

Professor Name

Rie Endo

Laboratory name

High-Temperature Physical Chemistry

Laboratory Website

<https://www.shibaura-it.ac.jp/en/research/laboratory/00122.html>

Keyword

thermal conductivity, thermal diffusivity, oxide, metal, high temperature

Tasks in the laboratory

In steel manufacturing process, oxides are utilized. In our laboratory, we oxidize the surface of steel plates to investigate their thermal properties. For example, we conduct analyses such as measuring the thermal conductivity of oxidized samples and observing the microstructure of the oxides. Based on these results, we also perform heat transfer simulations.

Program period

max 1 year

Required skills

None

Desired skills (Preferred skills)

understanding for thermodynamics and heat transfer

Eligibility-school year

- Bachelor 3rd
- Bachelor 4th or higher
- Master 1st
- Master 2nd
- PhD 1st
- PhD 2nd
- PhD 3rd

Eligibility-student's major/fields

- Mechanical
- Chemistry
- Material
- Electrical
- Electronic
- Computer Science
- Life Science
- Mathematical
- Civil Engineering
- Architecture
- Engineering and design
- Other