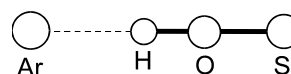


27 IR	ArHOSi⁺	Hydroxysilyliumylidene – argon (1/1) (weakly bound complex)	C_{∞v} (effective symmetry class) (large-amplitude motion) H–O–Si ⁺ · Ar	

State	R_{cm} [Å] ^{a)}	$r(\text{Ar} \dots \text{H})$ [Å] ^{a)}	$r(\text{O} - \text{Si})$ [Å]	$r(\text{O} - \text{H})$ [Å]
$\nu=0$	4.062(1)	2.186(1)	1.537 ^{b)}	0.940 ^{b)}
ν_1	4.010(9)	2.134(9)	1.537 ^{b)}	0.940 ^{b)}
$\nu_1 + \nu_s$	4.040(2)	2.164(2)	1.537 ^{b)}	0.940 ^{b)}
$\nu_1 + 2 \nu_b$	3.996(3)	2.120(3)	1.537 ^{b)}	0.940 ^{b)}

The structure of the linear H-bound complex was determined from the rovibrational IR photodissociation spectra of the ν_1 fundamental and the $\nu_1 + \nu_s$ and $\nu_1 + 2 \nu_b$ combination bands.



The geometry of the monomer subunit was assumed to be unchanged upon complexation.

^{a)} Estimated standard errors.

^{b)} Assumed.

Olkhov, R.V., Nizkorodov, S.A., Dopfer, O.: Chem. Phys. **239** (1998) 393.