

Prof. Akihiko Hatano

Laboratory name

Biomolecular Laboratory

Keyword

Bio-Organic Chemistry, Organic Chemistry, Nucleic Chemistry, Enzyme Engineering

Tasks in the laboratory

In our laboratory, we try to design, synthesize, and analysis bio-molecules to produce new functional molecules. There are three themes. One is nucleic acid chemistry. The second is enzyme chemistry. The third is middle-molecule drug chemistry. We are investigating an efficient method for synthesizing nucleoside drugs by combining nucleic acid chemistry and enzyme engineering. Medium molecular chemistry is developing diabetes drugs. We are aiming to develop highly efficient diabetes drugs by making polyvalent amino sugars with medium molecules.

Program period

More than 6 months

Eligibility-school year

- Third year undergraduate
- Fourth year or higher undergraduate
- First year master degree
- Second year or higher master degree
- First year doctoral degree
- Second year doctoral degree
- Third year or higher doctoral degree

Eligibility-student's major/fields

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

Required skills

- Basic understanding for organic chemistry and bio-organic chemistry
- Fundamental knowledge for Experiment of organic chemistry

Desired skills (Preferred skills)

Positive thinking, strong mental and cooperativeness

URL: [https://www.shibaura-it.ac.jp/en/research/lab/engineering/materials/akihiki\\_hatano.html](https://www.shibaura-it.ac.jp/en/research/lab/engineering/materials/akihiki_hatano.html)

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