

Report on Invitation Fellowship Programme for Research in Japan (Short-Term)

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I arrived to Muroran, Hokkaido Island, on 16 September having narrowly missed a typhoon. Little that I knew, this was only one in a series to come!

My host, Professor Koji Nagano, picked me up from the airport and drove me to the apartment he had rented and even furnished for me – I was humbled and extremely grateful for the effort he put into this. Even the fridge was full!

I had a wonderful time in Japan. It was both stimulating professionally and enjoyable on a personal level.

The topic of my research was carbon footprinting of products. Both my host and I work on the development of carbon footprinting tools. These include PC tools as well as tablet and smart phone apps. We discussed how we could develop these tools further, bringing them closer to industry and the consumer.

With research students



I had numerous meetings and visits that my host organised and accompanied me throughout. This helped enormously, not least with finding my way around (very unlike me, I never once got lost).

My visits included Coop Sapporo to see their low-carbon shop and products with carbon labels as well as the Japanese Steel Works plant in Muroran which makes nuclear reactors. The latter was of particular interest to me as it was co-founded in the early 20th century by the company of Joseph Whitworth's, who was from Manchester. The road named after him – Whitworth Street West – is just one block from my office so I walk along it almost every day.

I was fascinated to see some of the innovative low-carbon technologies implemented in the Sapporo region. One of these recovers waste heat from cooking fast food in a convenience store to melt snow during winter in the store's car park. This saves energy and fuel by displacing the need for snow-clearing vehicles. Given that Sapporo gets a lot of snow in the winter (one of the reasons for the Winter Olympic Games in 1972), this means a significant carbon saving.

Another one was a snow-melting technology which is used for air conditioning in the Visitor's Centre in Morenuma Park near Sapporo. Snow is collected and stored in a large storage room, enough to last the whole summer. It melts slowly to provide cold water which is then used to cool the large glass building housing the Visitor's Centre. This is an excellent example of how local natural resources can be used to save energy and reduce carbon emissions.

I also travelled to Tokyo to meet with some researchers and organisations based there. An amazing city in all respects, including the second typhoon in a series since my arriving to Japan!

I also had an opportunity to see some of the natural beauties on the Hokkaido Island – not many people make it up there which is shame, as it really is stunning (maybe I shouldn't be advertising it...).

Time flew and soon it was time for me to fly back – as it happens, on the day the third typhoon was heading towards Japan! Eventually, it changed its mind and I flew away watching the endless sprawl of Tokyo and hoping to come back soon.



With the host in Noboribetsu, Hokkaido