



## ***CHUST – Chemical U.S. Travels***



### ***Travel Story 2017***

**Name: Maria Alba Naharro Vilàs**

**Year and line of study at KTH: 2017, MSc Chemical Engineering for Energy and the Environment**

**Which university did you visit? University of Notre Dame, South Bend, Indiana**

Time frame: from the 3<sup>rd</sup> June to the 12<sup>th</sup> August

Visa type: F1

Insurance: From the university (iSURE programme)

Scholarship: From the university (iSURE programme)

**Please write about your travel, internship and time in the U.S. by answering the questions below as detailed as possible, in 1-2 pages. You may answer in Swedish or English.**

#### Project description

It was a problem in heterogeneous catalysis at the Schneider Research Group (CoMSEL, Computational Molecular Science and Engineering Laboratory). The project is included in one of the current research areas: NO<sub>x</sub> selective catalytic reduction (SCR) - Development of atomistic models of Cu-exchanged zeolites used to reduce small amounts of NO<sub>x</sub> to N<sub>2</sub> in an overwhelmingly large background of O<sub>2</sub>. The interaction with the professor was really good even he needed to travel to other cities for conferences and other job duties. He was very helpful as well as the group colleagues. The office schedule was from 9 to 17. However, it was very flexible and since it was computational project, I could work from my laptop anytime.

My project was part from a big project where several PhD students were also doing their researches so every week we had subgroup meetings where we were updating the other members. From this environment, I have learned how to communicate technical information in few minutes and how to have a concise discussion. The other members had so much more experience so I was following their tips at the same time that developing my own ideas or thoughts. During my experience at the Schneider Group, I was learning new things every day. In addition, it was a very professional environment so I could enrich my writing and communication skills when it comes to write a technical report or have a formal presentation.

My previous knowledge was not entirely enough since the computational part combined with quantum chemistry are not main areas from my studies. However, I had many help from the group members and professor so I adapted to the research very fast. Reading a quantum chemistry and make some short presentations together with a Postdoc student also helped me to understand the main principles from my research.

Finally, regarding the responsibility, I was having the same than other first year PhD students. I had my own place in the office and access cards.

### Campus life

For first time, I was included in an iSURE programme where the accommodation, health insurance, diets and international activities were all included. Their help was extremely good from the very first time. I had email contact with the international coordinators that helped me in every single step for the VISA application. They provided very useful information from the university and US life.

Once I arrived, they even bought the bus ticket to arrive to the University (Chicago to Notre Dame) and they picked me up. They have summer interns that were organizing the housing, welcome activities, trips and many more activities. Since during summer there are no classes, the campus was not busy with thousands of students but thanks to that activities and the research group, it was very easy to find people to hang out with.

The campus is safe, they have security services and the iSURE team gives you some tips to avoid unpleasant situations. I was living in a student accommodation for girls with some housing rules but I had flexibility and total freedom to go to parties outside campus since it is not allowed inside.

In campus as an iSURE student, we had access to many facilities such as the three gyms, basketball courts, swimming pool and other many facilities. The campus also has two lakes and a small beach nearby. South Bend is a very small student city but it is connected with Chicago by train and bus.

### Application

I did not have any problems, the iSURE interns and coordinators were guiding me during the whole process so the whole application was very smooth and organized. They explain you what documents they need and for what parts of the process. Regarding the visa, I gave all the documents listed in the embassy webpage and as a support, I also brought my flight tickets to go and come back as well as my acceptance letter from the University of Notre Dame.

**Thank you for taking the time to fill out this form and share your story!**

**Name the document according to: “University – Your Name” and send it as a PDF to [chust@k.kth.se](mailto:chust@k.kth.se)**

Best regards,  
CHUST committee 2016/ 2017