# Call for MicroED Application Proposal 2023

Institute for Protein Research is now accepting non-proprietary proposals for Microcrystal Electron Diffraction (MicroED).

#### 1. Microcrystal Electron Diffraction (MicroED)

MicroED (Microcrystal Electron Diffraction: Rotational method for the electron diffraction) is the crystallographic technique to collect the diffraction images from thin ( $< 1\mu m$ ) 3D crystals in the powder sample. Even in the case that the X-ray experiment only showed the power diffraction pattern from the sample, MicroED experiment may acquire the diffraction patterns from single crystal(s) and solve the structure of complicated natural compounds or synthetic organic materials. Our institute implemented the automatic data acquisition system already, then crystal polymorph or low rate of crystalline particles may not be a serious problem. Since the method is still under development, applicants cannot operate the electron microscopy by themselves in principle and collaborative support from IPR member is essential.

#### Microscopes

JEM-2200 FS (JEOL)
200kV, TVIPS F416 camera, in-column ω-filter
Talos Arctica (Thermo Fisher Scientific)
200kV, Ceta Camera

### 2. Requirements of the Applicants

Researchers who belong to academic organizations. The proposal must be non-proprietary.

#### 3. Valid Term of the Application

1 year. From April 1, 2023 to March 31, 2024.

## 4. How to Apply

Required documents: Application Form (Original)

\* Application Form and This Guidelines for applicants (this document) can be downloaded from the web site. (http://www.protein.osaka-u.ac.jp/joint)

## Deadline for Proposal Submission: December 1, 2022 (Thu.)

Send to: Project Team of Joint Usage / Research Center,

Institute for Protein Research, Osaka University

3-2 Yamadaoka, Suita, Osaka 565-0871

Japan

TEL:+81-6-6879-4323 / FAX+81-6-6879-8590

### 5. Contact

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# 6. Proposal Review

The proposal will be reviewed by the Panel on Joint Usage/Research, and the decision will be informed to the applicant in the early March, 2023

### 7. Usage Reports

"Research Report" has to be submitted within one month after completion of the experiment.

#### 8. Publication

When the research results are published in journals, the researchers should describe that the research has been conducted under this program. For example, the following sentence should be added to an acknowledgement section:

"This work was (in part) performed under the Collaborative Research Program (MicroED) of Institute for Protein Research, Osaka University.

## 8. Others

Researchers should be responsible for their own health insurances during their stay at IPR.