

JSPS Short-term Invitational Fellowship

Fellow: Dr Zoran Ikonc ID: S18161

School of Electronic and Electrical Engineering, University of Leeds, Leeds, LS2 9JT

E-mail: z.ikonc@leeds.ac.uk

Host: Prof. Osamu Nakatsuka

Graduate School of Engineering, Nagoya University

Period: 14th to 28th February 2019

I was honoured to have been awarded a JSPS Invitational Fellowship (Short-term), sponsored by Prof. Osamu Nakatsuka at the Graduate School of Engineering, Nagoya University. Our research activities include group-IV materials, in particular GeSn and SiGeSn, for electronic and optoelectronic applications. The JSPS short-term Fellowship allowed me to travel to Japan for research discussions and to initiate research collaboration with Prof. Nakatsuka and his group.

Throughout my visit, from the arrival in Nagoya airport to the very end, I was treated with great kindness, and also had well-planned work activities, thanks to Prof. Nakatsuka. He was waiting for me at the airport, and took me by train and metro to my accommodation – he had booked a room at the university guest house, excellent quality and also very conveniently located on the Higashiyama campus, just 10 minutes walking distance from the Engineering building with his labs.

During my stay a special workshop on ‘Theoretical and Experimental Researches on Solid-State Physics of Semiconductors, Thin Films, and Nanomaterials’ was organized by my host, attended by about 30 participants, where I gave an Invited talk on my research activities, and also had the opportunity to learn about various research in Nagoya in the broader area of semiconductors. After that, we had a dinner in a traditional Japanese restaurant, with delicious food. On other days of my stay I was given a tour through the lab facilities for SiGeSn materials in Nagoya, and also had a number of meetings with researchers / PhD students, discussing various aspects of their research. My stay was very fruitful in terms of discussion about further steps in our collaboration. With the complementary skills of myself and Prof. Nakatsuka's research group, I believe that the research collaboration will be mutually beneficial, and we have identified the topics that we can collaborate on, presently and in the near future. We have already submitted a joint JSPS – Royal Society grant proposal, and a successful outcome would support the longer-term collaboration of our research groups.

This is the second time I have been in Japan, after a conference in Nara in 2003, but on this occasion I had more time to go around and learn much more about it. Nagoya itself is a large and beautiful city, with lots of things to see (like Nagoya Castle, the picture below), and has very good public transport. During the weekend I have also visited Kyoto, another beautiful city (and of course visited its Golden Pavilion, picture below). It was a huge pleasure to travel by Shinkansen, the train is not just fast, but is also very comfortable and very frequent! A general impression from sight-seeing tours is that Japan is very clean and safe country, with polite people, willing to help me for directions. I am grateful to Prof. Nakatsuka and his team for making my visit both fruitful and enjoyable, which was also made possible by the generous JSPS allowance, and I certainly hope to have another opportunity to visit Japan in the future.

