

COMLEAM-Workshop

Introduction and Application of the Simulation Software COMLEAM

Date 12th / 13th September 2019

Place HSR University of Applied Sciences Rapperswil

> Oberseestrasse 10 8640 Rapperswil Switzerland

Workshop Building 1, room 1.277

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Background

The software COMLEAM (Construction Materials Leaching Model) has been developed by HSR to simulate the leaching of substances (e.g. biocides, flame retardants) from components and buildings to assess its environmental impact. COMLEAM takes into account wind driven rain, the temporal resolution of runoff, spatial data of specific buildings, and generates automatically a standardized reporting file. The modular concept can be adapted by the user and run in an expert configuration (for science, research) or standard configuration (for product or substance approval). In several projects COMLEAM has been successfully used and demonstrated its potential.

Programme

The new COMLEAM Version 2.0, the web-based hosting and its application will be presented and discussed. All participants will be trained in several exercises to get further insight to modelling substances release from buildings, e.g. in using field or laboratory leaching data provided by HSR or from the users.

Presenters

- Prof. Dr. Michael Burkhardt, UMTEC Institute of Environmental and Process Engineering
- Prof. Dr. Olaf Tietje, MathNat Mathematics-Natural Sciences
- Mirko Rohr, UMTEC Institute of Environmental and Process Engineering
- Silvan Gehrig, IFS Institute of Software Engineering









1st Day (12th September)

Time	Programme
10:00-10:15	Welcome Michael Burkhardt
10:15-11:00	Leaching and environmental impact assessment Michael Burkhardt
11:00–11:45	Software deployment: web based Server and local installation Mirko Rohr, Silvan Gehrig
11:45–12:30	Structure of COMLEAM: a quick walkthrough Mirko Rohr
12:30-13:30	Lunch
13:30-15:00	New COMLEAM features Mirko Rohr
15:00-15:30	Parametrization of emission functions Olaf Tietje
15:30-15:45	Coffee Break
15:45-16:30	Local and temporal influence to emissions Mirko Rohr, Florian Hochstrasser, Michael Burkhardt
16:30-17:30	From components to buildings Mirko Rohr, Florian Hochstrasser

19:30 Dinner: Restaurant Dieci, Rapperswil (at the lake)

2nd Day (13th September)

Time	Programme
8:30-09:30	Emissions from construction products: From lab to field Olaf Tietje, Michael Burkhardt, Mirko Rohr
09:30-10:30	Emission scenario documents (ESD) and dynamic simulation (COMLEAM) Mirko Rohr, Florian Hochstrasser
10:30-10:45	Coffee Break
10:45-11:30	EU-Scenarios proposed for dynamic simulations Mirko Rohr, Florian Hochstrasser
11:30-12:00	Product classification by modelling Mirko Rohr, Michael Burkhardt
12:00-12:30	Summary and Outlook Michael Burkhardt
12:30-13:00	Feedback
13:00	End (Lunch)