

Thank you, Professor Ren, vice president of Harbin Institute of Technology, Dr. Zhang, the representative of the Heilongjiang Provincial Government, for all those kind words.

Good morning, Ladies and Gentlemen, My colleagues and friends,

It is my great honor, as the principal of Chinese team of the joint project "Seismic Hazard Assessment for the Next Generation Map" of the Strategic Chinese-Korean-Japanese Cooperative Program and the host of the first annual meeting of the project, to warmly welcome all of you.

Based on the MOU, DOIC, KICOS and JST have agreed to establish a new scheme for joint funding of Chinese – Korean - Japanese cooperative activities. After consultation among the Parties, "Climate Change (Included Greenhouse Gas Emission Reduction), Energy Saving, Disaster Prevention and Water Cycle" have been selected as the field of research for JRCP. The aim of JRCP is to strengthen collaboration among Chinese, Korean and Japanese researchers within the above fields to enable them to forge long-term collaborations, leading to world-class scientific results and innovative technologies.

As you know, Earthquake causes a lot of death, injuries and loss of human beings, and even worth as the global civilization, denser population and treasures in cities. At present earthquake prediction is not available to reduce earthquake disaster, while prevention of buildings and construction is an effective countermeasure against the disaster. The prevention usually costs some additional money, therefore it must be decided from an acceptable risk level. And that level comes from the seismic hazard, in general, showed on the national or regional seismic hazard map. Seismic zoning map is the basis of earthquake fortification for buildings, structures, cities, regions and states. The technical approach to prepare the map is seismic hazard assessment. It is the joint job of seismologists, geologists and engineers to develop the approach. The map is prepared from a comprehensive consideration of seismological, geophysical, neo-tectonic and ground motion observation data, which so called as seismic zonation. There are long histories of seismic zonation in China and Japan, respectively, as well in many other earthquake countries. Map in China has been renewed about each ten years, and more shortly in Japan. The first map in Korea was promulgated in 1997 and now is going to be renewed. The damages in the earthquakes after the maps promulgated, showed the fact that death and loss can be mitigated obviously in the buildings and constructions designed from the maps.

As the progress of science and technology in the countries and world wide, the data have been much richer, the methodologies have improved much more, especially in this century. I am certainly sure that we can learn from each other by detailed exchanges, especially through a joint project. We are going to review the data and methodologies adopted in seismic hazard maps of the three countries, and re-evaluate and improve the SHA in each of the countries; to compare the data and the methodologies with the state of the art world wide, and see if there anything could be accepted for the next generation the maps; to develop a procedure to establish ground motion attenuation relationships for the maps; to

combine the probabilistic seismic hazard assessment and the deterministic one, scenario seismic approach, the latter is especially for near field of potential large earthquake; to set-up a prototype of database and method for the next generation seismic hazard maps in the countries by sharing the current status and consensus on a standard procedure to process the data. The joint project is designed in cooperation way for the three teams mainly work at their home-country, and meet together regularly. In order to exchange the SHA situations, to make the state-of-the-art of SHA world wide clearly, to review the database adopted, the way to process the data and the methodologies in SHA, and work out a summary and a detailed plan for the project, the first annual meeting is opening this morning. We are certainly sure that all of us will benefit from the meeting, from the cooperation, as well as our three countries.

Now let me express my sincere thanks to my co-worker, principal of Japanese team, Dr. Hiroyuki Fujiwara, National Research Institute for Earth Science and Disaster Prevention (NIED), Japan; and principal of Korean team, Dr. Myung-Soon Jun, Institute of Geosciences and Mineral Resources (KIGAM), Korea; for their foresight and deep understanding of the Chinese- Korean-Japanese joint research, and their big efforts to make the project to be funded, also Dr. Hao Xiansheng, National Research Institute for Earth Science and Disaster Prevention (NIED), Japan, for his unforgettable contribution and hard work to get the three of us together, and prepare so many things for the project and this meeting.

I also would like to thank our invited speakers,

I would like to extend my sincere greetings to every speaker with a high excitement and joyful feeling. I believe that you can share new ideas, methods, experiences and technologies from each other during the meeting.

This meeting is fortunately sponsored by Harbin Institute of Technology; Heilongjiang Huixian Earthquake Engineering Foundation and Institute of Engineering Mechanics, CEA. Herewith, I appreciate all sponsors on behalf of the joint research collaboration project.

Some of my students and colleagues give me many helps to organize this meeting. All their efforts are acknowledged with deep thanks.

I hope and certainly believe this meeting to be success.

Thanks once again for your coming and your contribution.