Contents

Winner: Best Student Article Competition

1. Seismic Response of Hybrid Systems with Metallic and Viscous Dampers
   Ramiro E. Vargas, University at Buffalo ................................................................. 1

Honorable Mentions

2. Soil Densification Using Vibro-Stone Columns Supplemented with Wick Drains
   Thevachandran Shenthan, University at Buffalo ................................................... 9

3. Seismic Response of Steel Framed Hospital Buildings with Self-Centering Systems
   Dong Wang, University at Buffalo ........................................................................ 17

Papers

4. Finite Element Parametric Study of Hybrid Rectangular Links for Eccentrically Braced Frames
   Jeffrey W. Berman, University at Buffalo ............................................................. 23

5. Seismic Resilience
   Gian Paolo Cimellaro, University at Buffalo .......................................................... 29

6. The Double Concave Friction Pendulum Bearing
   Daniel Fenz, University at Buffalo ........................................................................ 37

7. Estimation of Kinetic Friction Coefficient for Sliding Rigid Block Nonstructural Components
   Cagdas Kafali, Cornell University ....................................................................... 43

8. Liquefaction Assessment By Energy Approach
   T. Kanagalingam, University at Buffalo ............................................................... 51

9. A Design Procedure for Liquefaction Mitigation of Silty Soils Using Dynamic Compaction
   Rafeek G. Nashed, University at Buffalo .............................................................. 59

10. Design Applications for Controlled Rocking System Retrofit Approach
    Michael Pollino, University at Buffalo ................................................................. 67