

# NED UNIVERSITY JOURNAL OF RESEARCH

## MEASUREMENT OF SOIL-MODEL FOOTING DAMPING CHARACTERISTICS FROM RESONANCE TESTING

Author(s): **Abdul Samad Khan**

Volume: **1**

No: **1**

Pages: **31-37**

Date: **January 1994**

### **Abstract:**

The objective of the research reported in this paper is to measure the damping (D) of Soil-model footing system using resonance testing technique. A technique of applying a constant dynamic excitation force was used to vibrate the system. System damping was measured by the "band-width method" and compared with theoretical prediction from the Hsieh [1] and Lysmer [3] analyses. It is observed that radiation damping is constant for mass ratio ( $B_z$ ) greater than 30 and varies considerably for mass ratio less than 10. Furthermore, the test results indicated that theory overestimates the radiation damping by about 30% to 50%.

### **For full paper, contact:**

**Prof Muhammad Masood Rafi**

Editor, NED University Journal of Research

Ph: +92 (21) 9261261-8 Ext:2277; Fax: +92 (21) 9261255

Email: [NED-Journal@neduet.edu.pk](mailto:NED-Journal@neduet.edu.pk)

Website: <http://www.neduet.edu.pk/NED-Journal>

