

Hybrid interfaces of organic/inorganic and female/male

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“I didn’t want women to gather at this workshop and only complain the difficulty of their lives.”

These were the concluding remarks of Prof. Draxl of the Humboldt University during the Hybrid interface Workshop held in the suburbs of Berlin in April 2014. Tellingly, the workshop hosted hot discussions on organic/inorganic semiconductor interface researches, as well as exchanges of opinions on career development strategies. What made this workshop distinct from other workshops for young researchers was that there were only two men among twenty-plus participants.

Toward Lakeshore in the Woods

This gender-equality workshop is held for young researches by Collaborative Research Center 951 (HIOS - Hybrid Inorganic/Organic Systems for Optoelectronics). I was invited to give a talk there by my friend, Dr. Stähler of Fritz Haber Inst.

In a typical April late afternoon with occasional gale and shower, the participants showed up at the bus station of Berlin Hauptbahnhof. Aboard on a blue bus I found everybody, including the bus driver, was female, except Dr. Roczen from HIOS secretariat. For a fraction of a second I wondered if he might feel uncomfortable about being the only male on the bus, but then recognized that I am daily in the very similar

situation (but as the only female).

After an hour’s drive toward southeast, the bus arrived at a hotel at a quiet lakeside of Motzener See. There we joined the rest of the participants, and soon surrounded the dinner table. One by one the participants introduced themselves, both on their research and their hobby in friendly and humorous atmosphere. Most of the participants were undergraduates, graduate students and postdocs in universities and research institutes in or around Berlin. Their ages distributed rather wide, however, and their nationalities included not only Germany but also Italy, Russia, Ukraine and China. Among them was a young researcher couple, accompanying their toddler son. The one-year-old became instantaneously the idol of all the participants.

Organic / Inorganic hybrid interface

The program of the workshop consisted of talks on both scientific researches and career developments.

The scientific speakers include Prof. Rudolf of Groningen University, Prof. Al-Shamery of Oldenburg University, Prof. Molinari of Modena University and Prof. Felser, director of the Max Planck Institute for Chemical Physics of Solids, Dresden. They presented their researches, respectively, on fabrication and evaluation of organic/inorganic hybrid materials (experimental), fabrication of organic nanofibers and their application to optoelectronic devices (experimental), design of light-harvesting organic molecules and their time-dependent dynamics (theory), electronic levels of topological insulators (theory). Together with my talk on phonon-plasmon dynamics on inorganic semiconductor interface (experimental), the scientific program featured topics related with the hybrid semiconductor interfaces in a well balanced way.

The young audience were either members of HIOS research project themselves, or non-





member researchers in the closely related field. After each scientific talk they joined lively discussion on the detailed research methods, the physical interpretation of the phenomenon, etc., just like other research workshops. I felt some sentiment that the hot discussions were being exchanged mostly among women, but it was only for a short moment.

Scientific speakers talked also briefly about their research careers and personal histories with lots of humor, to the great amusement of the audience. They sometimes made jokes on their attitudes towards marriage and family, which might be called “girl’s talk” in the broadest definition. Professors in Europe, especially in Germany, have much higher social status than their counterparts in Japan, and our speakers included the faculty head and the vice president of the university. It was quite impressive to compare their dignified and confident presence with their student-time photos, in which they sometimes looked a bit shy and uncomfortable to be the sole female member in the laboratory.

Female / male researcher interface

The career development lectures consisted of lectures by Ms. Neupert, a professional career development trainer followed by a group discussion, and presentation of gender equality statistics by Prof. Rudolf.

Ms. Neupert started her lecture by asking the audience “Who among you wants to be a professor?” and there were only three or four young researchers raising their hands. Considering the high social status of German professors, this question may be a match to “Who wants to be a CEO of a big company?”

I was surprised by this problem establishment, and then realized the “glass ceiling” within me.

The first half of Ms. Neupert’s talk focused on successful conflict solution for academic women. “To become a professor”, she told us, “women have to know the rules of the ‘games’ played in the male-dominating scientific world”. This strategic viewpoint inspired me very much, since the gender equality in Japan tends to be addressed as a moral problem. The second half was about balance between work and family life, in terms of the time management and the examples of family-friendly universities. Here I recognized, with a sigh, that working mothers in Europe are much more likely to find variety of day-care for their children than their counterparts in Japan. The participants then split into groups and discussed on their experiences of “difficult situations in the scientific community.” We got lots of examples such as “How to keep a right distance from the male supervisors,” and “How to join when the group of men go for a beer after a congress”; 20 minutes discussion time just flew by.

Presentation on gender equality statistics in the academic world by Prof. Rudolf attracted strongly the young researchers interest, since they represent more immediate problems. They include “70% of men consider they do better than average; only 50% of women do so,” “Employment is based 15% on achievements and 85% on networking”, “Women authors more papers per working time than men”, “Papers by female authors tend to be cited more than those by male authors”, “Rigorous female teachers are evaluated lower by students than rigorous male teachers,” as well as the famous investigation on “How peer review results are affected by the female/male name of the author”. These statistics told us that women tend to have lower self-evaluation than men, and accordingly tend to be evaluated lower by male and female colleagues. It was my Aha! moment, though I kept unconsciously feeling that way during my long experience in the academic world. Prof. Rudolf gave the audience such tips as “Write when you had

child-care leave within your publication list (since male referees tend to overlook your CV!)”, “Wear a read jacket when you attend an important meeting.” Only one of the tips was far more difficult than others; “Choose a right man (to marry)”.

“Let’s keep in touch!”

After all talks and the concluding remarks by Prof. Draxl, the participants discussed on their impression and future prospects of the workshop. Though I myself found the career development lecture very inspiring, some of the young researchers thought it was too abstract to them and were more impressed by the real-life career stories by the scientific speakers. Other young researchers proposed a longer group discussion, preferably combined with role playing trainings, for the next occasion. Everybody agreed to keep in contact after the workshop, and discussed on the methods. I found the participants shared strong interest on each other’s research at the end, because the workshop had a very focused scientific topic.

According to its webpage, HIOS project also contributes to events like (non-gender-specific) research workshops for young researchers and “Girls’ Day”, an open school for female 5th and 6th graders, Collaborative Research Center projects in general can span up to as long as 12 years (!), during which the researchers can afford to return their achievement to the society while pursuing the state-of-the-art science.

Looking back from Japan

I took part in the workshop as a speaker; however, I found it quite helpful, also as one of the audience, to learn the strategic way of thinking in the academic world. Honestly, I could not help wondering that I could have avoided this and that conflicts in my research life, had I been to this workshop twenty years ago. I was also impressed by the social skills of the young female researchers in Germany, not to mention their passion for their

researches. The participants with different backgrounds, ages and nationalities made a good example of the variety of career paths for female researchers. I am sure that everyone gained a lot from lively discussion in a very relaxed and close atmosphere, which would be difficult to realize if majority of the participants were male.

In Japan, only 40% of the university freshmen are female, compared with 50% in Germany. We need to start academic gender-equality by acquiring equal higher education opportunities. Nevertheless, I sincerely wish that events of this kind will be offered to inspire young female researchers, who aim to be professors.

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All individuals named in this article are female, unless otherwise noted.