
International Session (Oral) | Symbol G (General [Education and Outreach]) | General [Education and Outreach]

[G-01_29PM2]Ocean education in tomorrow's classrooms

Convener:*Chi-Min Liu(Professor, General Education Center, Chienkuo Technology University), Chair:Chi-Min Liu(Professor, General Education Center, Chienkuo Technology University)

Tue. Apr 29, 2014 4:15 PM - 5:30 PM 423 (4F)

This is a poster-only session for presenting current progress and new ideas in all aspects of ocean education. As ocean science and technology speedily advance nowadays, the arising important issue is how to transfer the progress and knowledge from researchers to students in classroom. Such a gap between research and teaching is always a challenge in classrooms not only for teachers and researchers but also for undergraduate or younger students. Therefore the main target of this session is to provide a forum for discussing and seeking the strategies to connect the gap by all possible methods and technologies. Topics which include, but are not limited to educational multimedia, online education, new development of teaching materials, classroom activities and collaborative learning are welcome.

5:15 PM - 5:30 PM

[G01-P01_PG]An experiment of tsunami-like flow through coastal vegetation designed for classrooms

3-min talk in an oral session

*Tzu-yu LIU¹, Chi-min LIU², Ting-hsuan LIU¹ (1.Taipei Municipal Dunhua Elementary School, 2.Chienkuo Technology University)

Keywords:experiment for classrooms, tsunami-like flow, coastal vegetation, disaster mitigation

This paper present an experiment for simulating tsunami-like bores passing over coastal vegetations designed for being performed in classrooms. Easy experimental facilities are used to display and study which layout of coastal vegetations can greatly reduce the bore speed. An acrylic tank which is divided into two regions by a movable gate is used to generate a tsunami-like bore. At the downstream region, different layouts of acrylic cylinders are placed to simulate the planting of coastal vegetations. When the gate is suddenly removed, the water in the upstream regions will flow through cylinders and go outside of the open end of the tank. The longest distance of the flow out of the tank is measured by a video camera. Finally the longest distances of all layouts are compared to find out the best design of layout for reducing the flow speed. The experiment not only can be performed in classrooms, but also provides an insight to the role of coastal vegetations in disaster reduction.