### Emilio Alvarenga

CV November 10th 2011



Alpinveien Studentby, Hybel 3G-1 8515 Narvik, Norway Tel. (+358) 40 4619057 / (+47) 412 86000 ealvaren@paju.oulu.fi Born, December 30, 1983, Tegucigalpa Nationality, Honduran

## EDUCATION

Master of Science (MSc.) student, University of Oulu, Finland and Narvik University College, Norway, Faculty of Technology 2010-

*Programme*: Barent's Environmental Engineering, 1<sup>st</sup> ac. year. Environmental Engineering, 2<sup>nd</sup> ac. year: Sustainable Energies; 60/120 ECTS points

# Bachelor Degree, Universidad Nacional Autónoma de Honduras (UNAH), Tegucigalpa, Honduras, 2000 – 2006

*Programme*: Industrial and Chemical Engineering, Major: Chemical Engineering (Industrial Processes)

Liceo Franco Hondureño (high school), Tegucigalpa, Honduras, July 2000

## WORK EXPERIENCE

# Trainee, University of Oulu, Laboratory of Mass and Heat Transfer Process Engineering Oulu, Finland, 23.5.2011–12.8.2011 (2,5 months)

The Laboratory organizes the teaching of basic and advanced courses for students of process and environmental engineering. Its research activities are conducted in the fields of physical-, chemical- and biochemical phenomena in multiphase and multicomponent systems; process development and design; sustainable production processes; and treatment and utilization of industrial by-products and wastes.

My duties included preparation, characterization and laboratory testing of adsorption materials. The adsorption materials, i.e. activated carbon, were prepared from cocoa pod husk by chemical activations with three different activation agents. After characterization with different methods, including e.g. BET, SEM and ICP-OES, the activated carbons were tested for their ability of adsorbing As, Pb and Cd from aqueous solutions.

# Chemical analyst / Laboratory instructor, Universidad Tecnológica Centroamericana (UNITEC), Tegucigalpa, Honduras, 1.2.2008 – 30.8.2010 (30 months)

UNITEC provides higher education and it sells laboratory testing services to the Honduran private sector mainly in industrial and environmental fields.

On one hand, I was in charge of the physicochemical area of the laboratory (1 employee supervised) under ISO/IEC-17025's quality management system. I was responsible for carrying out water and waste water analysis by volumetric, gravimetric and spectrometric methods. In addition, analysis of food macronutrients and medicaments were fulfilled as well. On the other hand, I was working as a laboratory instructor of chemistry, ecology and sanitary engineering courses.

# Process assistant, Cementos del Norte S.A. (CENOSA), Choloma Cortés, Honduras, 1.5.2007 - 30.11.2007 (7 months)

The company produces different types of cement for the Honduran construction sector.

I supervised the quality control laboratory technical operations (4 employees). At the same time, I was making analysis of cement process samples by X ray spectrometric methods. I ensured the analysis of metals in cement process samples by volumetric and gravimetric methods when the instrumental methods were not available.

LAGUAGE SKILLS	
Spanish mother tongue	English excellent
French excellent	Finnish basics

IT SKILLSOperating Systems:Windows (Excellent)Software:Microsoft Office (Excellent)Programming:C++ (basics), MatLab (basics) and Simulink (basics)

#### ORGANISATIONAL SKILLS

In my previous job, I worked with a Quality Management System under ISO/IEC 17025:2005 Standard.

#### **TECHNICAL SKILLS**

Technical competence as a Chemical Analyst under ISO/IEC 17025:2005 Standard

#### SOCIAL SKILLS

*Member of the Rotaract Club Oulu (District 1400), 1.9.2010 - 1.9.2011* This Club is part of Rotary International organization.

Member of Rotaract Club San Migvel de Heredia (District 4250), 15.01.2009 – 30.8.20120 I was working with young adults to develop leadership through community service and accomplishing many projects in terms of Honduran society benefit.

#### POSITIONS OF TRUST

Director of Community Service, Rotaract Club San Migvel de Heredia, 2009 - 2010

#### HOBBIES

French literature and film festivals, listen to jazz music, play soccer and basketball.

#### AWARDS

Erasmus Mundus External Cooperation Window (EMECW Lot 20b) scholarship holder, 2010 - 2012

There was an open application process in Central America and Mexico in order to obtain the grant. The evaluation committee from the Universidad del País Vasco (UPV/EHU) took into account the marks, the statement of motivation, the language skills and extracurricular activities as well.

#### Novice of the year, Rotaract Club San Migvel de Heredia, 2009 - 2010

This is an award for young leaders that have an active participation in most of the community service projects of the club.