Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Infrared spectroscopic investigation of stable glasses of indomethacin JING JIANG, MARK EDIGER, University of Wisconsin- Madison — Glasses with high density and kinetic stability can be prepared by physical vapor deposition. By varying the substrate temperature, stable glasses can be produced with an anisotropic distribution of molecular orientations. We use infrared transmission spectroscopy to investigate the effect of substrate temperature on the structure of indomethacin stable glasses. At normal incidence, height of peaks which are assigned to asymmetric hydrogen-bonded acid C=O stretching vary systematically with the substrate temperature. This indicates either more hydrogen-bonded acid carbonyl groups in the most stable glass or a dependence of molecular orientation upon substrate temperature can be shown by IR.

Jing Jiang
University of Wisconsin- Madison

Date submitted: 14 Nov 2014 Electronic form version 1.4