

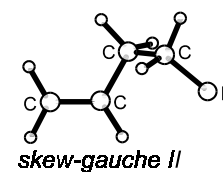
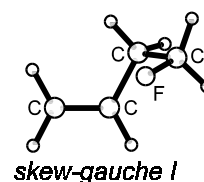
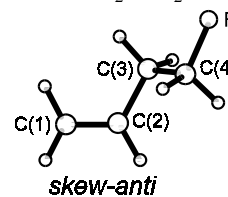
1692
MW

C₄H₇F

4-Fluoro-1-butene

C₁ (*skew-anti*)
C₁ (*skew-gauche* I)
C₁ (*skew-gauche* II)
H₂C=CH-CH₂-CH₂F

<i>r</i> ₀	Å	θ ₀	deg
C(1)=C(2)	1.331 ^{a)}	C(1)=C(2)-C(3)	127.8 ^{a)}
C(2)-C(3)	1.496 ^{a)}	C(2)-C(3)-C(4)	111.6 ^{a)}
C(3)-C(4)	1.530 ^{a)}	H-C(1)=C(2)	121.5 ^{a)}
C(4)-F	1.393 ^{a)}	H-C(2)=C(1)	121.5 ^{a)}
C(1)-H	1.090 ^{a)}	C(3)-C(4)-F	111.0 ^{a)}
C(2)-H	1.090 ^{a)}	C(3)-C(4)-H	109.47 ^{a)}
C(3)-H	1.093 ^{a)}	C(4)-C(3)-H	109.47 ^{a)}
C(4)-H	1.093 ^{a)}	H-C(3)-H	109.47 ^{a)}
		H-C(4)-H	109.47 ^{a)}
		C(1)=C(2)-C(3)-C(4) ^{b)}	
		(<i>skew-anti</i>)	114(3)
		(<i>skew-gauche</i> I)	125(3)
		(<i>skew-gauche</i> II)	125(3)
		C(2)-C(3)-C(4)-F ^{c)}	
		(<i>skew-anti</i>)	-179(3)
		(<i>skew-gauche</i> I)	-57(3)
		(<i>skew-gauche</i> II)	63(3)



Three conformers were detected.

^{a)} Assumed.

^{b)} Dihedral angle.

^{c)} Dihedral angle. A negative value indicates that the F atom approaches the double bond.

Guirgis, G.A., Marstokk, K.-M., Møllendal, H.: Acta Chem. Scand. **45** (1991) 482.