Report on the MERIT Errantry program

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The MERIT Errantry program provided me a great opportunity to visit and interact with so many researchers abroad in close research field. During the trip, I visited Prof. Rudolf Zentel in the Johaness Gutenberg University Mainz (Germany), Prof. Ulrich S. Schubert in the Friedrich Schiller University Jena (Germany), and Prof. Fabrice Burel in the L'institut national des sciences appliquées de Rouen (France). They gave me chances to make presentations on my research about development of drug delivery system (DDS) carrier, to have discussion with lab members, and also to look around interesting experimental equipment in each of their lab. Additionally, I attended the Fourth International Conference on Multifunctional, Hybrid and Nanomaterials (Hybrid Materials 2015) in Spain, during the trip.

Johaness Gutenberg University Mainz, Friedrich Schiller University Jena

During the visit for the two labs in Germany, I accompanied members from the Graduate Program for Leaders in Life Innovation (GPLLI). I got a great opportunity that not only to make presentations, but also to listen to many of interesting presentations by German students. Since both of the labs were focusing on DDS, we enjoyed deep and fruitful discussions on each of our study. Not only that, I fortunately got chance to hear about experimental systems which could be applied to my study directly.

In Mainz, Prof. Zentel gave me a chance to look around equipment in his lab, and also in the Max Planck Institute for Polymer Research (MPIP). It was very interesting to see a lot of novel equipment, but the most beneficial thing there was that I could ask for advice on some familiar machines, which I was recently having troubles in Japan, to excellent technicians working in the MPIP.

In Jena, I was so impressed by all the newest and sophisticated equipment in Prof. Schubert lab. Not only that, on the day of my presentation, I fortunately met a student who was working on an experimental system that might be efficiently applicable to my

work. As I asked him if I could briefly take a look on his apparatus, he readily got permission from his supervisor, Dr. Alexander S. Mosig, and Dr. Mosig soon kindly spared me time to show his experimental systems. Even with a brief discussion, it turned out that indeed the system would be perfect for my wishing experiments. Thus, I immediately proposed him for a joint research, and Dr. Mosig told me that he would be very welcome for that. Considering this matter, we are now continuously discussing through emails.

With few of the students I met in Jena, I again got a chance to meet them at the "Fourth International Conference on Multifunctional, Hybrid and Nanomaterials" in Spain which I joined after visiting



Presentation at Prof. Zentel lab. (at Mainz)

Germany, thus the personal connections I have made at Jena was readily utilized in the academic field already.

L'institut national des sciences appliquées de Rouen

In France, I made a presentation at Rouen in front of Prof. Burel's lab members. They were in same research field to me in a sense that they focus on biocompatible polymers, but it could also be said that they were in slightly different field from me because their interests were more for the chemical synthesis techniques rather than practical applications as DDS, which I focus on. Nevertheless, the good point for that was I could see so many of equipment in their lab that I had never seen before. I learned a lot during a lab tour they made, listening to their detailed explanation on each of machine

and getting thorough answers for my questions. After my presentation, they kindly gave me a chance to discuss closely with few of the lab members who are working on comparatively close topics to mine. This was also a good point for this visit because we could discuss each other's

work from slightly different point of views, thus it helped me to broaden my outlook.



Discussion after my presentation with few of the Prof. Burel lab members. (at Rouen)

Through MERIT programs

Through the MERIT Errantry program, I was surprised how much all the MERIT programs in this two and a half year have grown my skill to communicate as a researcher with people all over the world. Thinking back, my first opportunity to visit foreign lab was as the short-term overseas training program, and that was also my first challenge to make appointments with foreign researchers, which was a big job for me at that time. However, as I got another chance to learn abroad for the long-term overseas dispatch program and worked three months in a lab in the Netherlands, it became just an ordinary thing for me to discuss on research in English with foreign researchers. Then this time, for the MERIT Errantry program, I had a great experience to organize my seminar in several labs abroad, to have deep discussions with researchers in the first meet, and more over, to bring up a collaborative research by myself. But not only specific programs in abroad, but also ordinary discussions with MERIT members, such that we are having at the MERIT colloquium and so on, helped me a lot to store knowledge in broad research field and to be able to make fruitful discussions during the MERIT Errantry. Based on these precious experiences I had through the MERIT program, I will keep on striving to become a great researcher.

Acknowledgments

I would like to express my deepest gratitude to MERIT program for providing me with such a great chance to study through the MERIT Errantry. I am also indebt to all the researchers who gave me a chance to learn a lot from them during my trip, especially Prof. Rudolf Zentel, Prof. Ulrich S. Schubert, and Prof. Fabrice Burel.