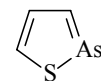


**351**      **C<sub>3</sub>H<sub>3</sub>AsS**  
ED, DFT calculations

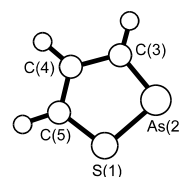
**1,2-Thiarsole**C<sub>s</sub> assumed

$r_g$	Å <sup>a)</sup>	$\theta_\alpha$	deg <sup>a)</sup>
C–H (average)	1.078(14)	C=C=C	118.0(12)
C(4)=C(5)	1.382(9) <sup>b)</sup>	As=C–C	117.7(10)
C(3)–C(4)	1.414(10) <sup>b)</sup>	S–C=C	117.9(9)
S–C	1.711(5)	As–S–C	96.6(4)
As=C	1.829(4)	S–As=C	89.8(5)
As–S	2.198(3)	C(4)–C(3)–H	123.8(61) <sup>b)</sup>
		C(3)–C(4)–H	121.7(82) <sup>b)</sup>
		C(4)=C(5)–H	123.4(92) <sup>b)</sup>

The nozzle temperature was 24 °C.

<sup>a)</sup> Twice the estimated standard errors.

<sup>b)</sup> Differences between the C–C bond lengths and between the C–C–H bond angles were constrained to the values from B3LYP/6-31G\* calculations.



Ashe, A.J., Fang, X., Schiesher, M., Richardson, A.D., Hedberg, K.: J. Am. Chem. Soc. **122** (2000) 7012.