

Editorial Preface

J. S. Vinod, University of Wollongong, Wollongong, Australia

T. G. Sitharam, Indian Institute of Science, Bengaluru, India

Happy New Year to our readers, authors, associate editors and editorial board members, independent referees, and members of the Editorial team. We wish everyone a happy and prosperous 2019.

This issue, 10(1), has 5 major papers focussing on the behaviour of foundations and infrastructure subjected to dynamic/seismic loads. The papers selected in this issue include numerical and analytical methods, field and laboratory testing and case studies.

The article on ‘Influence of Joint Orientation on the Behavior of Dam Foundation Resting on Jointed Rock Mass under Earthquake Loading Condition’ investigates the effect of rock joints on the dynamic response of gravity dam. The foundation with 60° joint inclination was reported as the critical angle and exhibits maximum compressive stress under dynamic loads.

The performance of different storied building during a design earthquake considering with and without the stiffness of the infill wall was reported in the paper ‘Performance of buildings using site specific ground motion of Kolkata, India.’ The ground story drift remains below Immediate Occupancy (IO) level during design earthquake irrespective of number of stories.

The paper titled ‘Effect of Flexible Soil in Seismic Hazard Assessment for Structural Design in Kuala Lumpur’ discuss the site-specific hazard assessment on seven flexible soil sites in Kuala Lumpur, based on the modified time history. The paper highlights that the adoption of Eurocode 8 for seismic design should be investigated to include the effects of high period motions in flexible soils, especially on the amplification factors and its corner periods.

The study on ‘A case study of probabilistic seismic slope stability analysis of rock fill tailing dam: Seismic Stability of Tailing Dam’ presents case history of expansion of rock fill tailing dam of the Rampura-Agucha zinc mine in Rajasthan, India. The paper demonstrates that for the critical geometry of the slope, the observed factor of safety values was found to be higher than the values specified in the ANCOLD (1999).

The article titled ‘3D Seismic Response Analysis of Shallow Foundation Resting on Sandy Soil’ highlights the attempt made to study the response of a shallow foundation resting on medium dense sandy soil under seismic excitation. They reported that the peak acceleration, displacement, excess pore pressure and settlement values are found to be more in shear beam type boundary condition than that of the rigid box-type boundary condition.

J. S. Vinod

T. G. Sitharam

Editors-in-Chief

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