana Rao	305
40-S1 Performance of sugarcane bagasse ash concrete in marine environment T. Santhosh Kumar, V. Siva Ramaraju and K.V.G.D. Balaji	315
News and Notes	319

Typeset in LATEX and printed by

Sigma Publishing Services

No. 1013, 3rd Main Road, State Bank Colony

Nanganallur, Chennai - 600 061.

Phone: 044-65151910

Email: sigmapublishing@gmail.com

ISSN 0970013-7



9 770970 013003