

## Report

### Excursion of the 3<sup>rd</sup> FOLENS International Symposium

On 5<sup>th</sup> and 6<sup>th</sup>, December, 2011 FOLENS conducted students and professors of the E&R Bases and a partner university in a field trip to Iida and Ina Cities of Nagano Prefecture. The objective of this excursion was to understand the concepts and strategies of local communities that actively promote local energy generation for local consumption. With two days visiting, we had opportunity to visit communities and see actual practices of renewable energy utilization. This trip helped all the students, professors and faculty who gathered from various research areas and countries expressing own feeling, sharing opinions and friendship.

The first day, through the introduction of experts we learned basis of energy for example biomass, one of the important renewable energy sources, and heat pump one of the energy-saving technologies. We arrived at Iida city, where “Ohisama Shinpo Energy” was applied in communities. We heard the presentation “Natural energy use promotion intentionally funded by citizens –Change our energy, now!” of the president and realized how their innovative “Citizen Fund” system, how the efforts of Iida City to create a “sustainable cultural city”. That was a suitable energy development policy in context of the world faced to serious situation with resource depletion and environmental pollution. The second spot we visited was Sakura farm, a mushroom producing farm, introduced a boiler to utilize mushroom bed wastes instead of oil as a resource. It is found that this model can be feasible applied in local manufactory in many developing countries. At the end of day, we spent one night at Sangitei Honkan, a spa hotel, using heating pump utilizing overflowed hot spring water and heat generation utilization by wood wastes. It showed an effective process that had energy saving effect. We enjoyed hot spring public bath, relaxed and experienced Japanese-style rooms

The second day we visited Kanae Mitsuba Nursery where Ohisama Shimpo Energy installed solar panels on its rooftop and receives electricity fees from the nursery. We found the company not only applied a sustainable energy but also well educated environmental to the children and their family about solar panels and energy saving. This company with the goal “local energy product for local consumption” cooperated with Iida City to create a “sustainable cultural city”. We went to Nanshin Biomass Cooperative, a pellet factory, promoted wood pellet production as an alternative energy source and consumption of local business. We also visited Hasenakayama Community Power Station, where Inadani Natural Energy Study Group installed a micro hydro power system. It was interesting that they imported it from Vietnam and it was managed by local volunteer group. Though of micro system, produced electricity just lighted one street lamp but it showed that the local people could create energy in their own way to help community effectively. The last destination was the No. 4 Power Station of Mibugawa Power Company, another small-scale hydro power station. We were explained about the electricity generation, equipments in their factory and it had better to apply appropriate energy developmental strategies for each specific area.

This trip attracted me so much because this is the first time I observed actual practice of renewable energy, utilization and issues for sustainable energy. I could learn how important of renewable energy sources, acknowledged the high level of awareness of local people and communities as we met. Sustainable energy utilization not only based on governmental subsidies but also local community power. Energy issues now are urgent task for every country in the world to think for utilization the sustainable energy in future.