

HSI Report: “Soft Matter: From single molecules to materials”

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As part of the Hokkaido Summer Institute (HSI), the course “Soft Matter: From single molecules to materials” was held from July 30th to August 11th, attracting more than 50 graduate students from Japan and beyond, to discuss the fundamentals of soft matter science, an emerging research field to develop innovative soft materials through interdisciplinary studies.

This course, hosted by the Global Station for Soft Matter (GSS) of Hokkaido University’s Global Institution for Collaborative Research and Education (GI-CoRE) and the Graduate School of Life Science, was held in conjunction with the International Soft Matter Summer School which brought together 13 internationally renowned scientists as lecturers and young researchers from all around the world.

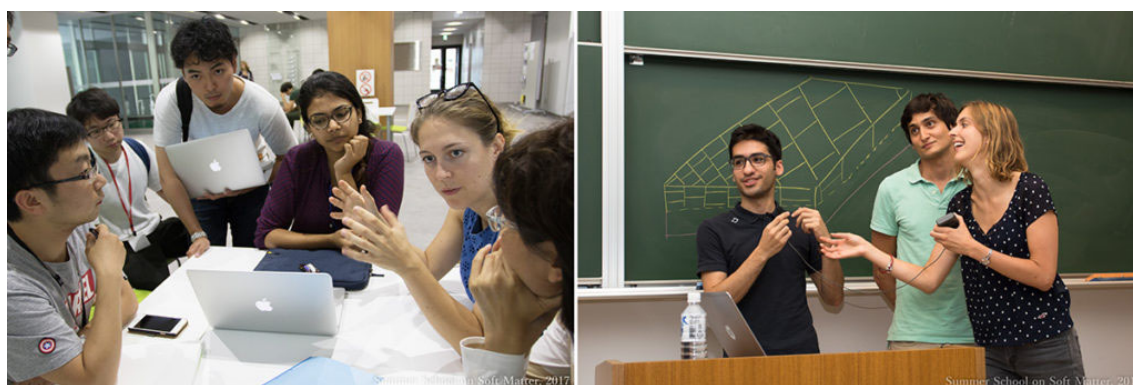


Internationally renowned scientists lecturing the participants. Photos taken by Tomas Sedlacik.

The first seven days of the program took place at the Otaki Seminar House located in the countryside outside of the university's Sapporo campus. A series of lectures on varying subjects, yet with a particular focus on polymer science, were given by world-leading scientists every day and lively discussions followed each lecture. Poster sessions were held on the second and third day to share recent findings and exchange ideas. While lectures were not in session, some participants enjoyed Nordic walking in Otaki and a boat cruise at Lake Toya for a break.

The intensive lectures continued on the Sapporo campus from the eighth day. On August 7th and 8th, participants joined the "Hokkaido University-ImPACT Joint Symposium," an international symposium on advanced soft matter held in coordination with the summer school. ImPACT is a governmental research program funded by the Japan Science and Technology Agency (JST).

During the course, graduate students were divided into groups to work on assigned tasks related to soft matter. Assisted by young researchers attending the summer school, the students put their heads together to devise possible solutions for the tasks at hand by utilizing the knowledge learnt during the course. They later gave presentations on their topics.



Students working on an assigned task (left) and giving a presentation (right). Photos taken by Tomas Sedlacik.

Master's student Zhongtong Wang from Xian Jiaotong University in China said "I major in solid mechanics at my university. I'm interested in the mechanical characteristics of soft matters and its application to the development of soft sensors, for example. The subjects taught in this summer school are so diverse and interdisciplinary. It's not easy for me to go beyond my area of expertise, but I believe learning different subjects and having discussions with people from other disciplines are very important and will help my future research."



Attendees of the Soft Matter Summer School and the HSI course with Mt. Showa-shinzan in the background. Photo taken by Tomas Sedlacik.