CIRP LCE 2018, LCA Short Course

Addressing the most critical issues in LCA: from theory to practice

Date and time: 29 April 2018, 08:30 – 17:00

Location: Tivoli Hotel & Congress Center, **Room Dansetten**

Course objective: The objective of this course is to give guidance on how to address the most critical issues that an average LCA practitioner is faced with when carrying out and documenting an LCA study. Completing the course will allow participants for an educated and more confident modelling and reporting of LCA studies in the future.

Course level: The course is designed for those who are already familiar with LCA to some extent and have carried out or participated in carrying out an LCA before.

Instructors: Senior researcher Mikolaj Owsianiak & Associate professor Alexis Laurent, Division for Quantitative Sustainability Assessment, Dept. of Management Engineering Technical University of Denmark.

Course schedule:

08.30 – 09.00	Arrival, registration, coffee/tea
09:00 – 09:15	Introduction and overview
09:15 – 10:00	Definition of the functional unit with practical exercises on identification of function(s)
10:00 – 10:15	Coffee break
10:15 – 12:00	Handling of multi-functional processes and associated modelling: clarification of the terminology used in authoritative guidelines and by database developers (attributional, consequential, allocation, system expansion, average, marginal data)
12.00 – 13.00	Lunch break
13:00 – 13:30	Identifying and dealing with missing data when performing life cycle inventory analysis
13:30 – 14:00	Selection of life cycle impact assessment methods: challenges and criteria
14:00 – 14:10	Coffee break
14:10 – 15:05	Life cycle interpretation: walk through the completeness check, consistency check, sensitivity check, identification of significant issues and conclusions, limitations and recommendations steps, including examples of non-recommended practice
15:05 – 15:15	Coffee break
15:15 – 15:45	Recommendations on good reporting practice for LCA study
15:45 – 16:00	Wrap up, feedback & closure
16.00 – 17.00	Informal networking with beverages

About the course instructors:

Mikolaj Owsianiak, Senior Researcher, PhD in Life Cycle Impact Assessment
LCA practitioner. Coordinator of LCA activities within several European research, demonstration and innovation projects. He has also worked closely with small and medium size enterprises (SME) applying LCA to assess sustainability of technologies developed by the SMEs. Involved in an EU FP7 project LC-IMPACT on development of life cycle impact assessment methods for dealing with terrestrial toxicity of metal emissions. He is a contributor to methodology chapters providing a comprehensive and pedagogic introduction to LCA methodology, and first author of an illustrative case study providing an example of how to structure a report according to the ISO requirements (for details, see new LCA textbook Hauschild et al. 2018, Life Cycle Assessment. Theory and Practice).

Alexis Laurent, Associate Professor, PhD in Life Cycle Assessment
LCA lecturer, practitioner and developer. He has run the course on life cycle assessment given at DTU since 2014 (Master level, 80-120 students, 10 ECTS), in which students perform real-life full-fledged LCA case studies in collaboration with companies and institutions (for details, see Cosme et al. 2018, Learning-by-doing: experience from 20 years of teaching LCA to future engineers). He has worked in the field of LCA for the past 8 years, with research focus on life cycle impact assessment (LCIA) method development (incl. normalisation), footprinting of large-scale systems (sectors, countries), and applications of LCA to systems in various domains, including waste management, nanomaterials and energy sectors.