Introduction to Engineering Seismology

Module 5 Site characterization and Different methods, Seismic site classification in modern seismic codes, Concept of site response; Local site effects and evaluation methods, Introduction to liquefaction; methods and procedures of estimation

Learning Objectives

To learn the concepts of site characterization and Different methods, Seismic site classification, local site effects and site response, Liquefaction hazard mapping.

Highlights and Motivation

The following topics are discussed in this module, which is delivered as a three lectures for the duration of 9 hours.

- ❖ Site characterization and site classification
- ❖ Local site effects, Ground motion amplifications and Response spectrum
- ❖ Liquefaction Mechanism and factors causing liquefaction,
- Estimating liquefaction hazard and Mapping