



LUNDS UNIVERSITET
Lunds Tekniska Högskola



Would you like to:
Prepare yourself for a globalized world
Learn about the renewable energy for the future
Learn about fuel cells
Work experimentally or modelling
Try to live and work in a different culture
Do your master thesis in Ecuador!!!

Master thesis at ESPOL in Guayaquil, Ecuador with focus on Experimental or Modelling Fuel Cell Research

Department of Energy Sciences (Lund University) is offering the possibility to perform your master thesis at the Laboratory of Renewable Energy at ESPOL (Escuela Superior Politécnica del Litoral of Ecuador).

The costs for travel (flights) and accommodation in Guayaquil are covered for 2 students per year by a research project form Åforsk research foundation.

The research will focus on experimental or modelling PEFC (Proton Exchange Fuel Cell) research such as new types of bipolar plate material development (by using expandable carbon), modelling characterization of Gas Diffusion Layers (understanding the different transport phenomena inside the PEFC through the GDLs) or PEFC behavior (understanding the energy conversion process when the cells are operated under different conditions). Associate Professor Mayken Espinoza-Andaluz will be responsible for the scientific work at ESPOL. Dr. Espinoza has international research experience both from Fachhochschule Stralsund in Germany and Lund University in Sweden from where he obtained his PhD degree.

Escuela Superior Politécnica del Litoral of Ecuador (ESPOL) is a teaching/researching university in Guayaquil, Ecuador. ESPOL has been selected among the best 3 universities in Ecuador. It is possible also for you to stay at the campus student accommodation. The campus is located around 13 km from downtown.

Guayaquil is the economic and commercial capital of Ecuador located in the Southwest of the country, population in the urban area is around 3.5 million inhabitants. Guayaquil has a monsoon-influenced humid subtropical climate and is largely mild and humid. It has two distinct seasons, a wet and rainy season that extends from January to May (corresponds to the austral summer); and the dry season that goes from June to December (corresponds to the austral winter). Because it is located in the middle of the equatorial zone, the city has warm temperatures throughout the year, although the most stifling heat is between January and May. Getting some of the most beautiful beaches in South-America from Guayaquil takes around 1-3 hours by car. You can find the so called "La ruta del sol".

In Guayaquil, the typical dish is ENCEBOLLADO, a broth with albacore, cooked yucca and seasoned with type of salad composed (onion, kidney tomato, cilantro and lemon juice), considered an excellent revitalizing after a night party. The downtown area of Guayaquil is one of the most important places for national and foreign tourism, since it is the oldest and colonial in the coast region. Guayaquil airport have direct flights to and from Europe.

Department of Energy Sciences is also offering a project course (MVK115 Project – Energy Technology, 7.5 ETCS), which can be used to perform a literature pre-study or to write a scientific article after the master thesis. Please contact Martin Andersson if you are interested.

Interested?

Contact Associate Professor Martin Andersson at: martin.andersson@energy.lth.se