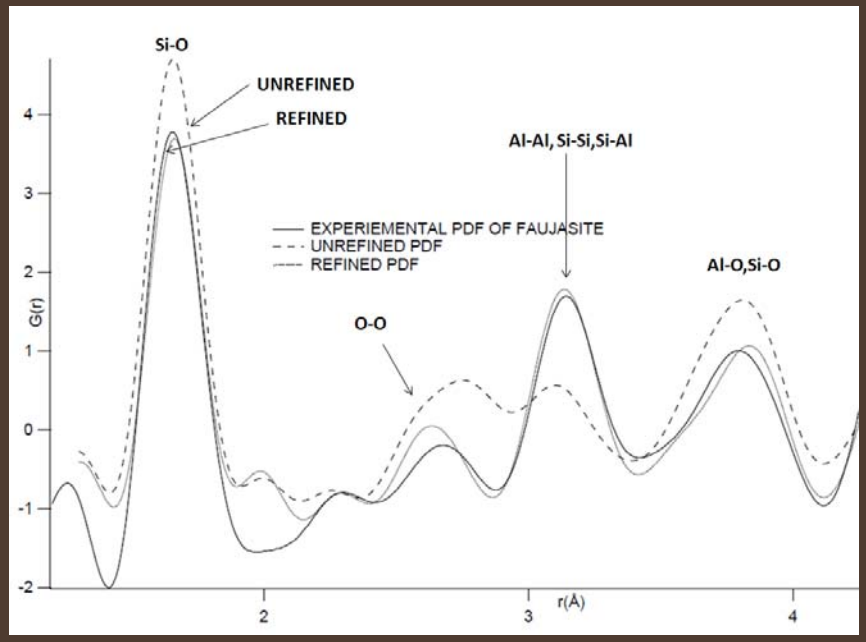
Development of a Scattering Characterization Technique to Study the Nucleation and Growth Mechanism of Supported Metals

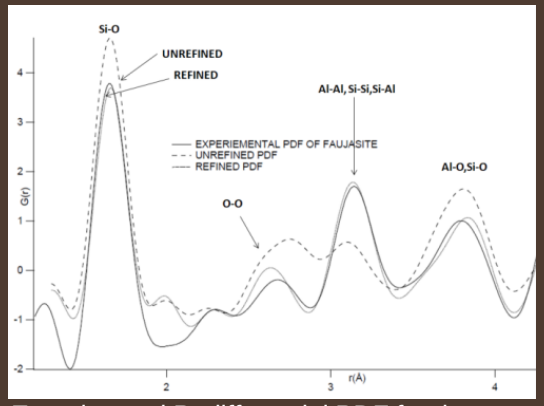
Maria Martinez-Inesta, Chemical Engineering Department, University of Puerto Rico, Mayaguez, PR ND 49192-ND5

•Structural models were obtained for zeolites faujasite and mordenite with a real space Rietveld refinement using the experimental pair distribution function (PDF)

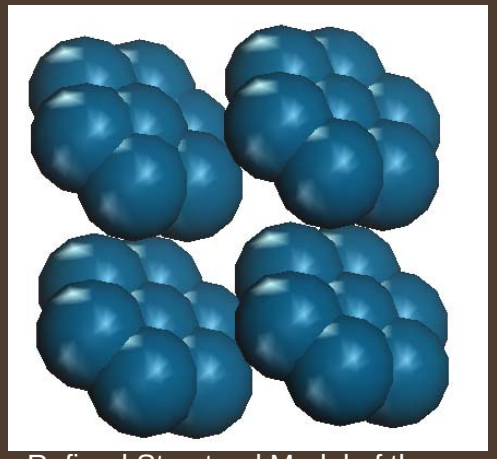


Unrefined and refined structure of faujasite compared to the experimental PDF

A Pt Cluster Model was obtained that agreed with the differential Pt PDF



Experimental Pt differential PDF for the 2.5% wt Pt-faujasite



Refined Structural Model of the supported Pt particles