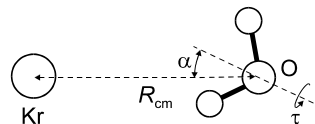


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MW**H₂KrO****Krypton – water (1/1)**
(weakly bound complex)**C_s**
(effective symmetry class)
(large-amplitude motion)
Kr · H₂O

r_0	Å ^{a)}
R_{cm}	3.7896(50) ^{b)}
	3.8261(50) ^{c)}

A tunneling splitting due to a large-amplitude internal motion of the H₂O subunit that exchanges bonded and non-bonded hydrogen atoms was observed. The values of R_{cm} in the other 21 isotopomers detected differ from the two corresponding ones listed in the above table by less than 0.01 Å. The intermolecular stretching wavenumbers are 34.8 and 39.7 cm⁻¹, and the corresponding force constants are 1.06 and 1.38 N m⁻¹, respectively for the lower and upper tunneling states of ⁸⁶Kr · H₂O. Experimental and theoretical data previously reported indicate that the angles $\alpha = 90^\circ$ and $\tau = 0^\circ$ (namely the complex is planar and of C_s symmetry).



^{a)} Uncertainties were not estimated in the original paper.

^{b)} For the lower tunneling state of ⁸⁶Kr · H₂O.

^{c)} For the higher tunneling state of ⁸⁶Kr · H₂O.

Van Wijngaarden, J., Jäger, W.: Mol. Phys. **98** (2000) 1575.