

## THE MILLIMETER WAVE SPECTRUM OF ESTRAGOLE AND VERBENONE

COREY J EVANS, STEPHANIE M ALLPRESS, *Department of Chemistry, University of Leicester, Leicester, LE1 7RH, United Kingdom*; PETER D GODFREY, DON MCNAUGHTON, *School of Chemistry, Monash University, 3800, Victoria, Australia*.

The rotational spectra of estragole and verbenone have been recorded in the millimeter wave region (48-72 GHz). This is the first ever investigation of the rotational spectroscopy of both estragole and verbenone. For estragole, lines from two conformers have been identified and assigned. Surprisingly, lines from a possible third low-lying conformer were unobserved. Precise rotational and centrifugal distortion constants for both conformers have been determined. For verbenone, lines have been assigned to the global minimum structure and precise rotational and centrifugal distortion constants have been determined.