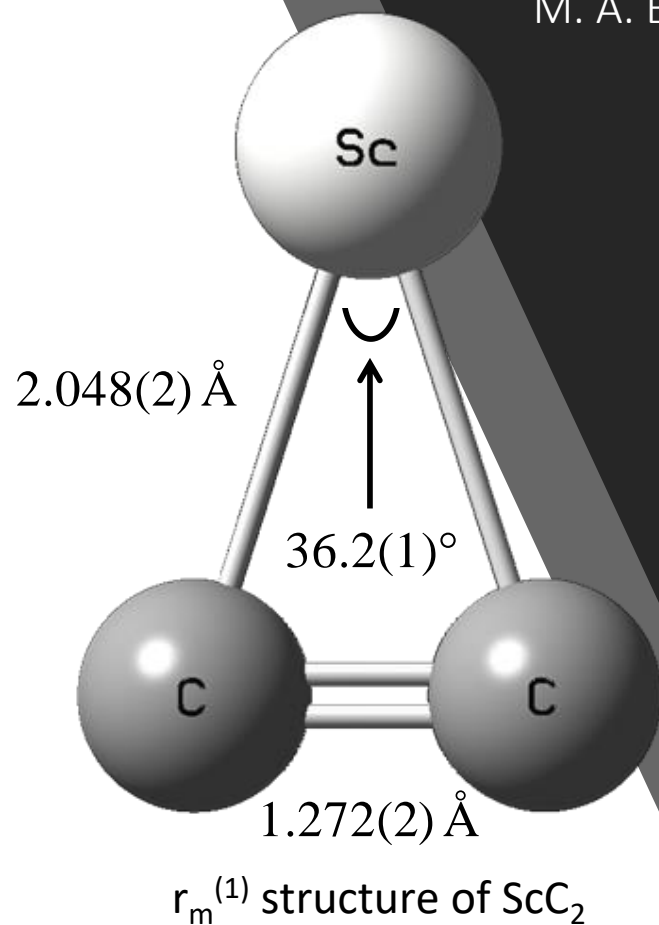


FD02: The Structure of ScC_2 (\tilde{X}^2A_1): A Combined Fourier Transform Microwave/Millimeter-wave Spectroscopic and Computational Study

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- An $r_m^{(1)}$ structure of ScC_2 determined experimentally
- Computationally determined geometries and molecular constants compared very well with highly accurate experimental structure
- CcCRE computational method can be used to predict geometries for starting experimental spectral surveys of other 3d-dicarbides

ScC_2			
	CcCRE	Exp.	% Diff.
B (MHz)	8401.348	8421.0934	0.235
C (MHz)	7214.709	7271.3857	0.782
$r_{\text{Sc-C}}$ (Å)	2.065	2.048	0.827
$r_{\text{C-C}}$ (Å)	1.2737	1.272	0.134
$\angle_{\text{C-M-C}}$	35.93	36.2	0.749