My name is Ikkou Fujishima, a fourth-year student at the Ritsumeikan University, majoring in Sociology. I live in Kyoto, Japan.

I'm not good at take photos of myself, so I put a photo of my cat. I'm sure he doesn't want to show this face though, it's funny picture of my cat.

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Let's talk about my research theme at university. I'm currently researching about Organic Rankin Cycle. Let me explain it briefly.

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In a steam Rankine cycle, water is used to spin a turbine. And The mechanism of heating and evaporating a working fluid to make it do work on a turbine is the same for ORC.

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In ORC, however, a fluorocarbon-based fluid is used. Because these fluids have low boiling points, it's possible to generate electricity from low-temperature heat sources.

For example, flash-type geothermal power generation requires temperatures of 200°C or higher. By using ORC, electricity can be generated from heat sources below 200°C.

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I am building a simulation model of an ORC right now. This model predicts how much electricity can be generated from a given heat source temperature and flow rate, and also calculates the cost.

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Currently, I am calculating the potential for introducing ORC using the condensers and exhaust gas from waste incineration plants as heat sources.

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I think that ISEP has extensive knowledge of agrivoltaics and PV. I'm interested in the installation of PV and wind power from the perspective of their impact on the power grid.

Specifically, I believe that the introduction of wind power and energy storage is necessary to achieve 100% renewable energy. I would like to research about the introduction potential and problems associated with the istallation of these technologies.

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I also think that it might be good idea to research about policy initiatives for the introduction of ORC. At my university, my research will likely be focused only on thermodynamic calculations.

It probably wouldn't be possible to discuss the usefulness of policies from the national or local government in a paper that I'm writing in university.

Therefore, I think it may be a good idea to focus on the current state of policies for geothermal power generation and waste heat utilization, and to conduct international comparisons.