

## Relationship between Dynamic behavior of soft clay and sedimentary environment

# Takato Takemura[1]; Masanobu Oda[2]; Katsumi Kimura[3]; Tomoya Akama[4]

[1] Nihon Univ.; [2] Civil and Environmental Engineering, Saitama Univ.; [3] GSJ, AIST; [4] Soil Mech. Lab., Saitama Univ.

<http://www.geo.chs.nihon-u.ac.jp/geotec/index.html>

A big earthquake may happen in Kanto area in the near future, and may cause big urban earthquake hazard. An earthquake hazard is strongly related to soil properties, such as water content and grain size, however, relationship between geological structure and soil properties in Chuseki-so, which is the latest Pleistocene-Holocene incised valley fills, have not been understood. Therefore, it is important that geological structure is applied to geotechnical engineering of urban earthquake hazard, especially Nakagawa lowland, which is one of area destroyed many house by Kanto earthquake. Here, to clarify such purpose, we introduce basic physical properties, void ratio, water content and consistency, and dynamic behavior, shear modulus and liquefaction (excess pore pressure), of soft clay to evaluate seismic damage in lowland areas.