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The Role of the Ferroelectric Nature of a Substrate on its Ability to absorb Carbon Dioxide¹ E. RAMOS-MOORE, JURGEN BAIER, A. L. CABRERA, Universidad Catolica-Departamento de Fisica-Santiago-Chile — The CO₂ adsorption on potassium niobate (KNbO₃) and potassium tantalate (KTaO₃) was studied in order to compared a ferroelectric and a parelectric surface towards CO₂ adsorption. Both oxides has Perovskite structure but when the niobate is ferroelectric at room temperature the tantalate is not. Characterization of the oxide powders was made by XRD, SEM and Micro-Raman spectroscopy. The adsorption of carbon dioxide was performed by TPD using the same system were BET surface area was obtained. TPD results will be displayed and discuss in the presentation.

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Alejandro Cabrera Universidad catolica

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