



外国人研究職員の

印象記

Impression on Okazaki and IMS

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I have spent in IMS a little bit more than seven months and I already know that I will enjoy my life here the remaining seventeen as much as I did up until now. Before arrival to Okazaki I have researched the information about it from various sources, which led me to expect it to be a small town in the middle of nowhere (like typical American midwest). I was pleasantly surprised when, upon my arrival, I found myself in a well developed city with all the required attributes for this, including heavy traffic. On the other hand, there are multitude of historical monuments and old shrines well preserved in a green environment. Banks of Otogawa river, that runs through Okazaki, host various traditional events and festivals all year round that are fun to watch and participate in. So, you get a nice cultural exposure to both the old and new Japan.

Although Okazaki proved to be very lively place, the location of IMS and associated Mishima Lodge (where I reside with my family) on the top of the hill ensures the quiet and comfortable atmosphere for the scientific work. The apartments in Mishima Lodge are fully furnished which is very convenient, since I was liberated from the trouble of buying everything for the living, just to sell or throw away it later, when the time of my departure would come. In a walking distance from Mishima Lodge there are kindergarden, elementary, middle and high schools which is very nice if you have a family.

Administrative staff of IMS is very kind and supportive. I greatly appreciate the kind help of Ms. Inagaki and Ms. Kamo who helped me with various essential paperwork for settling in Okazaki, which would be a big headache if I did it myself.

The variety of international community of IMS speaks of its recognition as one of the centers for pioneering research in

the world. I was impressed with the quality and significance of research as well as the available equipment and technical support. Namely, in Ohmori group, of which I am a member, fascinating experiments are conducted, aimed at the control of the quantum mechanical matter waves in various medium. Very advanced scientific instrumentation, some of which were designed and made at IMS (e.g. Attosecond Phase Modulator), makes it possible to directly observe the clear manifestation of wave nature of the matter, measure, extend or shorten the coherence of the quantum systems, like iodine molecule, solid para-hydrogen or ultra-cold rubidium gas. This research might as well have a direct influence on the development of quantum computing. Prof. Ohmori's presentation of his group's very clean and amazing results at the high profile international Gordon Research Conference on coherent control was what stimulated me to seek a JSPS fellow position in his group. My research is concerned with the creation of ultra-cold molecules from ultra-cold rubidium gas and subsequently manipulating their various internal degrees of freedom with the application of the shaped ultra-fast laser pulses.

Of course the most important component of the successful research atmosphere in the group is not the equipment, but the personality of the group members, which I found to be very friendly and welcoming. Every weekly group meeting is full of live discussions and no problem is left unaddressed or shelved for later times to ensure the constant progress.

All in all I am honored to be here and be able to give my share of the modest contribution to the fame of IMS.

Many thanks to prof. Ohmori and JSPS for this wonderful opportunity.