

IISEE NEWSLETTER No.4 April, 2005

Dear Ex-participants of IISEE Training Course!

Ladies and gentlemen,

I believe you are working actively and successfully in seismology and earthquake engineering related fields, hoping that our training efforts have taken a certain role in your career. The IISEE will keep trying to improve the training program by obtaining your kind supports.

Toshibumi FUKUTA, Director of IISEE

1. Symposium on Masonry Buildings at IISEE

"The Symposium on Earthquake Resistance of Masonry Buildings in Developing Countries and International Technical Cooperation" was held at the IISEE hall on March 23rd 2005.

Our high-priority research effort is focused on the earthquake disaster prevention in developing countries. Construction in developing countries for the most part involves masonry and confined masonry buildings. Therefore we concentrate our research interests on such structures. This symposium was held as the part of this high-priority study.

Presentations were made by five speakers from BRI, Japan, CISMID (Japan Peru Center of Earthquake Engineering & Disaster Mitigation), Peru, CENAPRED (National Center for Disaster Prevention), Mexico and UNCRD (United Nations Centre for Regional Development), Japan. Around 50 people including the participants of the IISEE regular training course attended the symposium.

Information of earthquake resistance of masonry structures has been collected in CISMID, CENAPRED and other research organizations in developing countries. Therefore, establishing strong collaboration with these organizations is an important part of the IISEE agenda. Present symposium should be considered as one of the first steps towards this goal.

The banquet which took place after the symposium provided good opportunity for informal discussions and exchange of the information between the participants. We plan to expand our audience and attract more people from outside for next symposiums which will take place in the near future.

Photograph: Dr.Carlos Zavala's lecture



The program and the short summaries of the presentations

The chair: Dr. Taiki Saito (IISEE)

- 1) BRI Strategy of International Collaboration with Developing Countries: Dr. Tatsuo Narafu (Senior Coordinator for International Cooperation, BRI)

The presentation summarized current status of the International Cooperation projects (Training, JICA Technical Cooperation Projects, and Research Exchange Program) which are being conducted and supervised by the BRI. A new project entitled "Housing with Enhanced Earthquake Resistance in Developing Countries" has been introduced. This project will start from the beginning of the next fiscal year.

- 2) Real-Scale Structure Tests on a Two Story Brick Building Constructed with Handmade Bricks: Dr. Carlos Zavala (CISMID, PERU)

This presentation reported the results of the real-scale earthquake resistance tests performed on two story brick buildings. These tests were carried out by CISMID in collaboration with BIR and so on.

- 3) Study of the Lateral Resistance of Brick Walls and Their Rehabilitation: Dr. Oscar Lopez (CENAPRED, MEXICO)

This presentation outlined basic reinforcement methods which could be applied to the exposed parts of walls. The results of the wall reinforcement with a wire mesh have been reported. These structural studies were conducted on a stand-alone brick structure.

- 4) Activities of UNCRD for Safer Communities: Dr. Kenji Okazaki (UNCRD, JAPAN)

This presentation described the educational activities and promotion of the advanced technologies for safer housing.

5. Earthquake Safety of Non-Engineered Buildings and Technology Transfer: Mr. Bishnu Hari Pandey (UNCRD, JAPAN)

This presentation addressed dissemination and promotion of basic construction techniques towards better earthquake resistance and applicable to circumstances in developing countries.

2. Development of the Earthquake Damage Estimation Systems for Buildings

We investigate and develop new methods for the earthquake damage estimation which could be utilized in developing countries. The dissemination of the acquired methodology will be promoted by our web site "Information Network for Earthquake Disaster Mitigation of Developing Countries (IISEE-net)".

The methodologies of the damage estimation generally involve evaluation of the hypocenter characteristic, estimations of seismic wave propagation, amplification at local site and evaluation of building response and damage. In the final fiscal year we plan to carry out case studies for target countries.

This research project is specifically designed to meet the demands of developing countries. Therefore, it is essential that we achieve effective information exchange and strong collaboration with the researchers from those countries.

(IISEE-net: <http://iisee.kenken.go.jp/net/index.htm>).

Please feel free to send us your comments and opinions.
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