

Teaching Outside the Classroom: Field Trips in Crystallography Education for Chemistry Students

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Abstract Image:



Abstract Text:

Field trips are an underutilized opportunity to provide depth and richness in college-level chemistry courses. We have found that a field trip, such as to the Advanced Photon Source (APS) at Argonne National Lab, greatly enhances the impact of a course in X-ray crystallography. Students who attend this field trip report that it is a highlight of the course and develop a lasting interest in the science of X-ray crystallography as a result. We report on our experience in planning these trips, advise on best practices, and demonstrate the positive impact of a field trip on student learning and engagement.

References:

- (1) Malbrecht, B.J.; Campbell, M.G.; Chen, Y.-S.; Zheng, S.-L. *J. Chem. Educ.*, **2016**, 93 (9), 1671–1675.