**MS016.O01**

Interactive teaching of crystallography using Jmol

Robert Mark Hanson[1]
[1]*Department Of Chemistry, St. Olaf College, Northfield, United States*
E-mail: hansonr@stolaf.edu

Many aspects of crystallography are difficult for students to conceptualize. Examples include symmetry operations, primitive vs. conventional unit cells, reciprocal lattices, electron density, incommensurate modulation, and local atom environments. Jmol, both as a stand-alone Java application and especially as its web-based HTML5/JavaScript "JSmol" equivalent, is uniquely positioned to provide dynamic, interactive, accessible opportunities to students and professionals alike so that they can explore and visualize these difficult concepts. This presentation will focus on recent developments in Jmol that allow students and interested developer-educators to address long-standing issues in crystallography education, providing examples of several simple web sites that have been developed or are in the process of development for such purposes.
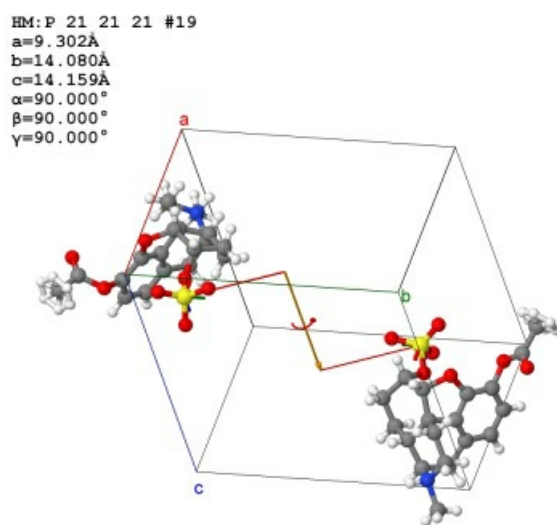
COD 2004374 operation 2 (screw axis)

Keywords: Jmol, education, web