

## ANNOUNCEMENT

### THE SECOND U.S.-JAPAN WORKSHOP ON SOIL STRUCTURE INTERACTION

#### 1. Introduction

In Japan, and other seismically active countries, the importance of soil-structure interaction phenomenon has been recognized for many years. Various researchers and organizations have actively carried out both theoretical and experimental researches on soil-structure interaction (SSI), and developed analytical tools to be used in structural design.

With the experience of the 1995 Kobe earthquake, preparedness for future destructive earthquakes is recognized as the main goal. To this end, large-scale earthquake observation networks and large scale testing facilities are being planned.

This year, the Building Standard Law in Japan has been revised. For the first time, it includes the earthquake load considering the SSI effect. We recognize that this is just a starting point.

To incorporate SSI effects into the design procedures, the following general issues have yet to be solved.

- (1) To clearly determine the SSI phenomenon during vibration caused by earthquakes and wind.
- (2) To carry out research on understanding the inelastic and/or nonlinear behaviour caused by SSI, particularly during strong shaking.
- (3) To clarify the external loads which are a combination of inertial force and ground displacements in case of pile foundations.

It is the aim of this workshop to discuss these issues. The Japanese Organizing Committee cordially invites leading researchers from U.S. and Japan to share their researches and experiences, to identify the issues to be solved urgently and to facilitate suggestions for future research direction in the field.

#### 2. Description of the Workshop

The planned U.S.-Japan workshop on Soil-Structure Interaction is the second opportunity for researchers of both countries to get together, present and discuss the state-of-the art as well as recent developments in SSI. It aims to fulfill the resolution that was issued during the first workshop held in Menlo Park, Ca, in 1998.

The previous workshop recognized the importance and necessity of the broader SSI research and aimed to enhance the cooperation of researchers from both countries. In addition, the workshop discussed about the present status in the field, additional SSI research, Better Field Observations, Transfer Knowledge, Data exchange between US and Japan etc.

#### 3. The Second U.S.-Japan Workshop on Soil-Structure Interaction

**Date: March 6, 7, 8, 2001**

**Venue: The Tsukuba International Congress Center "EPOCHAL TSUKUBA"**

Takezono 2-20-3, Tsukuba-shi, Ibaraki-ken, 305-0032, Japan

Tel: +81-298-61-0001, Fax. +81-298-61-1209, URL: <http://www.epochal.or.jp>

#### 4. Topics

During the workshop, the following essential topics will be covered:

1. Current Methods of Practice of SSI in US and Japan
  - a. Geotechnical Point of View
  - b. Structural Point of View

2. Code Provisions and Limitations.
3. Observed Data.
4. Observational Arrays and Testing Facilities - Current, Future and Needs.
5. Recent Research Results and How To Implement Them into Practice.
6. Needed Additional Research.
7. Needed Additional Observational Arrays and Testing Facilities.

## 5. Participants of the Workshop

Leading researchers from both Japan and US sides will be invited to the workshop. From Japan, approximately 25 -35 leading professors, researchers and practitioners will be invited to the workshop. The Steering and planning committee members listed next is also included as workshop participants.

## 6. Steering and Planning Committee in Japan

Chairman	Prof. Iguchi, Tokyo Science University
Members	Dr. Mehmet Celebi, US Geological Survey (from US side)
	Prof. Tokimatsu, Tokyo Institute of Technology
	Prof. Sugimura, Tohoku University
	Prof. Kitagawa, Keio University
	Prof. Fukuwa, Nagoya University
	Prof. Tamori, Shinshu University
	Dr. Yoshio Kitada, NUPEC
	Dr. Keiichi Tamura, PWRI
	Dr. Takashi Nagao, PHRI
	Dr. Chikahiro Minowa, NIED
	Dr. Kenji Miura, Kobori Research Complex
	Dr. Yuzuru Yasui, Obayashi Corporation
	Dr. Mitsumasa Midorikawa, IISEE, BRI
	Dr. Hiroshi Kuramoto, BRI
Secretaries	Dr. Izuru Okawa, BRI
	Dr. Masanori, Iiba, BRI

## 7. Financial Support

### Japan International Science and Technology Exchange Center (JISTEC)

(Limited number of Overseas and domestic participants are supported for their round-trip transportation and accommodations.)

## 8. Tentative Workshop Programs

### Tuesday, March 6th, 2001

12:30	Registration
13:00	Opening Ceremony
	Welcome speech by Director General of BRI
	Speech from US side
13:10 - 13:20	Introduction of the program
13:20 - 17:00	Presentation of State of the Art Lecture
17:10	Adjourn
18:00 - 20:00	Reception

### Wednesday, March 7th, 2001

9:00 - 10:30	Presentations by chairpersons of both sides
--------------	---

	Outlook of current research activities in both sides
10:30 - 10:45	Coffee break
10:45 - 12:30	Group discussion 1
12:30 - 14:00	Lunch
14:00 - 16:30	Group discussion 2
16:30 - 17:00	Summary and Discussion by chairman and secretaries
18:00 - 20:00	Dinner

#### **Thursday, March 8th, 2001**

9:00 - 10:00	Group discussion 3
10:15 - 10:30	Coffee Break
10:30 - 11:30	Reports of Group discussions
11:30 - 12:00	Closing ceremony
	Adoption of resolutions and recommendations
	Concluding speech

\*1: Translation is available for Wednesday and Thursday (not simultaneous, not for all sessions)

\*2: The provisional topics of group sessions areas follows,

- (1) Engineering implications from experiences during recent big earthquakes.
- (2) Earthquake recordings and experimental measurement and theoretical considerations
- (3) Design issues

#### **9. Contributions**

The participants are requested to submit a paper that will be presented during the workshop. The copy of the paper will be distributed to each participant in the workshop. The completed paper will be bound and published as the workshop proceedings. The format of the paper will be sent later from the secretariat to each participant.

#### **10. Contact Person**

If you have any questions, please send messages to, either

Dr. Izuru Okawa ([okawa@kenken.go.jp](mailto:okawa@kenken.go.jp))

Building Research Institute

Ministry of Construction

Tachihara-1, Tsukuba-shi, Ibaraki-ken

305-0802, JAPAN

Tel +81-298-64-6758, Fax +81-298-64-6774

Or

Dr. Mehmet Celebi ([celebi@usgs.gov](mailto:celebi@usgs.gov))

U.S. Geological Survey (MS977)

345 Middlefield Rd.

Menlo Park, CA 94025

Tel 650-329-5623, Fax. 650-329-5163