



Universitas 21 PhD Scholarship report



Name & School: Chris Jeavons, School of Mathematics.

U21 partners visited: Waseda University, Japan.

Thesis title: Optimal constants and extremising functions for Strichartz-type inequalities.

Report:

Why did you choose to apply for this U21 event?

I felt that this was a fantastic opportunity to collaborate with my host Professor Ozawa, a leading expert in a field close to the area of my own research. I also believed that such an experience would be a good opportunity to broaden my network of contacts outside Birmingham, which would be highly beneficial with regards to my future employability prospects in academia.

What was the best thing about your experience?

The best thing about my visit was that it was an opportunity to gain experience doing research in a completely different environment, with a leading expert in my research area; this is valuable experience for anyone considering an academic career. I was also able to work with my co-supervisor, Professor Bez, based in Tokyo, and during my visit the three of us jointly obtained some progress on an active area of ongoing research. My visit also coincided with a conference hosted by Prof. Bez at which Prof. Ozawa was speaking, so I was able to attend and learn about some of my host's other research, as well as research from other leading experts in Harmonic Analysis.

What benefits do you think you gained in relation to your personal development e.g. your confidence, competence, knowledge, future employability?

The main benefit for me was the opportunity to work with Professors Ozawa and Bez. Their input and advice has been invaluable, not just for my PhD thesis but also for my research and my employability more generally – in particular, Professor Ozawa highlighted some possible directions for future research. In addition, during my visit I was invited to give a seminar in Waseda, which enabled me to raise the profile of my research and of the University of Birmingham. Lastly, before my visit I had not had the experience of staying for an extended period outside of the UK, so my visit has improved my confidence in this respect.

State any plans you have to continue collaboration with your U21 host university:

I am currently working on a paper collaboratively with Professors Ozawa and Bez; this arose directly from discussions we had during my visit.

What facilities or expertise did your host university have that is not available to you at the University of Birmingham?

Aside from the expertise and insight of Professor Ozawa and other researchers in the Department of Applied Physics, Waseda University had a very well-stocked library, including access to a number of journals which were not accessible from the library in Birmingham.

Is there anything you would have changed about your visit?

I would have planned the activities of my visit in more detail in advance. I feel that although my visit went well I could have made better use of the time and the facilities with additional research and preparation (on my part) beforehand. As part of this I would have taken an open access language course – this was not at all needed for the academic side of things as this was all done in English, but some language skills would have made life easier! Also, I would have got a photo with Prof. Ozawa!

What advice would you give to students thinking of applying for a U21 PhD Scholarship in the future?

Plan ahead! Correspondence in advance with your host about potential projects is of course necessary for a successful application, but if you are successful it is beneficial to *continue* correspondence in order to plan your visit in as much detail as possible. A U21 visit represents a unique opportunity and there will almost certainly be some action you can take (for example background reading, or identifying specific availability of resources at your host institution) before your visit to get the most out of it, provided you know the specifics of the project you are planning to work on.