

Integration of Solid waste management Tools Into specific settings of European and Asian Communities (ISTEAC)

Hanoi meeting and workshop

TEACHING AND EXCURSION PROGRAMME

Location:

Hanoi University of Science, Building T1, Room 416, 4th floor.

Schedule:

- Wednesday September 22nd, 2004, 1st teaching day.
 - Thursday September 23rd, 2004, 2nd teaching day.
 - Friday September 24th, 2004, field excursion UNRENCO + composting plant.
 - Monday September 27th, 2004, 3rd teaching day.
 - Tuesday September 28th, 2004, 4th teaching day.
 - Wednesday September 29th, 2004, 5th teaching day, exam preparation.
 - Thursday September 30th, 2004, field excursion to landfill, course exam
 - Friday October 1st, 2004, Conclusion session and awarding of course certificates
- Daily lecture time: 1st lecture 7:30-9:00 am,
 15 min break,
 2nd lecture 9:15-11:30 am,
 afternoon: lecture preparation, exam preparation, working groups and discussion

Lecturers:

Prof. Bernd Bilitewski	Dresden University of Technology, Germany
Prof. Peter Werner	Dresden University of Technology, Germany
Dipl.-Ing. Jan Reichenbach	Dresden University of Technology, Germany
Dipl.-Ing. Alexander Janz (<i>left pict.</i>)	Dresden University of Technology, Germany
Dr. Phares P. Parayno	Miriam College, The Philippines
Assist.Prof. Avraam Karagiannidis (<i>right pict.</i>)	Aristotle University Thessaloniki, Greece



Days 3 – 11: Teaching mission and field trips

Wednesday	22/9	Teaching 1 st day	Preliminary design & cost estimation for waste management facilities. Speaker: Bernd Bilitewski Methods and practice of site remediation. Speaker: Peter Werner
Thursday	23/9	Teaching 2 nd day	Landfill processes and design. Landfill sanitation. Speaker: Alexander Janz, Practice of landfill sanitation Speaker: Jan Reichenbach
Friday	24/9	Field Excursion	Visit and discussion at UNRENCO and local composting plant (all)
Monday	27/9	Teaching 3 rd day Morning lecture	Composting approaches and experiments at MC. Speaker: Phares Parayno
Monday	27/9	Teaching 3 rd day	Paper recycling: Approaches and impacts. Speaker: Jan Reichenbach
Tuesday	28/9	Teaching 4 th day	Experimental exercise on needs assessment/ Sorting and processing operations. Speaker: Alexander Janz
Wednesday	29/9	Teaching 5 th day	Waste collection, transfer stations and other logistic aspects. Speaker: Avraam Karagiannidis
Thursday	30/9	Field Excursion	Visit to local landfill Written exam of course participants
Friday	1/10		Concluding session and awarding of course certificates

The lectures and the final exam were attended from a total of 46 participants from different courses and institutions. The exam consisted of about 15 questions which covered all topics of the lessons given and were prepared by the respective lecturers. To evaluate the results of the written exam, lecturers and academic staff met to a panel discussion and applied a pre-defined grading scheme (point system).



Notes on the field excursions:

The composting plant belongs to the Hanoi Urban Environment Company (URENCO) and is located about 20 km far from the main city of Hanoi. An extended discussion took place on the operation of the plant. The director of the plant, Mr. Trinh Xuan Luu and the member of the International Relation Department of URENCO, Ms. Luong Mai Huong

presented plant components and the composting process and answered to questions concerning the operations. The construction of the plant started in the year 2001 and the operation in the year 2003. It is founded from the Spanish and the Vietnamese Government and occupies in total 120 workers, where 53 of them are working in the composting plant. Highlighted was the need of the separate collection of the organics for a better compost quality. A pilot project for this has been started in one district of Hanoi which has brought a significant improvement of the compost output already.



Unloading of collected organic waste at the plant



Composting input after mechanical pre-treatment

During the visit to the Hanoi Urban Environment Company (URENCO) members from each institute had a discussion with the head of the International Relations Department of URENCO, Mrs. Nguyen Thi Hoang Lan and her assistant Mrs. Luong Mai Huong. Assist. Prof. Karagianidis (AUTH) as the ISTAEC project leader and Prof. Trang (HUS) introduced the participants of the workshop and presented the main targets and activities of ISTAEC. Mrs. Lan explained the activities of the URENCO and mentioned the importance of the education on SWM which is one main concerns of the company. A short discussion on the composting plant and its operation took place and the future plans of URENCO introduced. In particular, URENCO representatives expressed concern on industrial and hazardous waste management and their interest on cooperation with universities (such as HUS) on SWM issues. Also discussed was a possible cooperation in a future project and a 2nd meeting concerning this possible collaboration arranged.

The landfill site visited is one of the three main deposit areas operated for Hanoi city and is located 50 km NE from the city center. During the visit which was guided by landfill engineers from URENCO and the advising professors for chemistry, the site operations, protective measures, as well as the leachate treatment facility were presented and technical features discussed.



Waste-derived quality compost ready for sale



The Hanoi landfill site in operation