

# INTRODUCTION OF THE SESSION

Shigeko HARUYAMA  
IGU Hazard and risk Chair

# IGU HAZARD AND RISK COMMISSION

**SC member**

**Shigeko Haruyama (Chair)**

**Dale Dominey-Howes (Vice Chair)**

**Juergen Weichselgartner** GKSS Research Center, LOICZ

**Victor G. Jetten** ITC

**Mahmoud Mohamed Ashour** Ain Shams University

**Charlchai Tanavud** Prince of Songkla University

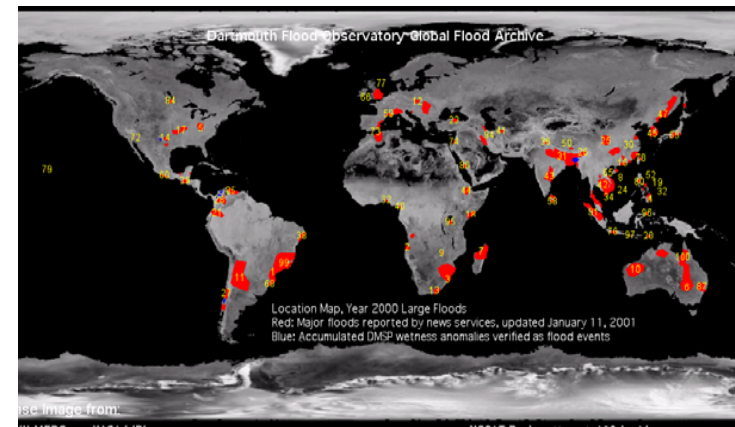
**Ailsa Holloway** University of Cape Town

**Andrey Shmakin** Russian Academy of Sciences

**Teruko Sato (Secretary)** Tokiwa University

**Enrique Novoa-Jerez.** Universidad de La Serena

Correspondence member



# IGU-HAZARD AND RISK COMMISSION PLAN

23 Nov. 2009 PESMA Manila

(Chair: Shigeko Haruyama)

12-16 July, 2010 IGU regional conference,  
Tel Aviv, Israel

28-30 September, 2011 IGU regional  
conference, La Serena, Chile

(Local organizer: Enrique Novoa-Jerez)

26-30 Aug., 2012 IGU Congress Cologne,  
Germany (Local organizer: Juergen and  
Jetten)

# HAZARD AND RISK COMMISSION CONCEPT

- To work to improve links with related agencies working in **geographical approach for hazard and risk**. The Commission will promote further collective engagement in research projects with these organizations. The aim is to research and publish from geographical approach for hazard and risk for mitigation such as **GIS technology and landscape** studies.
- To work to involve **young researchers** in Geography. Given the discussion networking each region in the Commission, we have close links to the several international disaster prevention associations.
- The 2008-2012 will work with the IGU Task Force on the risk management theory to develop a sustainable organisation to support this key endeavour for the future of the discipline. We have found it useful to have the taskforce linked to of LOICZ.

# VULNERABILITY AND FLOOD RISKS

- Natural process
  - Flood probability
  - Flood depth
  - Rainfall – runoff relations
  - Lag time
  - Flood hydrograph
  - Depth – Damage relations
- Prediction of floods
- Produced by social factors
  - Floods among many risks
  - Differential capacities – wealth or poverty
  - Access to information and decision making
- Vulnerability
- Social parameters
  - Location, Housing
  - People in flood prone areas, literacy, Age, gender, income, health, employment, welfare, etc.

Disaster management is important  
disasters becoming more frequent and  
catastrophic.

In the East Asian Seas region, coastal  
communities and small islands are particularly  
vulnerable, as evidenced by the impact caused  
by the 2004 Indian Ocean Tsunami among  
others.

# PART 1

## SCIENCE AND TECHNOLOGY FOR MARINE DISASTER PREVENTION AND MANAGEMENT

Mladineo Nenad :

Development of DSS for environment protection in cases of marine incidents

Kenji Hotta :

Experimental Research on the Development of Inorganic Coagulant for the Removal of Wreck Oil by Oil Spill Accident: Oil Removal Examination at the Philippines Guimaras Island

Li Jun :

Present situation of China for prevention and management against marine disasters

H.M. Ibrahim :

Risk assessment of shipping traffic in the Straits of Malacca

Capt. Rakish Suppiah :

Development of PSSA in the Straits of Malacca

Wrap up