

BROADBAND FTMW SPECTROSCOPY OF THE UREA-ARGON AND THIOUREA-ARGON COMPLEXES

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The rotational spectra complexes of argon-urea, argon-thiourea and water-thiourea have been measured by chirped-pulse Fourier transform microwave spectroscopy from 2-18.5 GHz. The sample was produced via laser vaporisation of a rod containing copper and the organic sample as a stream of argon was passed over the surface and subsequently expanded into the vacuum chamber cooling the sample. Argon was found to bind to π system of the carbonyl bond for both the urea and thiourea complexes.