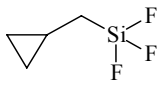
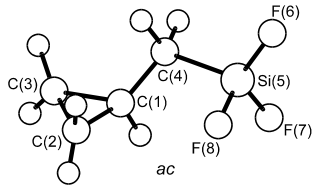
551 **$C_4H_7F_3Si$** **(Cyclopropylmethyl)trifluorosilane** **C_1** (*ac*)
ED, *ab initio* calculations **C_s** assumed (*sp*)



r_a	Å [a] [b]	θ_a	deg [a]	
			ac	*sp*
C(1)–C(2)	1.520 [c]	Si–C(4)–C(1)	115.0(12)	123.4(37)
C(2)–C(3)	1.500 [c]	F(6)–Si–C	111.3(24)	109.0 [c]
C(1)–C(4)	1.548(12)	F(7,8)–Si–C	110.0 [c]	115.9(64)
Si–C(4)	1.837(5)	H–C(1)–C(4)	110.5 [c]	113.0 [c]
Si–F	1.593(1)	H–C(4)–H	106.3(18)	106.3(18)
C–H	1.095(8)	H–C–H (ring)	113.0 [c]	113.0 [c]
		φ [d]	129.5(17)	124.6(53)
		τ_1 [e]	170.0(54)	180.0 [c]
		τ_2 [f]	115.7(29)	0.0 [c]

The molecule was found to exist as a mixture of *ac* and *sp* conformers with respect to the C(1)–C(4) bond in the ratio of 75(12):25(12).
The nozzle temperature was 40 °C.



[a]) Three times the estimated standard errors.
[b]) Bond lengths of the *ac* and *sp* conformers were assumed to be equal.
[c]) Assumed.
[d]) Angle between the C(1)–C(4) bond and the ring plane.
[e]) Torsional angle F(6)–Si–C(4)–C(1), $\tau_1 = 0°$ for the *syn* position.
[f]) Torsional angle Si–C(4)–C(1)…X (X is the center of the ring), $\tau_2 = 0°$ for the *syn* position.

Dakkouri, M.: J. Mol. Struct. **413-414** (1997) 133.