

¹⁹F NMR Reference Standards:

Compound:	δ(ppm) vs. CFCl ₃
CFCl ₃ (trichloro-fluoro-methane)	0.00
CF ₃ COOH (trifluoro acetic acid)	-76.55
C ₆ F ₆ (hexafluorobenzene)	-164.9
C ₆ H ₅ F (monofluorobenzene)	-113.15
CF ₃ Cl (trifluoro-chloro-methane)	-28.6
F ₂ (elemental fluorine)	+422.92
CH ₂ FCN (monofluoro acetonitrile)	-251
CFCl ₂ CFCl ₂ (difluoro, tetrachloroethane)	-67.80
C ₆ H ₅ CF ₃ (trifluoro-toluene)	-63.72
SiF ₄ (tetrafluorosilane)	-163.3
SF ₆ (sulfur hexafluoride)	+57.42
S ₂ O ₅ F ₂	+47.2
(CF ₃) ₂ CO (hexafluoro acetone)	-84.6
p-FC ₆ H ₄ F (para-difluorobenzene)	-106.0
BF ₃	-131-3
HF (aq)	-204.0
CF ₄	-62.5
Aqueous F ⁻ (KF)	-125.3

Positive (+) values indicate *downfield* shifts, lower-shielding, or higher frequency

Negative (-) values correspond to *upfield* shifts, higher-shielding, or lower frequency.

Note: Most literature references historically reverse the sign convention (i.e. negative shifts are reported as positive).