

**Interdisciplinary Symposium on Environmental Sciences  
—To Establish an Asian Network  
of Environmental Researchers—  
Summary of General Discussion on 13th November 2008**

A meeting of all the participants was held as the concluding session on the final day of the symposium. The session was chaired by Prof. Annamalai Subramanian and Prof. Shinsuke Tanabe and rapporteured by Dr. Karri Ramu.

Apart from the scientists of the Center for Marine Environmental Studies (CMES) of Ehime University, many of the symposium participants representing universities/government institutions/research laboratories in India, Indonesia, Malaysia, Thailand, Vietnam, Sri Lanka, The Philippines, Republic of Korea, China, Bangladesh, Ghana, USA and Canada attended the meeting and enthusiastically put forth their views on the possible future activities to establish an Asian Network of Environmental Researchers. The discussion focused on the following three aspects.

1. Expanding the Present Research Network
2. Finding Ways to Meet Often
3. Establishing New Specimen Banks in Developing Asian Countries

1. Expanding the Present Research Network

The discussion on this aspect went on a very fruitful path. Prof. Satoru Suzuki of CMES, Japan expressed his view that having triangle linkages between interested institutions, as CMES is having now with Hawaii and Oregon State Universities will be more beneficial than bilateral Memorandum of Understanding (MOU). There was a strong support to his view from the audience. Dr. Todd Miller from USA (now in CMES) highlighted the need to have strong interdisciplinary research between institutes. Then Dr. Md. Habibur Rahman of Rajshahi University, Bangladesh, Dr. Pathmalal M Manage from University of Jeyewardenepura, Sri Lanka and Dr. Supawat Kan-Atireklap of the Ministry of Natural Resources and Environment, Thailand evinced their interest in working together with CMES with regard to the pollution problems in their respective countries. Dr. Maricar Prudente, De La Salle University, The Philippines expressed her interest in signing an MOU with CMES based on the long lasting collaborative works between both the institutes. Dr. Nguyen Hung Minh and Dr. Le Thi Hai Le, Ministry of Natural Resources and Environment, Vietnam and Dr. Gan Zhang, Guangzhou Institute of Geochemistry, China expressed their interest in sending

their staff and students to have training at CMES. Dr. B. G. Loganathan of Murray State University, USA suggested that CMES can have courses taught by its alumni.

The members of CMES expressed their interest in expanding the existing network of Asian environmental researchers and many scientists from developing countries showed interest to work with CMES. It was decided that CMES and the interested institutes in developing Asian countries will have staff and student exchange programs, carry out collaborative research programs and have joint publications which are the prerequisites of Ehime University for signing an MOU.

## 2. Finding Ways to Meet Often

With respect to this topic, Dr. Mehran Alaei of Water Science and Technology Directorate, Environment Canada said that conducting meetings in developing countries should be a good idea for the members of the network to meet often. This will benefit not only the scientists but also the officials and local people of those countries. Dr. Agus Sudaryanto from Indonesia (now in CMES) suggested that, having the local people representing various stakeholders and common public from different walks of life at such meetings will be a good idea. Dr. Sani Ibrahim, SaniChem Resources Sdn., Bhd., Malaysia wanted the technical experts from CMES to visit laboratories in different developing Asian countries to train the staff of those laboratories. Dr. Gan Zhang, China and Dr. Maricar Prudente, The Philippines informed that their laboratories are conducting such regular meetings and wanted the members of the network to take interest in attending their meetings.

It was decided to conduct seminars, symposia, workshops, etc. in different developing Asian countries to discuss local and regional pollution problems and the facilities needed to control them. It was also decided to seek for funds to conduct such meetings from the agencies like UNEP, UNDP, local NGOs and some of the respective ministries in those countries.

## 3. Establishing New Specimen Banks in Developing Asian Countries

Mr. Kwadwo Ansong Asante, CSIR Water Research Institute, Ghana suggested that the programs of CMES to be extended to African countries as well. Dr. Agus Sudaryanto from Indonesia, (now in CMES) and Dr. N. H. Minh, Vietnam said that specimen bank will be a new concept in their countries. Apart from limited funds that may be available they evinced their interest in having this concept implemented in their countries. Mr. Muhammad Ilyas from Indonesia (now in CMES) said that it would be a good idea to have cooperation with research vessels to get samples from open seas. Dr. Mehran Alaei, Canada expressed his concern on the non-availability of enough literature on specimen banks and wanted CMES to take steps to prepare some guidelines for writing proposals to funding agencies for setting up environmental specimen banks and

to make them available for all the members of the network. Dr. Aramandla Ramesh of Meharry Medical College, USA further added that guidelines should also be prepared and made available to sample collectors without which the samples may not be collected properly.

It was decided that CMES will provide technical expertise for the establishment of environmental specimen banks in the developing Asian countries, as archiving biological and environmental samples is an important component of environmental monitoring that provides necessary data for toxicological research and other allied researchers. The interested people from developing Asian countries can approach CMES for such guidance. It was also informed that CMES intends to conduct a specimen bank symposium during December 2009.