

## 2<sup>nd</sup> ITP Japan-Germany Workshop

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Some poet said that “when we meet someone impressed is when we grow ourselves most effectively”. I’ve got three important things from this workshop; discussions with students in Ruhr-University Bochum, understanding of current research status in the field, and international friends in the same field. I’ll describe these three as followings.

### **1. *discussions with students in Ruhr-University Bochum***

Although there’re chances in which we have presentation in international environment, we seldom have a chance to discuss a particular topic deeply with foreign students. In this program, we had the chance, which gave me not only inspiration toward my research but also understanding on how students in another country think of their research and future. The students are passionate toward their research and the purpose of research seems clear to me. I also talked with them about their future. A student wants to work for a solar cell company, another to begin fusion venture business. I thought there’re lots things we Japanese should learn from their passion. This program can let us notice the differences of passion and personal characters between Japanese and German researchers. And I believe these experiences lead to nature next generation researchers: 21<sup>st</sup>-type Japanese researcher who can fluently and confidently communicate with foreign researchers, and enhance the presence of “Japanese” in the field of science and technology. Through the discussions during workshops, I’ve got a sense of internationalization of research.

### **2. *understanding of current research status of the field in Europe***

In usual international conferences, it’s possible to deepen overall understanding of a particular scientific field. However, we cannot dig into the research and researchers,

because the area covered is generally too wide and time is always limited. In this workshop, we could deepen a research done by a particular group and communicate with students in the university enough: both through presentations by students and lab tour. I think, honestly, the group in Ruhr-University Bochum is quite attractive, because of two reasons: research topics and their various experimental devices. First, they are focusing on not only conventional large scale plasma for etching and deposition but also a booming topic such as atmospheric microplasma. Secondly, they have various experimental devices: many LASERs, lots chambers, big rooms. I understand overall world map of “plasma science field”; Ruhr-University Bochum in Germany, Drex University in USA, Nagoya University in Japan. These three research centers are well collaborated, which strengthen the output of their research.

### **3. *international friends in the same field***

Finally, I want touch the importance of international friends in the same field. I think the international friends means two things: nature of international sense and broad view.

In the field of science, we cannot live without paying attention to overseas. Therefore, it is absolutely important to keep good relation and communicate well with students and researchers abroad. In terms of this prospect, ITP program is well designed for the purpose, because we can get to know students from various countries in Europe.

It is also important for us to keep our eyes on other field related to our ones; a person who researches low temperature plasma should pay attention to not only thermal plasma but also fusion, which sometimes give the person innovative ideas.

This program gave me these three important lessons, and I really appreciate it.