講演会のお知らせ

◆講師◆　Dr. Brent L. Nannenga
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◆演題◆ Development and Applications of Microcrystal Electron Diffraction(MicroED)

◆日時◆ 2024年6月24日（月）17:00～18:30

◆場所◆ EEI棟6階611会議室

Abstract

A common barrier to high-resolution structure determination is the growth of large well-ordered crystals. Electron diffraction is capable of producing diffraction data from crystals that are orders of magnitude smaller than those needed for conventional X-ray crystallographic experiments. The cryo-EM technique of microcrystal electron diffraction, or MicroED allows the collection of high-resolution diffraction data from extremely small nano and microcrystals that resist other structure determination techniques. The method has been used to solve high-resolution structures from a variety of diverse of targets and is becoming a powerful tool for macromolecular and chemical crystallography. In this presentation, MicroED methods will be described along with representative applications of the method to biomolecular crystals, organic crystals, and materials. Additionally, current work in our lab, which is focused on improving MicroED methodology and extending this technique to new samples will be presented.

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