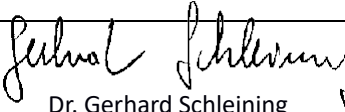


**SHORT COURSE CERTIFICATE Reference 2108**

Name of the course	Emissions and System Analysis (Ô nhiễm và phân tích n)	
Contact person	first name	Hung Anh
	surname	Le
	e-mail	lh.anh.9@googlemail.com
	phone	+84 988014271
Workload for participants	8 days	
Learning Outcomes (LO)	After attending this course, participants - have a basic understanding where plastic waste is generated and which factors have influence on plastic waste generation - are able to explain costs and benefits of plastic waste recycling - understand the development of business plans in the recycling industry - recognize policy approaches which are used for plastic waste management; - understand how Life Cycle Assessment can be used for the planning and monitoring of plastic waste management - are able to characterize common approaches for citizen engagement in waste management	
Target groups	Manager or technical director of plastic companies	
Prerequisites	basic knowledge about plastic production	
Description of the course	This course provides puts plastic waste in the wider context of regulations, economic aspects, system analysis and consumer behaviour. Plastic waste is part of household waste, industrial waste and agricultural waste, the generation of plastic waste is explained. In terms of economic aspects, the economic benefits of plastic waste recycling are explained. Further related cost and fees systems as well as business plan development are explained. A case study for a business plan of a recycling facility in Laos provide further details. For plastic waste policies, global trends and regulations in Vietnam and Laos are given. Policy instruments such as command and control approaches and market-based instruments are explained. For the system analysis of plastic waste implication, Life Cycle Assessment is introduced. The concept of citizens engagement is shown.	
Overview of the syllabus	<ul style="list-style-type: none">- Plastic waste generation (ppt slides)- Economic aspects (ppt slides)- Policy and legislation (ppt slides)- LCA based environmental system analysis (ppt slides)- Plastic management though citizens engagement (ppt slides)	
Teaching and learning methods	Presentation and practice methods were used. PBL method for participants.	
Assessment of LO	Answer multiple choice questions Group report on the project	
Trainer	<ul style="list-style-type: none">• Dr. Nguyen Thi Thanh Truc• MSc. Do Doan Dung• Dr. Nguyen Thi Lan Binh• MSc. Nguyen Trung Hoang	

Reviewer 1	Prof. Dr.-Ing. Kerstin Kuchta, Technical University Hamburg
Reviewer 2	Dr. Sujitra Vassanadumrongdee, Chulalongkorn University, Bangkok
Date of Certification	2021-04-14
Expiration of Certification	2024-04-13

Vienna, 2021-04-14  Dr. Gerhard Schleining