

I've participated as an observer in Kiso workshop and it was a great opportunity for me to find out that what educational program was designed and how was carried out in the field and lab.

It's not easy to get to the Center for Ecological Research and Kiso workshop, but under many concerns I could participate to the workshop. I can't help appreciating to Prof. Okuda and CER faculties to give me permission on Kiso workshop. I also appreciate to Miss. Narisada in Uji campus, Kyoto Univ., she gave me a great help to get CEC, and I appreciate Miss. Ikuko and her friend, too, they dropped me at CEC. Nevertheless, unfortunately I'd participated only two days. So I couldn't along with the last five days. But two days was efficient to understand the program.

Through the Kiso workshop I've learned several important things and I also have thought something. First and foremost, I was much impressed with the history of biological research; Kiso biological station was found in 1933 by a farsighted leader and his coworkers; today's environmental education program for pre-researcher and people in general was started in 1993 by a university itself not government. Furthermore, this program has two important dimensions; one is for young researchers and the other is for long term monitoring. These facts were challenges to me.

And also participating to the program gave me some encouragements. For our sustainable future, education for next generation researchers is our duty. I knew this program has held on for young researchers, university students, senior high school students, and people in general. Kiso program by Center for Ecological Research of Kyoto Univ. practices these tasks. So, I think this program might contribute to expanding of population who concern with the environmental issues and this program give some opportunities for youngsters who prepare to choice of major in graduated school or job.

I've participated measurement of river discharge, sampling of algae, sampling of benthos, and sorting of benthos. Processing of program contained measurement of physio-chemical properties, and these were systematic, gradually. It was not difficult to practice and good to understand the waterbody. I could compare the research methods for freshwater benthos between me and Kiso program. I usually made alcohol-immersion specimens immediately, after sampling, but I could get a review that collected living samples have got good point to observe the body color, behavior, and characteristics of species.

I could see the international cooperation for our environments on this workshop by participating from the several Asia countries; Indonesia, Japan, Taiwan, Vietnam, and Korea. I hope this co-workshop for education is continually going on for our planet.

Although the causes are various, nowadays environmental education in high schools is not easy. But education for environments is more and more needed with each passing day. So I'm in the agony what I teach and how can I teach the environmental subject. In the middle of the exploring for educational method, I found that freshwater benthos as one part of ecosystem is a good material for environmental education. So, I've taught freshwater benthos in extracurricular activities for last two years. But always I wonder how many schools are introduced the freshwater

benthos, what and how teaches in their class because there were very few to induce the freshwater benthos in their class or extracurricular activities. Therefore I want to communicate with other laboratories or educational institutes, especially CER, because I found that CER provide the educational programs to various layers of society that include senior high school. In Kiso program, I could meet the reconfirmation that they have an educational program for next generation in the field of freshwater ecosystem. Measure of river discharge and samplings showed me more detailed methods in the field experiments. I'm going to introduce more detailed methods in my lessons. I also have some plans; making a regular monitoring site to survey the environmental factors with benthos and to accumulate the data; taking an environmental workshop for students and teachers as the methods of training and understanding for freshwater ecosystem.

In my experiences of environmental education, I'm feeling the environmental education of specific and classified region is much more effective than general area of environments for students to understand the ecosystem. Therefore I'm going to keep doing environmental education for freshwater ecosystem on. Through this educational design, I want to play a role to let students expand the interest in freshwater ecosystem and have environmental friendly mind.