## Abstract Submitted for the TSF05 Meeting of The American Physical Society

Microwave Enhanced Polarization in Carbon Dioxide Molecule JAMES ROBERTS, AMAN ANAND, University of North Texas, JAI DAHIYA, Southeast Missouri State University — The chemistry of carbon dioxide is one of the most interesting topics for the scientists in this modern age of technology. Science has made tremendous progress in several fields and humanity is reaping the rewards of this important progress. But at the same time this progress in technology has a big price tag for humanity to pay and this is in terms of the pollution that we as human beings have to face. The Green House Effect is one of the hottest topics of this modern technological era. A significant percentage of this problem is the presence of carbon dioxide in the atmosphere that is depleting the ozone layer. This is a very critical problem and the problem is based on the unavoidable production of carbon dioxide required in this modern technological world. In this research paper a possible solution to this problem in which one can make use of the CO<sub>2</sub> molecule and avoid its exposure to the atmosphere is given. In this experiment microwave technology is used to activate carbon dioxide. The amount of carbon dioxide has increased significantly in the last decade: This enhances the green house effect. A lot of research has been done on the activation of carbon dioxide photo chemically and electrochemically. But no reports have been given on the research subject of activating carbon dioxide by using microwave technology. The main goal of this research experiment is to activate and utilize the CO<sub>2</sub> molecule by using microwave technology.

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