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Presentation Title: Nanoporous Materials	
Abstract: <p>Nanoporous materials, such as the aluminosilicate zeolites and the open-framework aluminum phosphates, find widespread applications in separation processes, ion-exchange, and catalysis [1]. The presentation will review both the history and recent developments in this fast-moving area, including the discovery of nanoporous materials based upon many other types of chemistries, e.g. oxides, halides, nitrides, and especially open-framework organic-inorganic framework structures. We shall then discuss some aspects of our recent work in Santa Barbara on open-framework metal phosphates and carboxylates. In the first area, we shall describe some of the properties of nanoporous nickel phosphate materials, including their potential for catalysis and hydrogen storage [2-7]. In the context of hybrid materials, the synthesis of some dicarboxylates with various dimensionalities will be discussed, including systems that exhibit high surface areas and reversible adsorption-desorption properties [8-10]. We shall also examine the synthetic factors that influence the structures adopted by hybrid framework materials [11-15].</p>	
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