

2013 Harald – Fachhochschule Offenburg/Master Energy Conversion and Management

From Offenburg to Kajang

Doing an internship in Asia was always a big wish, and with the help of my University of Applied Sciences Offenburg I could find this offer at German Malaysian Institute (GMI) in Kajang, Malaysia. My strong interest in the big variety of cultures in Malaysia and the working life in the country made strengthened my decision to spent six months there.

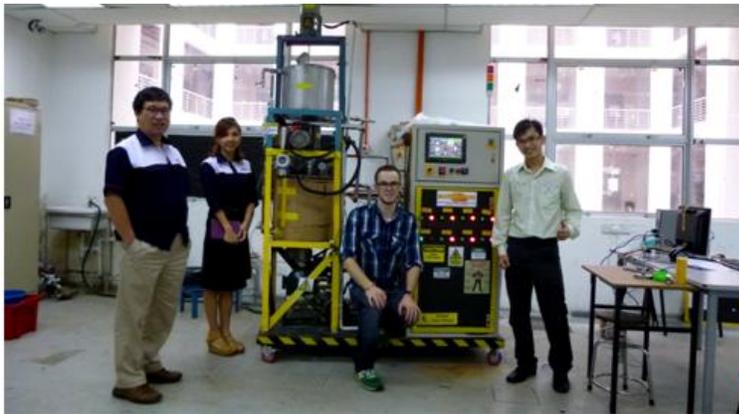
Tasks and projects

During my internship I got involved in several projects in my department “Industrial Electronics”. Mainly the support of students doing their Final-Year-Project (FYP) in the study course “Process Instrumentation and Control” was my task for almost 4 month. There are several projects in this field and I could choose the projects which I wanted to contribute. In my case it was a plant for processing Bio-Ethanol. This plant consisted of two process parts. The first process was the fermentation process, where sugarcane molasses was fermented with the help of yeast. The temperature and the pH-value of this mixture were controlled continuously. During this process ethanol was produced. To separate the ethanol from the remaining water and other solutions the mixture was distilled during the second process step. In the steam-heated distillation column the temperature and the reflux-flow were controlled. All control operations were implemented in a Programmable Logic Controller (PLC).

After the Final Year Project Phase was finished, I contributed in the improvement of one FYP for further purposes. This project was a plant for drying heat-sensible products by using a freeze drying process. Together with a student we improved the control and process of this plant.

I also got the opportunity to design an exhibition model for GMI related to their new study course “Sustainable Energy and Power Distribution”. It was about a cube, which could be turned and illuminated by solar power. By using a battery the system could be designed as a standalone system operating at 12V, which does not have to be connected to the electrical power grid. The model consisted of a cube, which can turn on a pole and be illuminated at night. The cube areas can be used for GMI or advertising labels. By setting up the pole and the solar panels at the entrance area of GMI campus it is visible for students, employees and visitors of GMI.





Atmosphere at GMI

The working and studying atmosphere at GMI was very cozy, because everyone is interested to meet Germans and also show them their live, culture and of course their food! Eating is a very important thing in Malaysia and so going for eating with the people at GMI is always nice and always a great opportunity to get to know the people. Of course the working and communication culture and habits differs from Germany but it is interesting to explore it and also show Malaysians how it is done in Germany.

Leisure Time in Malaysia

During six months in Southeast Asia there is enough time to travel around and explore. I was travelling a lot in Malaysia as well as in Thailand and visiting Singapore. Malaysia offers a variety of holiday opportunities such as tropical islands, historical cities as well as nature and jungle spectacles. Students invited me to join them for tours, which I always loved to do. Taking this opportunity, they could show me parts of Malaysia seen through their eyes. Also exploring their way of life, hometowns and meeting their friends and families was a worth experience for me.