Application of a Newly Built Chirped-Pulse Fourier Transform Microwave (CP-FTMW) Spectrometer to Study Biomolecules in the Gas Phase

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 µs pulse. 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.

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