ODOUR MODELLING FROM LARGE SOURCES, VIRTUAL AND BLENDED CROSS-BORDER PL-CZ UNIVERSITY COURSES

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Abstract: Regular modelling of the emissions dispersion including odor from large sources is required by law in all EU countries, however, there is a shortage of experts in this very specific and demanding profession. We reported before that lecturers from UHK (CZ) and UO (PL) in cooperation with experts from the CHMI (CZ) and Idea-Envi (CZ) designed and verified cross-border CZ-PL courses for bachelor's and master's study programs that always include full-day introductory motivation internships. This was not possible during the Covid pandemic. Therefore, KHP and IES-Veolia (CZ) allowed to use virtual 3D-interactive internships with final test at WWTP HK for distance education for professional training of employees.

A total of 89 (34 CZ, 55 PL) students participated in the research. Of these, 35 (15 CZ, 20 PL) students took part in real and then in virtual excursions.

Statistical evaluation of the time of virtual internship with tests and monitoring of interest in the taught topic using internship queries via MS Teams clearly indicate a significant advantage of students who participated first in a real and then a virtual excursion, i.e., the irreplaceability of a real excursion in the framework of teaching mathematical modelling of odour dispersion.

Keywords: Odour modelling from large sources, 3D-virtual interactive internship on WWTP