外国人客員所員を経験して



Martin Rotter

It was around Christmas 2014, when I received somehow as a Christmas gift the wonderful news from Prof. Yoshizawa, that I was invited to visit ISSP from Nov 2015 to Jan 2016. I had visited the institute before and thus was familiar with the abundant scientific ongoing activities at this place. Moreover, the three months were going to be my first "long stay" in Japan. The formalities like organising visa, submitting and correcting my quite complex CV etc. turned out to be quite exhausting. However, having overcome these initial obstacles I experienced a scientifically prosperous and overall extremely enjoyable time in Japan. Being married to a Japanese I was already quite familiar with the way of life, which is different from Europe.

Fortunately my wife could join me for nearly the whole time of my visit and introduced me to the variety an richness of this countries culture, people and customs. Yet we both were utterly surprised, when it turned out, that actually many gifted musicians are among the staff of ISSP and we enjoyed a beautiful musical evening concert. I immediately thought of famous physicists such as Albert Einstein, Max Planck or Werner Heisenberg who used to play actively music. One of the highlights of our stay was the bus tour organised by the International Liaison Office with activities such as learning to prepare Soba noodle and Japanese ceramics.

Let me also mention the material conditions of the stay, which were truly excellent and hassle-free. Everything was taken care of for me, lodging was provided in a large and comfortable apartment in the Kashiwa international lodge. This is just a few minutes walk from the institute and can be easily reached from the next train station. Bikes were provided for me and my wife and thus on the weekends we managed to explore many parts of the vicinity, visit shrines, Rakugo, Kabuki and enjoy hiking on Mount Tsukuba and much more. For more distant trips the japanese railway system is ubiquitous and to undergo the effort to drive a car seems even more crazy than in any other place I have been before.

The scientific goal of my visit was to bring the software suite McPhase to ISSP. This particular software is the outcome of a long collaboration of many scientists and it is used to do numerical simulations for complex magnetic matter. The output of these simulations can be directly confronted with experimental data from magnetic measurements, neutron scattering etc. When I came here, I was surprised to learn that Prof. Yoshizawa and Yoichi Ikeda had just collected beautiful neutron scattering data on La_{2-x}Sr_xCoO₄, on which I have started some McPhase simulations two years before. What turned out an initial application to analyse the new data became an elaborate effort to understand doped 2-1-4 oxides during my stay. I hope truly, that I could get across the possibilities of the McPhase software in my seminar talk on this topic and that the Japanese user community of this scientific software is going to grow in future.

It was a pleasure to stay at ISSP.