

*Teaching crystallography using the powder diffraction file*

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Crystallographic databases such as the Cambridge Structural Database and the Powder Diffraction File, among others, are no longer merely data repositories of crystallographic information as it used to be in a not so distant past. The data mining capabilities now built in these databases have transformed them in legitimate teaching and research tools. As part of the ever-present concern of our community for teaching Crystallography, these tools have extensively been used in different Courses, Workshops, and OpenLabs, around the world. In the case of the Powder Diffraction File, the days of the PDF cards and the Crystal Data books with their key information statically stored are long gone. The increasing range of facilities being incorporated into a computer based implementation has certainly broaden the application of the PDF for teaching Crystallography, particularly in the academic environment. In this contribution, the main features of the PDF used in recent teaching activities in Latin America will be presented. A short review of how the capabilities of the PDF have evolved over the years and how they have been used by the author in almost 40 years of teaching Crystallography, mainly in the Latin American region, will also be presented.

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