Abstract Submitted for the MAR09 Meeting of The American Physical Society

Application of a Newly Built Chirped-Pulse Fourier Transform Microwave (CP-FTMW) Spectrometer to Study Biomolecules in the Gas Phase¹ RYAN BIRD, DAVID PRATT, University of Pittsburgh, JUSTIN NEILL, BROOKS PATE, University of Virginia — Chirped-pulse Fourier Transform Microwave (CP-FTMW) spectroscopy is an exciting new technique that makes possible the recording of the complete microwave spectrum of a gas phase sample using a single 1 μ s pulse.² In this report, we will describe the recent introduction of a laser ablation nozzle for the study of small biomolecules using this technique. Potential applications to samples such as nucleic acid base pairs and small polypeptides will also be described.

Ryan Bird University of Pittsburgh

Date submitted: 21 Nov 2008 Electronic form version 1.4

¹Work supported by NSF (CHE-06 18740).

²G. G. Brown et al. J. Mol. Spectrosc. **238**, 200-212 (2006).