Report on European Summer School & 2nd Japanese-German Student Workshop

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I participated to European Summer School and the Japanese-German international student workshop based on International Training Program : ITP from October $4^{\rm th}$ to $14^{\rm th}$.

I participated in the school program until October 4th to 9th. On 5th, the lecture by Prof. Lieberman took place and a title of this lecture was "Fundamentals of Gas Discharge". Content of the lecture was that why plasma occur when introduce gas and add power in chanber. I could study a basic part again and the lecture was very good for me. And in evening of this day, the poster session took place and I conducted session with a title of "Damages on organic Low-k films due to VUV, UV radiation, radical and ion in dual frequency capacitively coupled plasma". Session in English was for the first time as for myself. So, I was truly nervous but people interested in my poster eagerly listened to my English and my Tension somewhat got loose. Next time, when a poster session like this session takes place and so that to want to say is reported skillfully, I had an acute feeling that it is necessary to study English for me.

In addition, the lecture contents that I was interested especially by a lesson of a school "Basics of Plasma Spectroscopy" on 6th. In my study, to evaluate damages induced on low-k films after plasma etching, I must measure optical emission spectroscopy from plasma and radical density in plasma, so I felt that this lecture was a very significant lecture.

On 10th to 11th, I participated to the lecture of master class. Just a thing that the lecture of the master class is connected with nuclear fusion plasma as for contents, it was a difficult lecture for me to understand because I do not have knowledge related to nuclear fusion plasma completely to me.

I participated to this Summer School and understood

that there is infinite possibility in plasma, plasma is being supposed to be used in various fields and there is also to be not being still elucidated at the same time plentifully in plasma. In addition, I felt that to know a progress of overseas plasma research was a considerable big result.

On October 12th, I participated to a Japanese-German international student workshop that was held in Bochum University. I gave an oral presentation on clarification of damages induced on low-k films after plasma etching in the same way as the title of poster session in a summer school. In Bochum University, the studies on plasma etching were not studied, what my presentation was questioned by chairperson only was regrettable, but I think that this presentation became the experience which runs on the oral presentation for example by a future international conferences. In addition, I can also experience that I knew progress of plasma research on other university, especially overseas universities.

On 13th, I visited the laboratory in Bochum University. I could observe experimental apparatus of people in Bochum university that made a presentation on previous day in the Japanese-German international student workshop. In addition, people in Bochum University explained the mechanism of experimental apparatus, the gases used in study and experimental methods. And it became precious experience for me.

On 14th, I did sightseeing Dusseldorf with people in Bochum University. What the Rhein descent that was being planned was canceled was regrettable, but I have thought that I could make a tour a town of Dusseldorf.

In conclusion, this European Summer School and a Japanese-German international student workshop became very precious experience for me. I think that I want to pick up ability to a body in world in food this precious experience.: