

## MS48 What should undergraduate students learn about crystallography?

MS48-05

Teaching Crystallography Without a Diffractometer

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### Abstract

Crystallography has been, and remains, the principal method of obtaining structural information at the molecular level, and therefore is of paramount importance in chemistry (particularly synthetic chemistry). Since the Cambridge Structural Database (CSD) is the world's largest repository of crystal structures, with well over a million structures deposited, it is an invaluable resource for structural information on molecules. In the absence of a diffractometer (a common situation in universities the world over), the CSD is a valuable resource for teaching crystallographic concepts. It is used in several different courses across the undergraduate Chemistry curriculum at the University of West Florida, a primarily undergraduate institution. In this presentation, we will describe how the CSD is integrated into our lecture and laboratory courses as well as into our research programs.