



Asia Pacific Advanced Network
Connecting People, Cultures, Research and Education

Masterclass on Disaster Mitigation

Introduction

Collaborators

UNESCO Jakarta Office

**Disaster Mitigation Competence Centre of EGI-Engage &
APAN Disaster Mitigation Working Group**



30 & 31 Aug. 2017
Dalian, China



Agenda of Masterclass @ APAN44: Day I

- **Session 1 (Chaired by Eric Yen): Introduction by APAN DMWG and UNESCO**
 - APAN Disaster Mitigation Working Group Introduction: Eric Yen, Taiwan (10 min)
 - Disaster Risk Reduction in UNESCO: Sugiura Ai, UNESCO (30 min)
 - Application of Numerical Model on Extreme Weather and Environmental Studies (tentative): Simon Lin, Taiwan (50 min)
- **Session 2 (Chaired by Rene Mendoza): Numerical Simulation and Sciences of Natural Hazards**
 - Disaster Mitigation Collaboration in Asia: Eric Yen, Taiwan (30 min)
 - New Moving-Solid Algorithm for Landslide Tsunami and Boulder Movement (tentative): Tso-Ren Wu, Taiwan (60 min)
- **Session 3 (Chaired by Sugiura Ai): Water-disaster Related Initiatives in UNESCO - IFI and IDI (coordinated by UNESCO to be linked to a water management and water related disaster Masterclass)**
 - International Flood Initiative (implementation of a new strategy to reduce flood risk in Asia and the Pacific), Dr Mamoru Miyamoto, International Centre for Water Hazard And Risk Management under the auspices of UNESCO (ICHARM), Japan
 - Development of grid-based precipitation portal for drought studies, Prof Sima Katirai, Islamic Azad University (IAU), Iran
 - Tsunami IOC: Remote Presentation by Mr Ardito Kodijat, Intergovernmental Oceanographic Commission of UNESCO Jakarta (IOC-UNESCO), Indonesia
 - Hydroinformatics for Water Management in Thailand by HAI, Ministry of Science and Technology, Veerachai Tanpipat, Thailand

Arrangement of Masterclass @ APAN44: Day I (2)

- **Session 4 (Chaired by Shahbaz Khan): UNESCO disaster risk reduction initiatives**
 - Combined remote sensing and modelling approach for flood response and management in Pakistan, Dr Umair Rabbani, UNESCO Islamabad, Pakistan
 - New Initiatives taken for Flood Reduction and management after Super flood of 2014 in River Chenab, Mr. Bodla, Programme Monitoring and Implementation Unit (PMIU) at Punjab Irrigation Department, Pakistan
 - VISUS methodology (Visual Inspection for defining the Safety Upgrading Strategies) for school safety: (Remote) Mr Ardito Kodijat, UNESCO Jakarta, Indonesia
 - Protecting Natural and Cultural Heritage from Climate change, Prof Fang Chen, Institute of Remote Sensing and Digital Earth, Chinese Academy of Science, China
- **Session 5 (Chaired by Eric Yen) : Training on simulation services or more case studies**
 - Tsunami Simulation Web Portal (30 min)
 - Storm Surge Simulation System (30 min)

APAN Disaster Mitigation Working Group

- **Objectives: Strengthening capacity development and collaboration on disaster mitigation by networked open framework in line with Sendai framework for disaster risk reduction and SDG delivery**
 - Sharing of knowledge, data, service, practices and resources
 - Promoting advanced or innovative approaches by case studies
 - Engagement of multi-disciplinary communities
- **Approaches**
 - Building open collaboration platform for resource sharing and federation
 - Knowledge and skills development by interactive activities such as cross-disciplinary training, workshop, etc. from case studies
 - Providing supports of consultation, planning, dissemination and team building

Disaster Mitigation Masterclass @ APAN44

- **Objectives: Masterclass of Open Collaborations on Disaster Mitigation by Deeper Understandings**
 - Leveraging well-developed endeavors in Asia Pacific and other regions by resource sharing, training, and collaborations (via ICT) to strengthen capacity building
 - Asia Pacific is the most disaster-prone region in the world according to the latest UN ESCAP report in 2016.
 - The primary challenge on natural hazard mitigation is insufficient knowledge to the root causes and drivers of disasters leading to invalid and inefficient risk estimation.
 - Successful experiences of Masterclass on network-enabled collaboration on flood mitigation and water security at APAN 37 (in Bandung, Indonesia) conducted by UNESCO,
 - APAN Disaster Mitigation Working Group (DMWG) is working together with UNESCO to the Masterclass at APAN44 by sharing case studies and promote collaborations through networked open platform in broader types of disasters and geographical coverage in Asia Pacific.
 - Case studies, numerical simulations, simulation facilities, and practices from UNESCO, Disaster Mitigation Competence Centre of EGI-Engage Project and other regional projects will be presented at the Masterclass.
 - APAN DMWG likes to promote more APAN partners to bring use cases, local user communities and requirements. Team building or consultation will be supported from the scientific groups or technology groups coordinated by the Working Group or UNESCO and other sources. Collaboration model, directions and long-term plan will be also bring forward for discussion in the panel session.
- **Chair: Eric Yen (ASGC, TW), Peter (ASTI, PH), Ai Sugiura(UNESCO) and Shahbaz Khan (UNESCO)**