## Abstract Submitted for the MAR13 Meeting of The American Physical Society

Study of polymorphism of Atenolol and Captopril antihypertensives using x-ray powder diffraction and Rietveld refinement JULIANA SATO, FABIO FERREIRA, Universidade Federal do ABC (UFABC) — Characterization of bulk drugs has become increasingly important in the pharmaceutical industry. X-ray powder diffractometry is an effective technique for the identification of crystalline solid-phase drugs. The technique is unique, since it combines specificity with a high degree of accuracy for the characterization of pharmaceuticals in solid state and is an especially useful method to describe the possible polymorphic behavior of drugs substances. In this work X-ray diffraction data have been obtained for two well-known antihypertensive drugs currently being administered in tablet form. They include atenolol and captopril. Atenolol and captopril were purchased from drugstore. The characterizations of the atenolol and captopril samples were carried out by FTIR spectroscopy and X-ray powder diffraction (XRPD).

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