

Member

JRC-IPSC side:

Fabio TAUCER :Structural Mechanics Unit.

NILIM side:

Junichi MURAKAMI :Deputy of Director General,
Mikio FUTAKI :Director of Building Department,
Mizuo INUKAI :Senior Researcher, Standards and Accreditation System
Division, Building Department,

BRI side:

Hiroyuki YAMANOUCHI :Chief Executive,
Toshibumi FUKUTA :Director of International Institute of Seismology and
Earthquake Engineering,
Masaomi TESHIGAWARA :Chief Research Engineer, Department of Structural
Engineering,
Masanori IIBA :Chief Research Engineer, Department of Structural
Engineering,
Hiroschi KURAMOTO :Associate Professor, International Cooperation Center of
Engineering Education Development, Toyohashi
University of Technology,
Hiroschi FUKUYAMA :Chief Research Engineer, Department of Structural
Engineering,
Hiroschi KATO :Senior Research Engineer, Department of Structural
Engineering,
Koichi KUSUNOKI :Senior Research Engineer, Department of Structural
Engineering,

AGENDA ON 30&31 MAY, 2002 AT NILIM & BRI

30 May(Thu)

- 9:30-9:35 Opening at Meeting room of NILIM ANNEX 4F
- 10:00-10:10 Introduction of members, confirmation of agenda
- 10:10-10:50 Session 1 Experimental Results on Stress-Strain Relation of Ti-Ni Shape Memory Alloy Bars and Their Application to Seismic Control of Buildings
by T. Fukuta
- 10:50-11:30 Session 2 Experimental Study on Torsional Vibration Behavior of Steel Frame Specimen with Eccentricity
by H. Kato
- 12:00-13:30 Friendship luncheon hosted by NILIM & BRI
- 13:30-14:00 Greeting to Director General
- 14:00-14:45 Session 3 Seismic Performance of Retrofitted RC Slab Connected with Strengthening Frame
by M. Inukai
- 14:45-15:20 Session 4 Posterior Time-Step Adjustment Technique in Substructuring Pseudo-Dynamic Test
by K. Kusunoki
- 15:20-15:50 Session 5 Mass-eccentric Effect on response of Base Isolation System for Houses
by M. Iiba
- 18:00-20:00 Dinner

31 May(Fri)

- 9:30-10:15 Session 6 Sub-Structure Pseudo Dynamic Testing on 12 story Reinforced Concrete Frame with Soft First Story
by H. Kuramoto
- 10:15-11:00 Session 7 European Laboratory For Structural Assessment (ELSA)
by F. Taucer
- 11:00-12:00 Session 8 Smart Structural System Large Scale Shaking Test
by M. Teshigawara
- 12:00-14:00 Luncheon hosted by NILIM & BRI
- 14:00-14:30 Session 9 Safety Assessment for Earthquake Risk Reduction: An EU Research and Training Network
by F. Taucer
- 14:30-15:00 Session 10 Seismic Performance Assessment & Rehabilitation: SPEAR
by F. Taucer
- 15:00-15:30 Session 11 Japanese Design And Construction Guidelines For Seismic Retrofit of Building Structures With FRP Composites
by H. Fukuyama
- 15:30-16:00 Session 12 Discussion about Future plan and Possible collaboration
- 16:00-16:30 Visit to laboratory
- 16:30-16:45 Confirmation of resolutions
- 16:45-17:00 Adoption of final resolutions
- 18:00-20:00 Friendship dinner hosted by BRI

SUMMARY, RESOLUTION AND RECOMMENDATIONS OF THE
SEVENTH MANAGEMENT PANEL ON COLLABORATION RESEARCH
ACTIVITIES BETWEEN JRC-IPSC J-NILIM AND J-BRI
(Tsukuba, Ibaraki, Japan, May 30 & 31, 2002)

The seventh management panel on collaboration research activities between JRC-IPSC(Institute for the Protection and Security of the Citizen, the former JRC-ISIS), J-NILIM(National Institute for Land and Infrastructure Management) and J-BRI(Building Research Institute) was held in Tsukuba on May 30 and 31, 2002, for the purpose of confirming the past activities related to the collaboration research, exchanging the related research information and discussing the future plan of the collaboration works. The past research results presented and discussed in a most friendly and cordial atmosphere. The cooperative activities in the future were discussed, and the summary, resolutions and recommendations were agreed.

1. PARTICIPANTS TO THE MEETING

From JRC-IPSC

Fabio TAUCER

From J-BRI

Toshibumi FUKUTA, Masaomi TESHIGAWARA, Hiroshi FUKUYAMA, Hiroto KATO,
Masanori IIBA, Kouichi KUSUNOKI,

Hiroshi KURAMOTO(former researcher of BRI, Toyohashi Univ. of Technology)

From J-NILIM

Mikio FUTAKI, Mizuo INUKAI

2. SUMMARY OF MEETING

The research results were presented and discussed on the collaborative research items as written below.

(ITEM 1) : Comparison of the seismic performance of building structures designed according to the current European and Japanese Norms (comparison)

(ITEM 2) : Development and validation of new design methods based on performance concepts (performance concepts)

(ITEM 3) : Study of seismic action, such as impulsive type of ground motion in near-source areas or long-duration long-period motion in the far field over soft soil (seismic action)

(ITEM 4) : Study of the concepts of base isolation and seismic response control for building structures (base isolation)

(ITEM 5) : Vulnerability assessment, repair and strengthening of existing building structures (repair)

(ITEM 6) : Development of large scale experimental method (pseudo dynamic)

JRC-IPSC side

- Presentation of the research activities, structure and organization of the ELSA laboratory. (F. Taucer)
- Safety Assessment for Earthquake Risk Reduction (SAFERR): Overview (F. Taucer)
- Seismic Performance Assessment and Rehabilitation (SPEAR): Overview (F. Taucer)

J-NILIM and J-BRI side

- Experimental Results on Stress-Strain Relation of Ti-Ni Shape Memory Alloy Bars and their Application to Seismic Control of Buildings (T. Fukuta)
- Experimental Study on Torsional Vibration Behavior of Steel Frame Specimen with Eccentricity (H. Kato)
- Seismic Performance of Retrofitted RC Slab Connected with Strengthening Frame (M. Inukai)
- Posterior Time-Step Adjustment Technique in Substructuring Pseudo-Dynamic Test (K. Kusunoki)
- Mass-eccentric Effect on Response of Base Isolation System for Houses (M. Iiba)
- Japanese Design and Construction Guidelines for Seismic Retrofit of Building Structures with FRP Composites (H. Fukuyama)
- Sub-Structure Pseudo Dynamic Testing on 12 Storey Reinforced Concrete Frame with Soft First Storey (H. Kuramoto)
- Smart Structural Systems Large Scale Test (M. Teshigawara)

Under the above considerations, the future plan of the collaborative activities was discussed.

3. RESOLUTION

- 1) Both sides consider that the meeting was successful and fruitful.
- 2) Both sides re-affirm that the exchange of detailed information about the results of the past activities was effective and should be continued at an increased level.
- 3) Both sides discussed the future areas of collaboration for research, namely: i) the renewal of existing building structures and ii) the harmonization of testing methods directed towards the development of performance based design methodologies. For this

purpose effective exchange of information during the next months will be maintained by electronic mail, fax, telephone, etc.

4. RECOMMENDATIONS

- 1) Both sides will make any necessary actions for continuing collaboration on the present agreement.
- 2) The materials and papers introduced in the meeting are bound as proceedings of the seventh management panel.
- 3) The collaboration between J-BRI, J-NILIM and JRC-IPSC, acting as main communication links of the Japanese and European research parties, will be continuously pursued.

Tsukuba, Japan, May 31, 2002



Fabio TAUCER, M. Eng..
Chairman, Management Panel EU Side
Structural Mechanics Unit
Institute for the Protection and Security
of the Citizen
Joint Research Centre (JRC-IPSC),
European Commission



Mikio FUTAKI, Dr. of Eng..
Chairman, Management Panel Japanese Side
Building Department
National Institute for Land and,
Infrastructure Management (J-NILIM)
Ministry of Land, Infrastructure and
Transport, Japan

SUMMARY, RESOLUTION AND RECOMMENDATIONS OF THE
SEVENTH MANAGEMENT PANEL ON COLLABORATION RESEARCH
ACTIVITIES BETWEEN JRC-IPSC J-NILIM AND J-BRI
(Tsukuba, Ibaraki, Japan, May 30 & 31, 2002)

The seventh management panel on collaboration research activities between JRC-IPSC(Institute for the Protection and Security of the Citizen, the former JRC-ISIS), J-NILIM(National Institute for Land and Infrastructure Management) and J-BRI(Building Research Institute) was held in Tsukuba on May 30 and 31, 2002, for the purpose of confirming the past activities related to the collaboration research, exchanging the related research information and discussing the future plan of the collaboration works. The past research results presented and discussed in a most friendly and cordial atmosphere. The cooperative activities in the future were discussed, and the summary, resolutions and recommendations were agreed.

1. PARTICIPANTS TO THE MEETING

From JRC-IPSC

Fabio TAUCER

From J-BRI

Toshibumi FUKUTA, Masaomi TESHIGAWARA, Hiroshi FUKUYAMA, Hiroto KATO,
Masanori IIBA, Kouichi KUSUNOKI,

Hiroshi KURAMOTO(former researcher of BRI, Toyohashi Univ. of Technology)

From J-NILIM

Mikio FUTAKI, Mizuo INUKAI

2. SUMMARY OF MEETING

The research results were presented and discussed on the collaborative research items as written below.

(ITEM 1) : Comparison of the seismic performance of building structures designed according to the current European and Japanese Norms (comparison)

(ITEM 2) : Development and validation of new design methods based on performance concepts (performance concepts)

(ITEM 3) : Study of seismic action, such as impulsive type of ground motion in near-source areas or long-duration long-period motion in the far field over soft soil (seismic action)

(ITEM 4) : Study of the concepts of base isolation and seismic response control for building structures (base isolation)

(ITEM 5) : Vulnerability assessment, repair and strengthening of existing building structures (repair)

(ITEM 6) : Development of large scale experimental method (pseudo dynamic)

JRC-IPSC side

- Presentation of the research activities, structure and organization of the ELSA laboratory. (F. Taucer)
- Safety Assessment for Earthquake Risk Reduction (SAFERR): Overview (F. Taucer)
- Seismic Performance Assessment and Rehabilitation (SPEAR): Overview (F. Taucer)

J-NILIM and J-BRI side

- Experimental Results on Stress-Strain Relation of Ti-Ni Shape Memory Alloy Bars and their Application to Seismic Control of Buildings (T. Fukuta)
- Experimental Study on Torsional Vibration Behavior of Steel Frame Specimen with Eccentricity (H. Kato)
- Seismic Performance of Retrofitted RC Slab Connected with Strengthening Frame (M. Inukai)
- Posterior Time-Step Adjustment Technique in Substructuring Pseudo-Dynamic Test (K. Kusunoki)
- Mass-eccentric Effect on Response of Base Isolation System for Houses (M. Iiba)
- Japanese Design and Construction Guidelines for Seismic Retrofit of Building Structures with FRP Composites (H. Fukuyama)
- Sub-Structure Pseudo Dynamic Testing on 12 Storey Reinforced Concrete Frame with Soft First Storey (H. Kuramoto)
- Smart Structural Systems Large Scale Test (M. Teshigawara)

Under the above considerations, the future plan of the collaborative activities was discussed.

3. RESOLUTION

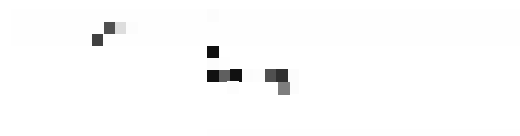
- 1) Both sides consider that the meeting was successful and fruitful.
- 2) Both sides re-affirm that the exchange of detailed information about the results of the past activities was effective and should be continued at an increased level.
- 3) Both sides discussed the future areas of collaboration for research, namely: i) the renewal of existing building structures and ii) the harmonization of testing methods directed towards the development of performance based design methodologies. For this

purpose effective exchange of information during the next months will be maintained by electronic mail, fax, telephone, etc.

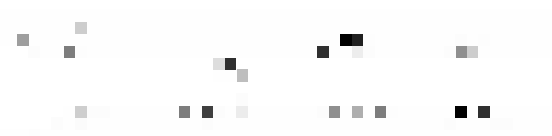
4. RECOMMENDATIONS

- 1) Both sides will make any necessary actions for continuing collaboration on the present agreement.
- 2) The materials and papers introduced in the meeting are bound as proceedings of the seventh management panel.
- 3) The collaboration between J-BRI, J-NILIM and JRC-IPSC, acting as main communication links of the Japanese and European research parties, will be continuously pursued.

Tsukuba, Japan, May 31, 2002



Fabio TAUCER, M. Eng..
Chairman, Management Panel EU Side
Structural Mechanics Unit
Institute for the Protection and Security
of the Citizen
Joint Research Centre (JRC-IPSC),
European Commission



Toshibumi FUKUTA, Dr. of Eng.
Chairman, Management Panel Japanese Side
Production Engineering Department
Building Research Institute (J-BRI),
Ministry of Construction, Japan