SSH Report Vol.4

【The Report on Science Experience Trips】

As part of the SSH project, we went to the Kanto, Kansai and Kyushu to experience different science projects this summer. We visited universities and facilities that conduct advanced scientific and technological research. These lectures and experiential activities have raised our interest in science and technology.

(Trip to Kanto：August 1st ~ August 3rd)

Main places visited … National Museum of Emerging Science and Innovation, Japan Aerospace Exploration Agency(JAXA), National Institute for Materials Science and Technology(NIMS), The University of Tokyo(Hongo / Kashiwa Campus)

The comments from the participating students

In NIMS, I was taught about heat conduction materials and why I should be interested in them. These are special substances whose electric resistance gets completely to 0 by lowering the temperature. They are actually used for linear motor cars and medical equipment such as MRIs. I asked, "What kind of mechanism would it be?", "Does the temperature make it difficult for electrons to move, and will the electricity not go through?" Then, based on what electric resistance is, the researcher in NIMS explained the characteristics of superconducting materials in detail.

(Trip to Kansai：August 8th – August 9th)

Main places visited … RIKEN(Large synchrotron radiation facility, “SPring-8” and Computational science research center), Research presentation by the SSH students National

The comments from the participating students

RIKEN’s Spring - 8 and Supercomputer "Kei" were unknown to us and also the effects they will have on the future. I found that all these projects in front of us are worldwide industries and that such science and technology supports Japan.

In the research presentation, the view on scientific research has changed greatly. The research that left a strong impression in particular was the one experimenting and verifying the hypothesis that "four-leaf clover will increase its number when stepped on".

(Trip to Kyusyu：August 15th – August 17th)

Main places visited … Fukuoka Yakult Factory, Fukuoka City Science Museum, FPCO Kyushu Sorting Center, Chugoku-Shikoku Kyushu Mathematical Sciences Research Presentation Competition

The comments from the participating students

At the Fukuoka Yakult factory, I toured the manufacturing process of Yakult. In particular, I was impressed by the strict checks to keep foreign objects from entering Yakult. At the research presentation, I took a look at the different types of research in various fields such as mathematics, physics, biology, and chemistry. I was surprised at how high the level of each presentation was. So, in the future, I would like to use their methods of setting up research topics and summarizing as a reference.

【Tour of the Companies vol.2】

On Tuesday the 10th of July, each class visited a different company. The students in Class 4 visited Timber processing manufacturer Cypress SUNADAYA. The students in Class 5 visited Top system Co., Ltd., which designs and produces pharmaceutical manufacturing equipment. The students in Class 6 visited Shikoku Electric Power Company's Honkawa Power Station. And the students in Class 7 visited Kuraray Saijo Co., Ltd., which manufactures textile products, films for liquid crystal polarizing films, etc. We appreciate all the companies for accepting our students on the tours.

(Class 4)

(Class 5)

(Class 6)

(Class 7)