

ternary arsenide, whereas a difference of $\sim 0.04 \text{ \AA}$ might be expected solely on the basis of the covalent radii.¹⁷ This leaves one with the thought that introduction of charge into such iso-electronic systems, viz., for $\text{Si-Se} \rightarrow \text{Si-As}^- \text{K}^+$, lengthens the Si-As bond appreciably. The same may occur when the higher field Ba^{2+} is present in $\text{Ba}_3\text{Si}_2\text{As}_4$ (above) although the two types of arsenic atoms present there complicate the situation.

Previously, we were able to discern a concerted (but hypothetical) process of ring opening and bond formation whereby the structure of SiAs could be reductively converted to that of the anion sheet found in KSi_3As_3 . This is not as direct for K_2SiAs_2

since the structure of the possible precursor SiAs_2 ¹⁸ (GeAs_2 type¹⁹) includes As-As bonds in the five-membered rings that have been condensed into sheets.

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Registry No. K_2SiAs_2 , 108945-44-4; K, 7440-09-7; SiAs_2 , 12255-97-9.

Supplementary Material Available: Tables of diffraction and refinement details and atomic thermal parameters for K_2SiAs_2 (2 pages); a listing of observed and calculated structure factor data (1 page). Ordering information is given on any current masthead page.

(17) Pauling, L. *The Nature of the Chemical Bond*, 3rd ed.; Cornell University Press: Ithaca, NY, 1960; p 225.

(18) Wadsten, T. *Acta Chem. Scand.* **1967**, *21*, 593.

(19) Bryden, J. H. *Acta Crystallogr.* **1962**, *15*, 167.

Additions and Corrections

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Karen Libson, Mary Noon Doyle, Rudy W. Thomas, Theodore Nelsnik, Mary Woods, James C. Sullivan, R. C. Elder, and Edward Deutsch*: Structural and Kinetic Investigations of a Tc(III)/Tc(II) Redox Couple. X-ray Crystal Structures of *trans*- $[\text{Tc}^{\text{II}}(\text{DPPE})_2\text{Cl}_2]$ and *trans*- $[\text{Tc}^{\text{III}}(\text{DPPE})_2\text{Cl}_2]\text{NO}_3 \cdot \text{HNO}_3$, Where DPPE = 1,2-Bis-(diphenylphosphino)ethane.

Page 3615. In Table I the *y* coordinates of atoms C(34) and C(35) were incorrectly listed as positive numbers. The proper values are -0.0646 (4) for C(34) and -0.0255 (3) for C(35).—R. C. Elder