

## 2017 JCCU Industrial Tour to Beijing Report

On 12<sup>th</sup> March 2017 we began our tour to Beijing. This year the tour took 12 undergraduates, 1 postgraduate Qu Chen and Adrian Taylor to Beijing for 10 days to visit Tsinghua University, The British Embassy in Beijing, OriginWater, Beifang Guoneng, Beijing Hyundai and Advanced Technology and Materials (AT&M).

The tour began with a 10 hour flight from Heathrow with our arrival on the morning of the 13<sup>th</sup> March. After a long journey we checked into the Hostel and decided to venture out to the nearby cafes to get some lunch. Eager to try the local delicacies some of us sampled organ soup for our first meal in Beijing. In the early evening we all went for a group meal to a Beijing Hotpot restaurant where we tried different meat and vegetables that we cooked ourselves on the table. Exhausted after a nearly 30 hours without sleep we retired to the Hostel for an early night.

### **Tuesday 14<sup>th</sup> March 2017 – Olympic Park, Tsinghua University and Bowling**

The first day consisted of a tour of the Beijing 2008 Olympic Park, in the morning, where we had the opportunity to tour the swimming centre and the famous Bird's Nest stadium where we were fortunate to have views all over Beijing from the rooftop and a close up of the steel stadium. After a quick lunch in the swimming centre we headed off to Tsinghua University.



*Tsinghua and Oxford students at the University of Tsinghua*

We arrived at Tsinghua early in the afternoon and were greeted by Professor Andy Godfrey and some Materials Science students. Professor Andy Godfrey, who completed his undergraduate and PhD at Oxford, helped to arrange the industrial tour and made it possible for us to contact the British Embassy in Beijing. The students gave us a tour of the Tsinghua campus, which seemed to be as large as the whole centre of Oxford, and gave us a chance to ask how the teaching in China varied to our teaching in the UK. We were then taken to a nearby bowling alley by Professor Andy Godfrey and the students, with our bowling abilities being severely tested! After bowling we were treated to a meal with Professor Andy Godfrey and the students at a nearby

restaurant, before returning to the Hostel ready for a busy next day.

### **Wednesday 15<sup>th</sup> March 2017 – OriginWater, Beifang Guoneng and the Beijing Opera**

The first company we visited on the tour was OriginWater, which is based on the Huairou Industrial Park about 2 hours outside of Beijing. The company specialises in products to treat waste water as there is a huge problem in China with the amount of clean water available. The company

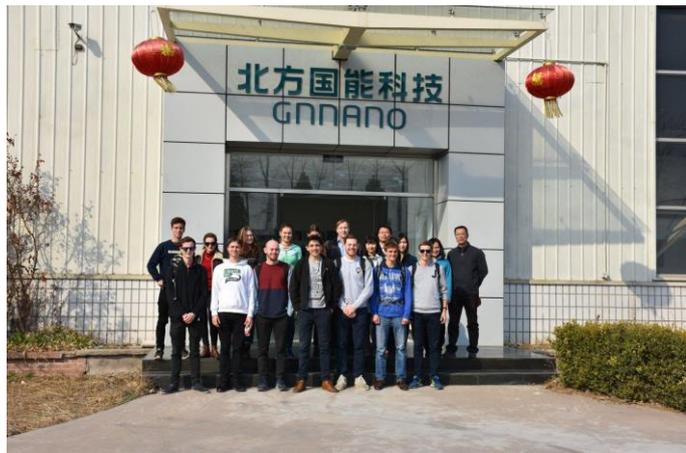


*Oxford Students at OriginWater*

produce polymer membranes that can decontaminate water through micro and nano-filtration. The visit consisted of an introductory talk by a team of staff and a short presentation where we were kindly provided with green tea and a huge array of different exotic fruit! After the introduction we were given a tour of the research laboratories where there are over 300 researchers with products being developed for use in desalination plants, water purifying treatments and reclaiming drinking water.

OriginWater were kind enough to hire in a Chef to provide us with lunch. We were overwhelmed by the volume of different plates the company had for us and it is fair to say we were all extremely full by the end of the meal! On a full stomach we set off to our second company Beifang Guoneng which happened to be located on the same industrial park as OriginWater.

Beifang Guoneng New Material Co. is a carbon materials company that has spun out of Tsinghua University and was set up in 2015 on the Huairou Industrial Park. The company specialise in making graphene with fullerenes between the graphene sheets in order to separate the layers. Their products are for use in super capacitors and batteries, to act as catalyst supports with large surface areas, with each gram of their product reaching up to 2000m<sup>2</sup> in area. We were kindly greeted by two representatives of the company through a short presentation and then taken for a tour around their processing facility. It was very interesting to see the difference between a large scale well established company in the morning and a newly developing company in the afternoon. A couple of days after our visit to Beifang a present turned up at our hostel in the form of three sealed presentation samples of one of the graphene products. We were extremely thankful for the kind gift and it is my favourite souvenir from the tour!



*Oxford students at Beifang Guoneng*

After a long day we headed back to the centre of Beijing for an early dinner before most of us headed to the Beijing Opera. We were met by a remarkable amount of different colours and sounds, a once in a lifetime experience.

### **Thursday 16<sup>th</sup> March 2017 – Breakfast in Beijing, Qianmen Street, Temple of Heaven**

The next morning Qu took us all out for a traditional Chinese breakfast at Ciqikou restaurant with various teas, congee (rice porridge), baozi (steamed buns) and wonton soup. The

restaurant was located on Qianmen Street, so we then took the opportunity to browse the shops and street food stands located there. This was where everyone began to develop their bartering skills, with no one wanting to pay over the odds for their chopsticks! We walked further from Qianmen Street down several side streets and found more traditional shops that sold Chinese paintings and hand painted glass balls as well as stones which you could personalise with your own stamp.

After a longer time spent shopping than we anticipated we were all starving so ashamedly had a late lunch at a nearby McDonalds. As we were behind schedule there was not enough time for us to go to the Temple of Heaven as planned, so instead we walked all the way around the Temple to reach the Pearl Market on the other side.

Nothing could prepare us for the pandemonium that is the Pearl Market. Each floor had different types of products on it ranging from silk scarves, to fake designer trainers, to real pearl jewellery on the top floor. Each of us were in competition to get the best price for a product, it was almost as if we were playing bluff with the stall holders until an achievable price was reached.

As we were all thoroughly tired out from our exhausting bartering we ate in the food hall below the market and then headed back to the hostel for a relaxed evening in the bar.

### **Friday 17<sup>th</sup> March 2017 – Temple of Heaven, Beijing Hyundai, Nanluoquxing, Shicha Hai**

Following on from breakfast at the Hostel we returned to the Temple of Heaven in the morning where we spent several hours absorbing the sites and welcoming the green space.

After a quick lunch we took the coach to Beijing Hyundai which is based about an hour outside Beijing for an hour's visit. We visited Plant 2 where we had a twenty minute talk by a sales associate and a presentation regarding the set up of the company, before a forty minute tour of the production line and testing facility.

Beijing Hyundai only produces cars for the Chinese market, including some models which are not sold in any other country. The company produce two fifths of Hyundai group's world wide sales and Beijing Hyundai are soon to open two more plants.

We were overcome by the sheer scale of the production line with sixty eight cars being produced per hour in this plant alone and the odd fact that, at present, 70% of all the cars they produce are in white!

The coach then took us back to Beijing where we visited Nanluoguxing which is an 800m stretch of road with lots of shops and street food, where we had dinner. Later in the evening we then visited the Hou Hai (Back Lake) which is known for its bars and nightlife. Every bar we walked past had some form of live music and flashing lights to entice visitors, almost like a mini Las Vegas strip.

### **Saturday 18<sup>th</sup> March 2017 – Forbidden City, The Place, Korean BBQ**

With three of our company visits down we spent the morning walking around and admiring the Forbidden City. A short ride on the bus led us to The Place, a modern shopping centre with the largest digital display screen in Asia.

As it was one of group's 20<sup>th</sup> birthday we booked a Korean BBQ restaurant just around the corner from The Place. It seemed extremely exotic to not be eating Chinese food, although by this point our chopstick skills had become second nature. We celebrated with a chocolate cake, that Qu had

arranged to be brought to the restaurant, and most of us then went to a Karaoke bar to sing the night away.

### Sunday 19<sup>th</sup> March 2017 – The Great Wall of China

We left the Hostel at 9:30 to take the coach to the Badaling part of the Great Wall. After taking lots of obligatory tourist photos and with aching legs we made our way back to Beijing in the mid afternoon. As many of us were very tired from our activities we chose to split up in the afternoon with some of us staying at the Hostel and others heading to the Pearl market, or the similar Silk market, for more bartering.



*Some of our students on the Great Wall of China –  
image courtesy of Tara Milne.*

### Monday 20<sup>th</sup> March 2017 – AT&M, Summer Palace, Gui Street

For our final company visit we were fortunate enough to visit Advanced Technology and Materials at their refractory metals division at the Yongfeng Industrial Base. The visit consisted of a presentation



*Oxford students at AT&M*

and a tour of the laboratories. It was very interesting to see high quality metal parts being tested, for example one component was undergoing SONAR scanning to check that there were no cracks present in the metal larger than a critical size. There was also a tungsten element the size of a metre diameter table which needed its temperature to be constant within one degree, requiring extreme precision of producing the component.

AT&M were kind enough to take us out to a local restaurant and provide us with a very large lunch. After lunch, and although it was raining, we kept to schedule and paid a visit to the Summer Palace. Unfortunately the scenery wasn't as beautiful in the rain, but it was still well worth the visit. We returned to the Hostel to relax before heading out to Gui Street (Ghost Street) for dinner.

**Tuesday 21<sup>st</sup> March 2017 – Silk Market, The British Embassy, DaDong Restaurant (Tour Dinner)**

Due to unforeseen circumstances our visit to the Embassy was rescheduled from the 17<sup>th</sup> to 21<sup>st</sup> in the early afternoon, leaving us some time to explore the Silk market which was close by. The Silk Market was very similar to the Pearl Market, but with more silk scarves, dresses and ties, perfect as presents for our mothers! We had a quick lunch in Silk Market before walking to the Embassy.

We were fortunate enough to speak to Nick Low, Counsellor and Head of National Outreach, who spoke to us about the UK's business relations with China and working in the Civil Service. This was an incredibly interesting discussion and even though we were all exhausted we were all totally engaged in listening and asking questions. It is a very important time for relations with China and it was great to hear first hand how our countries are working together. All brimming with enthusiasm to become civil servants we ventured back to the Hostel to get ready for our final night and the Tour Dinner at the DaDong duck restaurant.

We were delighted that Mr Zhang from the New Materials Development Centre, who had helped Qu arrange the company visits, could attend our meal. We all felt incredibly lucky to be eating in such a high quality restaurant and it seemed a fitting way to end an extremely successful tour.

By

Laura Wheatley

**Feedback from students:**

*'I really enjoyed the tour of Hyundai because the scale of production was incredibly impressive and it was amazing to see each stage the car goes through before making the final product.'*

*'As Materials Scientists we spend a lot of time working with metals and their processing techniques so it was important for us to see how the theory of cracks was being actively applied at AT&M. It was a pleasant surprise that we could understand why each testing technique needed to be carried out.'*

*'I enjoyed all of the company visits as it was great to see the contrast between the different scales of company and how they compare to our British equivalents.'*

*'I had never considered working for the Civil Service before, but after speaking to Nick Low who is brimming with enthusiasm, I am very tempted to investigate further into this field.'*



*Our tour organisers at the Beijing Opera*

*The students on top of the Bird's Nest Stadium*



*Our whole group at  
The Forbidden City  
– image courtesy of  
Tara Milne.*



*Half of our group at  
our final night meal  
at DaDong  
restaurant.*