Training subjects: Cycleco 2017 (update 20 janvier 2017)

French AND English required

**Subject: Aquatic Biodiversity**

Title: Implementing impact assessment on aquatic biodiversity in Life Cycle Assessment - A case study with the impact calculation of 1 kWh from hydro-electric dam. (Evaluation des impacts sur la biodiversité aquatique en ACV- Cas d'étude avec l'évaluation des impacts d'un kWh hydro-électrique.)

Description: Hydropower is the main source of renewable energy used in Europe. This source of electricity has low carbon emission but it is frequently questioned concerning possible impacts on biodiversity. In a recent study [http://www.ekoconception.eu/fr/wp-content/uploads/2015/07/Le-Journal-du-D%C3%A9veloppement-Durable-de-McDonalds-France.pdf], Cycleco has developed characterization factors for assessing impacts on aquatic biodiversity from dams. Based on this results and on previous results about aquatic ecotoxicity, water withdrawal and heat of rivers, Cycleco is now opening a training position for assessing overall impact of the production of 1 kWh from hydropower and comparing it with other electricity production mean.

Supervision: Dr Jerome Payet

Location: Cycleco- Amberieu- France

Language: English and French required

Competence: Life Cycle Assessment, Life Cycle Impact Assessment, Freshwater ecology, ecotoxicology.

Allowance : 3 300 Euros total for the 6 month training + travelling fees

Training duration: 6 month

Contact : jerome.payet@cycleco.eu

Send CV and cover letter to [recrutements@cycleco.eu] mentioning the subject of the training

Training subjects: Cycleco 2017 (update 20 janvier 2017)

English required

**Subject: Copper for animal nutrition**

Title: Life Cycle Assessment of trace metal for animal nutrition: a case study with the use of high quality copper for feed

Description: Animal nutrition requires to add trace of essential metals in order to ensure animal health. Several sources and different quality of metals can be used. Currently, numbers of metals additives are low quality and can be associated with toxic substances. New way to produce high quality metals for feed whith high purity are currently explored. The purpose of the training is to do the Life Cycle Assessment of copper for animal nutrition comparing environmental impact of current low quality product with new products of higher quality (better purification processes, improved control, etc). Life Cycle Assessment method based on ISO 14040-44 and ILCD handbook will be used to compare both products.

Supervision: Dr Silu Bhochhibhoya

Location: Cycleco -Amberieu - France

Language: English

Competence: Metal chemistry, Life Cycle Assessment, SIMAPRO, Ecoinvent, ISO 14040-44, ILCD

Allowance: 3 300 Euros total for the 6 month training + travelling fees

Training duration: 6 month

Contact : jerome.payet@cycleco.eu

Send CV and cover letter to [recrutements@cycleco.eu] mentioning the subject of the training

------------------------------------------------------------------------------------------------------------------------ **Subject: LCIA Human Health**

Title: Impact of indoor emissions on human health in Life Cycle Assessment

Description: The European Commission has selected USETox in the ILCD (international Life Cycle Data System for assessing impacts of toxic emissions on human health in Life Cycle Assessment. In his latest version, USEtox also enable the impact assessment for indoor emissions. Nevertheless, some emissions considered as important for indoor air quality are insufficiently documented or sometime missing in USEtox. Throughout the actual emissions of 5 building materials, the trainee will convert the measured concentration of toxics of the materials in impacts on humans quantified with USEtox. It will thus be possible to quantify impacts of indoor emissions and to compare it to the overall impacts on human health.

Supervision:Dr Silu Bhochhibhoya

Location: Cycleco- Amberieu- France

Language: English required

Competence: Life Cycle Assessment, Life Cycle Impact Assessment, USEtox.

Funding : 3 300 Euros total for the 6 month training + travelling fees

Allowance duration: 6 month

Contact : jerome.payet@cycleco.eu

Send CV and cover letter to [recrutements@cycleco.eu] mentioning the subject of the training

------------------------------------------------------------------------------------------------------------------------ **Subject: LCI for the textile Industry**

Title: Developing Life Cycle Inventories for the European textile industry

Description: The recent advances of the regulatory framework called "Environmental Footprint of mass market products" supported by the "Single Market for Green Product Initiative" (European Commission) is strongly inciting for democratization of Life Cycle Assessment. Thus future practitioners of LCA will be small companies instead of expert consultants. This requires to provide to textile companies reliable Life Cycle Inventories covering most of the textile processes and material. For that purpose, Cycleco is developing Life Cycle inventories concerning different processes (e.g. Pritning, dying, etc) and materials (polyamide yarn, Jute, etc). The objective of the training is to develop new Life Cycle Inventories that will be used by textile companies. These inventories shall respect the ILCD framework and both ILCD editor and eco-editor format.

Supervision: Ing. Sandrine Pesnel

Location: Cycleco- Amberieu- France

Language: English required

Competence: Life Cycle Assessment, Life Cycle Inventory, ILCD editor, Ecoinvent

Allowance: 3 300 Euros total for the 6 month training + travelling fees

Training duration: 6 month

Contact : jerome.payet@cycleco.eu

Send CV and cover letter to [recrutements@cycleco.eu] mentioning the subject of the training