



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

### ***Travel Story 2016***

**Name:** Pontus Renholm

**Year and line of study at KTH:** Going into my first year of masters studies "Chemical Engineering for Energy and Environment".

**Which university did you visit? (Name, city, state):**

City College of New York (CCNY), New York City, New York

Time frame: 10 Weeks (Beginning of June until mid-August)

Visa type: J1

Insurance: Gouda

Scholarship: 2000 USD

**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**

My supervisor was Dr. Ilona Kretzschmar, and she is great. She is very easy to talk to and likes to have students/interns in her lab. At the time that I came to her lab she had just become the chair of the department and was very busy, at least in the beginning of the summer. Towards the end of the summer she was gone for two weeks, but it worked out well as Dr. Kretzschmar was quick to respond to emails.

I was working with Dye Sensitized Solar Cells (DSSCs). DSSCs generally have lower efficiency than traditional solar cells. However, due to their low cost, ease of manufacture and the fact that they perform well under low intensity light, they have attracted a lot of attention. The goal is to make them efficient enough to compete with traditional solar cells on a cost per kWh basis.

The aim of this project has been to learn the basics of making DSSCs and measuring how altering various parameters impacts the performance of the cells. I really liked this project as it was "hands on" right away. After one day of training I was able to produce DSSCs on my own. Dr. Kretzschmar was not micromanaging me and entrusted me with a lot of responsibility. This was my first exposure to research, and needless to say, I was able to acquire much insight into this.

The average workday was between 9am to 5pm. However, if you had to leave earlier on a given day, there was never any problem as long as the work was completed in a timely manner.

#### **Campus life**

**What was life like at the university you visited? Campus life, nightlife and potential trips?**

The campus was pretty empty during the summer, so there was not much campus life to experience. However, in New York there are plenty of things to do. For example, I went to two Broadway shows and took trips to Washington, D.C. and the Niagara Falls. There are innumerable restaurants, pubs, and clubs to experience as well.

**How much did it cost living in your city? How did you finance the stay in the U.S?**

**Scholarship or private funds? If you received any scholarship, did you need to send any documents to the university in order to receive the funds?**

As an intern you received a scholarship of 2000 USD and 3060 SEK was given by CHUST. The rest came from personal funds. One thing to keep in mind is that New York is an expensive city. I lived in a four persons' apartment where I had my own room. I paid 950 USD per month.

**How did you find housing during your stay at the university and how much did it cost? How satisfied were you with the housing situation?**

I used Airbnb to find housing and was overall happy with the living situation.

**Application**

**Were there any problems that did arise during your stay that you think future students need to know about? In such case, which problems did you encounter?**

No particular problems occurred.

**What documents did you need to send to the university and what did you need to bring to the embassy in order to get your visa approved?**

Dr. Kretzschmar was always on top of things and told us what to send to the school. She also sent us everything we needed in order to apply for the visa.

To the school I sent:

- a) DS-2019 form.
- b) Shipping address & phone number.
- c) Resumé.
- d) Copy of passport.
- e) Letter from bank stating I have enough money to support myself during the stay.
- f) DS-7002 form.

To the embassy:

I brought every document I had. There is a checklist on the US-Embassy webpage on what to bring.

**May we publish your travel story on the official CHUST webpage ([kongligkemi.se/chust](http://kongligkemi.se/chust)) so that future exchange students can be helped by the information?**

Yes.

**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 2015/ 2016