



## Master project in Industrial Engineering

**Title:** A Supply Chain Management Approach to Fish Industry Liquid Effluents

### Type of project and ECTS

Master Thesis 30 ECTS

### Short description

Investigation of the potential for implementation of new technology in the herring industry from a supply chain perspective.

### Project description

This Master project is part of a large Nordic Innovation funded project i.e. PIPE and deals with investigation of the potential market for technologies aimed at recovering valuable components in effluents. The technologies which have been tested include ceramic membrane filtration and electro-flocculation and data have been gathered about their performances. In addition some of the organic fractions recovered have been analysed and present a potential for valorisation. A value chain perspective is needed to get a full overview of the cost/benefit for the implementation of these new technologies at the industrial level. This includes alignment of the cost of installation and the cost of effluent discharge and treatment as well as the market potential for the recovered fraction (considering for example their economical values, reduced environmental impacts etc.)

### Expected outcome

The student will collaborate with the project's partners, who will assist in data collection and further take part in interviews and guide the student regarding literature and relevant background information from national and industry data sources. The expected outcome is a MS thesis covering analysis of the key players of the supply chain involved in implementing the technologies in the herring industry, material flow analysis, cost- benefit analysis and market analysis.

**Time:** May – December 2014

**Industrial Collaboration:** The project "*Pelagic Industry Processing Effluents: Innovative and Sustainable Solutions – PIPE*" is a large Nordic Project with 7 partners including 5 industries and 3 Nordic Universities and deals with high organic effluents generated from herring producers. The main goal of this project is to solve the problem of high organic load effluents in the marinated herring industries by investigating environmentally friendly and cost effective technological solutions. A close collaboration with the following industries is expected in this student project

<http://www.liqtech.dk>

<http://www.a-factory.eu>

<http://www.fiskogfoedevarer.support.dk>.

**Project website:** <http://www.nordicinnovation.org/da/projekter/marine-innovation-projects/pipe-pelagic-industry-processing-effluents-innovative-and-sustainable-solutions/>

### Please, contact the University of Iceland supervisors for further information

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