Poster

Addressing Crystallography Misconceptions for Chemistry Students

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Misconceptions in chemical crystallography are a significant issue faced by many chemistry students [1]. "Even the brightest students in the class have false ideas based on enduring misconceptions that traditional instructional methods cannot overcome."[2] Traditional instructional methods often fail to address these misconceptions, leaving students with false ideas that hinder their ability to understand the course material [1]. To address this, we've re-designed our crystallography course, implementing various active learning methods, and providing diverse learning paths for our students over the past decade.[3-8] Our teaching strategy now features case-based learning modules that specifically target common misconceptions in chemical crystallography.[8] This approach allows students to deepen their understanding of the course material and acquire the necessary knowledge to apply crystallography in their research. By adopting this method, we ensure that our students have a strong foundation in crystallography and are equipped to make meaningful contributions to the field [9-14].

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