HIGH-RESOLUTION MW AND UV STUDIES OF THE JET-COOLED CHIRAL PROTOTYPE 1,1'-BI-2-HYDROXYNAPHTHALENE

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Current results from extensive spectroscopic studies of the jet-cooled chiral molecule 1,1'-bi-2-hydroxynaphthalene will be presented. First, a characterization of the ground electronic state obtained from an analysis of high-resolution microwave studies, on three isotopic variants, will be reported. Second, details of the S_1 electronic state at 341 nm, as elucidated by high-resolution UV spectroscopy in a skimmed molecular beam, will be described. Third, the latest results from ongoing polarization-sensitive cavity-ring-down studies which probe the optical activity of enantiomerically pure, jet-cooled samples will be given.