

ROTATIONAL SPECTRA AND NUCLEAR QUADRUPOLE COUPLING CONSTANTS OF 4-HALOPYRAZOLES
 $C_3N_2H_3X$ ($X = Br, I$)

GRAHAM A. COOPER, CHRIS MEDCRAFT, *School of Chemistry, Newcastle University, Newcastle-upon-Tyne, United Kingdom*; ANTHONY LEGON, *School of Chemistry, University of Bristol, Bristol, United Kingdom*; NICK WALKER, *School of Chemistry, Newcastle University, Newcastle-upon-Tyne, United Kingdom*.

The microwave spectra of the heteroaromatic molecules 4-bromopyrazole and 4-iodopyrazole have been recorded for the first time, along with their *N*-deuterated isotopologues. These species have recently been found to be useful in structural determination of proteins due to their ability to attach at a variety of binding sites.^a The nuclear quadrupole coupling constants have been fitted, and these have been used to determine the nature of the C-X bond, and related to the strength of the halogen bonds formed by the molecules.

^aJ. D. Bauman, J. J. E. K. Harrison, and E. Arnold, *IUCrJ* 2016, 3, 51–60