



CHUST – Chemical U.S. Travels



Travel Story 2017

Name: Carl André Nyberg Borrfors

Year and line of study at KTH:

Chemical Engineering, started in 2014

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

New York University, New York City, NY

Time frame: 3/6/17 - 5/8/17

Visa type: J1

Insurance: IF Insurance

Scholarship: \$3000

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

Can you describe the project you were working on? What subject area did it cover? How did the contact with the Professor/supervisor work? How long was an average day in the lab?

What new things have you learned during the project? Was your prior knowledge sufficient for you to handle the tasks presented to you? How much responsibility were you given?

I worked on two different projects during my internship at NYU. The first was oriented around Organic Hydrogen-bonded Frameworks, which theoretically could be used to encapsulate a wide range of different compounds and force them into a crystalline form to allow for structure analysis with Single-crystal X-Ray diffraction. During this project I used a lot of knowledge and techniques from the organic chemistry courses for designing syntheses pathways and compound extractions, as well as NMR analysis.

The goal of the second project was to develop software for a MATLAB program which could extract and process particle movement from movie clips of self-propelling Au-Pt Nano-rods. The program was designed to automatically remove artifacts and unwanted stationary structures, while also allowing the user to easily configure settings to suit different project setups. This project required extensive programming experience and allowed for a lot of freedom during the working process in the terms of problem solving which was very rewarding.

I worked with both projects simultaneously, but each under a different supervisor, which kept me very busy. The work load depended entirely on how ambitious I wanted to be, as I had complete freedom to test my own theories in the lab. A normal work day usually went from 9-5, but there were no specified office times, and no one really kept track on how much time you spent working.

Each week there was a dedicated group meeting for each project where you went through your progress for the past week together with professor Ward and each supervisor. These were perfect for obtaining feedback and suggestions on how to progress further.

Mostly I learned how to work independently, and how to search databases and scientific papers for other researchers' publications.

Campus life

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

I stayed at Palladium Hall, the university's own student housing in downtown Manhattan. NYU arranged numerous field trips to different interesting places such as the Metropolitan opera, a newly started company working with developing analytical tools and software, and the Metropolitan Museum where we got to explore their analytical department where they analyze the paintings and artworks from the museum. We also got to visit Princeton University and see their fusion reactor.

Palladium offered a wide arrange of activities such as their large gymnasium, basketball court and swimming pool which were located in the basement of the building. There were also dedicated study rooms, computer rooms, a TV room and music room.

In New York City there are numerous bars and cafés at almost every single street, so the nightlife was very active almost every day of the week.

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?

The rent for Palladium Hall was \$2400 for 10 weeks, which is very cheap for downtown Manhattan. Food is rather pricey though, and it's almost as cheap to eat out as it is to cook your own food.

I financed the trip by seeking scholarships from which I received 10000kr, as well as my personal funds. From the university I received \$3000 after the summer was over, and I reckon I went back about 15000kr for the whole trip including all private expenses and VISA fees.

The University have a hard time of paying to an international bank account using an IBAN number, but I managed to get them to do it anyway as I didn't want to cash a check or get an American bank account.

I really enjoyed staying at Palladium, and I got to live together with others who partook in the same program as I did at NYU. The university was somewhat bad at communicating before the trip started, and you need to reach out to them and ask if they have specific housing arrangements for the people partaking in the program, which they did for my year. This makes the booking of a room in Palladium Hall very easy, and you get to stay with your fellow "classmates" which is a great experience and opportunity.

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?

NYU requires a SSN for making payments. To apply for a SSN you need to receive a **sponsor letter** from the sponsor specified on the DS-2019 (In our case this was Leanne Tsuruda). Make sure that the sponsor puts the students into the OGS system (this takes a couple of days). The students should book a meeting with their sponsor as soon as possible when entering the country for these procedures. You will also need to acquire a "most recent I-94" document, which is easily done online. **YOU NEED TO PRINT THIS.**

The Social Security Administration has multiple offices, and the one you need to go to depends on your zip-code. For students living in Palladium Hall, zip-code 10003, the office is in downtown Manhattan near the Fulton Street subway. Bring ALL documents related to your stay when visiting the SSA, together with your passport, sponsor letter and I-94. You will need to specify the address where you stay, so write down the **street number, zip-code, and apartment number.**

As soon as you get your SSN card (this takes at least 2 weeks from the application day), you need to contact Wesley to get the process for payment started. You will need to fill in a W-4 form (through the NYU GLACIER system) and a W-9 form. The W-4 form is very confusing, and I suggest that you seek help in filling it out either from your student sponsor or from the [StudentLink Center at Lafayette Street](#). I advise you to contact your bank as international payments from the US require specific information from the bank, not just your account number.

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?

- Proof of studies at KTH
- Original Grade Transcript
- 120 Personbevis – Alla relationer (Proof of citizenship – all relations)
- Bank Statement in English (confirming you have sufficient funds for the trip)
- Curriculum Vitae
- Passport
- Photocopy of Passport (the page with your picture)
- 5x5cm portrait picture (see guidelines on the US government website, NO glasses or headwear in picture)
- Insurance letter (make sure it covers the requirements for a J-1 visa, we used IF Insurance)
- Proof of housing (confirmation letter from NYU Housing works)
- ORIGINAL SEALED ENVELOPE with Extraction from criminal records (only required if there is anything on the record)
- Proof of Bachelor's Degree
- DS-2019
- Invitation Letter from NYU + Internship placement plan
- DS-160 printed confirmation
- I-901 SEVIS-FEE receipt
- VISA FEE transaction receipt (different fee than the SEVIS fee, both are required)

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

Sure!