

Update on POGO capacity building (cont'd)

POGO Visiting Professorships

The 2011 visiting professorship was successfully completed in March 2012. Prof. Walker Smith (Virginia Institute of Marine Science, USA) visited Dr. Lam Ngoc Nguyen (Institute of Oceanography, Nha Trang, Viet Nam) to conduct a training course on the use of fluorescence in oceanographic studies of coastal waters of Vietnam. *The following article was provided by Prof. Walker Smith.*

Nha Trang is a city on the south-central coast of Viet Nam, and is well known for its marine reserves, reefs and fisheries. The Institute is one of Viet Nam's leading research facilities, and has a building dedicated to marine plankton that was built with Danish assistance ten years ago. Faculty in Marine Plankton have numerous ongoing projects with various European and Asian countries as well as the United States. Many of these projects deal with the distribution, ecology, and effects of harmful algal blooms in coastal waters.



Prof. Smith and Dr Nguyen with the group of students who attended the POGO training course in Viet Nam

The course was designed to introduce students to the concepts of fluorescence and its use in oceanography. Topics covered included fluorescence of chlorophyll, active fluorescence, fluorescence from space, and fluorescence in other applications that ranged from chemical procedures to applications in flow cytometry. Discussions also included how fluorescence is being used to assess biological and oceanographic impacts of climate change.

The students were from a variety of backgrounds and institutions, including one from Denmark, one from the historic city of Hue, and one from Ho Chi Minh City. Students included beginning students as well as recent PhDs. In addition to the expected challenges with language (English was used in class by the instructor), there were also challenges in academic backgrounds and experiences. Happily, the students worked well together and helped each other with tasks with which some were less familiar. A short presentation by Dr. Doan Nhu Hai on his use of

fluorescence in Vietnamese coastal waters was included.

The course involved both lectures and laboratories. Because the concentration was on phytoplankton fluorescence, many of the laboratories would overlap from one day to the next, as students were asked to monitor growth and changes in fluorescence through time. They were also able to sample in the field to look at spatial patterns of variable fluorescence. The field trips provided a welcome addition to laboratory studies and a vivid contrast in using fluorescence in different settings.

Smith commented that he "found the students to be exceptionally well trained and inquisitive. It was fun showing them new procedures, and seeing them absorb ideas and apply them to their own research areas, whether it was vascular plant physiology or algal growth and ecology". He also was impressed by the students' capabilities and desire to learn.



Fieldwork component of the training course

One of the final elements of the course was an overnight trip north along the coast, where they sampled and enjoyed the village setting. This was a wonderful opportunity for both students and instructor to experience the slower pace of Viet Nam and its beauty (see photo below).



The 2012 Visiting Professorship has been awarded to Dr. Kanapathipillai Arulanathan, who will be hosting Prof. Iosif Lozovatsky at the National Aquatic Resources Research and Development Agency (NARA), Sri Lanka, for a training course on "Coastal Dynamics: Observation and analysis of currents, internal waves and turbulence on shelves".