Part II: 14:15 – 17:20 Disaster recovery support from scientific/academic perspectives

- 1. Disaster Safety and Human Health
- 14:15 Professor Satoru Oishi, Kobe University "Research and Education for Developing Resilient Society against Mega Disaster in Kobe University"
- 14:40 Professor Satoshi Takada, Kobe University *"Post-Traumatic Stress Disorders and Mental Health Care (Lessons Learned from The Hanshin-Awaji Earthquake, Kobe, 1995)"*
- 2. Regional sustainability and industrial recovery
- 15:05 Professor Masahiko Fujimoto, Tohoku University "What should we do in order to reconstruct regional economy from great disaster as a university located at the center of the affected area?"
- 15:30 Mr Katsumi Hirabayashi, photographer *"what I have witnessed in Tohoku as a photographer"*
- Cofee Break 15:45 16:00
- 3. Panel discussion: 16:00 17:20

Speakers from 1 & 2 Professor Hormoz Modaressi, BRGM Mr Pierre Jean Coulon, European Economic and Social Committee

In the afternoon session, we had four presentations. The first presentation, made by Prof Oishi, introduced the activity of the Research Center for Urban Safety and Security in Kobe University. He introduced a class, volunteer activities, and research regarding Tohoku. The second presentation, made by Prof Takada, introduced the research results of a study into children's PTSD and the difficulties faced by handicapped children and their parents. The third presentation was made by Prof Fujimoto, who talked about regional industry, especially medium- and small-sized companies. It was argued that their lack of innovation made it difficult for these companies to get out of structural recession. Finally, the photographer Mr Hirabayashi related his thoughts through his photographs. He stressed that despite there being many ideas for regeneration for Tohoku's devastated areas, none have been implemented. In the discussion session which followed we shared our ideas concerning the structural problems preventing substantive progress from being made, like the shortage of administrative personnel, gap between victims, too many different sources of support being arranged and accepted by devastated areas. The audience was asked to consider the definition of "resilience"; it was eventually defined as the society of self-recovery. Finally, we talked about the missing people and how their families are still having difficulty accepting the inevitable. We concluded that a common administrative procedure is fundamental to the recovery of such individuals.

Satoru Oishi Professor Research Center for Urban Safety and Security Kobe University

*"Research and Education for Developing Resilient Society against Mega Disaster in Kobe University"* 



The Research Center for Urban Safety and Security (RCUSS) was established on May 11, 1996, almost one year after the Great Hanshin-Awaji Earthquake. RCUSS contributes to ensure safe and secure urban society by conducting research

and education based on scientific methodologies and academic frameworks that has a vision towards the resilient society. Great Eastern Japan Earthquake and Tsunami (GEJET) happened in March 2011 reminded us of our original mission and we have conducted a lot of surveys and supporting activities not only for people suffered by the GEJET but also for citizens all over Japan.

Generally, Japan is very disaster prone country. We have many kinds of natural disaster in our history. However, the most important source of disaster is the fact that people tend to forget disaster. Forgetting is very natural healing system for each person. But we have to prevent the society from forgetting disasters for making resilient society against Mega disaster.

In the symposium, the educational activities in Kobe University including lectures of Great Hanshin-Awaji Earthquake, volunteer activity in conjunction with the disaster, international risk management program are talked. It is followed by recent research activities related with natural disasters by using cutting edge science and technology. Finally, academic activities connected with municipal governments and citizens are introduced. Though introducing topics, we can share the idea to develop resilient society against Mega disaster.

## Satoshi Takada

Professor Graduate School of Health Sciences Kobe University

"Post-Traumatic Stress Disorders and Mental Health Care (Lessons Learned from The Hanshin-Awaji Earthquake, Kobe, 1995)"



The Hanshin-Awaji Earthquake occurred in 1995. After the earthquake we conducted two surveys consisting of approximately 8,000 families with preschool aged children and 466 families with disabled children. Symptoms related to PTSD

were found more frequently in the small children whose houses had been severely damaged one year after the earthquake. Although the symptoms decreased, they were still present more frequently in the children and their mothers with severely damaged homes in 1998. Children with intellectual or emotional disabilities displayed many behavioral problems, while the physically disabled children required medical resources. Both groups voiced concern for the need to set up specialized facilities to cater for the people disability. Specialized support in a structured environment is necessary for disabled children. Since the Central Java Earthquake occurred in 2006, we have engaged in "children house" activity in the disaster stricken area in collaboration with Gadjah Mada University. Through this activity, we have been able to share what works in helping children with disabilities and their families. The Great East Japan Earthquake has moved into the recovery phase. This exchange of information among the disaster stricken areas reduces the psychological damage of the children and aids in the recovery process.

## $\mathbf{K}_{\text{EY}}$ words

Hanshin Awaji Earthquake, Great East Japan Earthquake, Central Java Earthquake, PTSD, Pre-school aged children, Children with disabilities

## Masahiko Fujimoto

Director Regional Innovation Research Center Tohoku University

"What should we do in order to reconstruct regional economy from great disaster as a university located at the center of the affected area?"



Two years has passed since the Great East Japan Earthquake. The incident was a complex of high intensity ground shaking, a massive tsunami and a serious nuclear power plant accident and the scale of the disaster was unprecedented in the his-

tory of Japan. The toll of dead and missing stands at 18,579 today, of which over 90% is estimated to have drowned by the tsunami. Many people evacuated from Fukushima prefecture and nearly 60,000 people still live outside the prefecture.

The Tohoku district, including areas most severely affected by the tsunami and nuclear power accident, was facing structural problems such as aging of population, depopulation and decrease in number of jobs and the Great East Japan Earthquake made matters worse. We have to tackle these difficult problems in order to reconstruct regional social and economic situation.

This time, we intend to introduce what and how we are doing in the Tohoku district as a university located at the center of the affected area.

## Katsumi Hirabayashi

photographer

"what I have witnessed in Tohoku as a photographer"



Katsumi HIRABAYASHI is a commercial photographer based in Tokyo, Japan. Following the Great East Japan earthquake, Katsumi personally witnessed the damage caused to the Tohoku region and began to help as a volunteer. Since

then he has visited the affected region more than 30 times to capture the reconstruction efforts in Japan. He has successfully held the photo exposition "Dawn in Japan" in Tokyo(Ginza), Kobe and Okayama.