

# Design considerations for the Group 15 elements: The pnictogen $\cdots\pi$ interaction as a complementary component in supramolecular assembly design

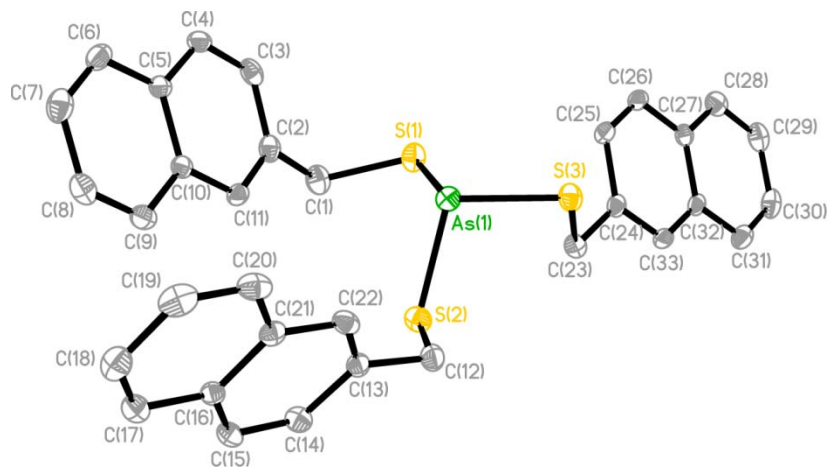
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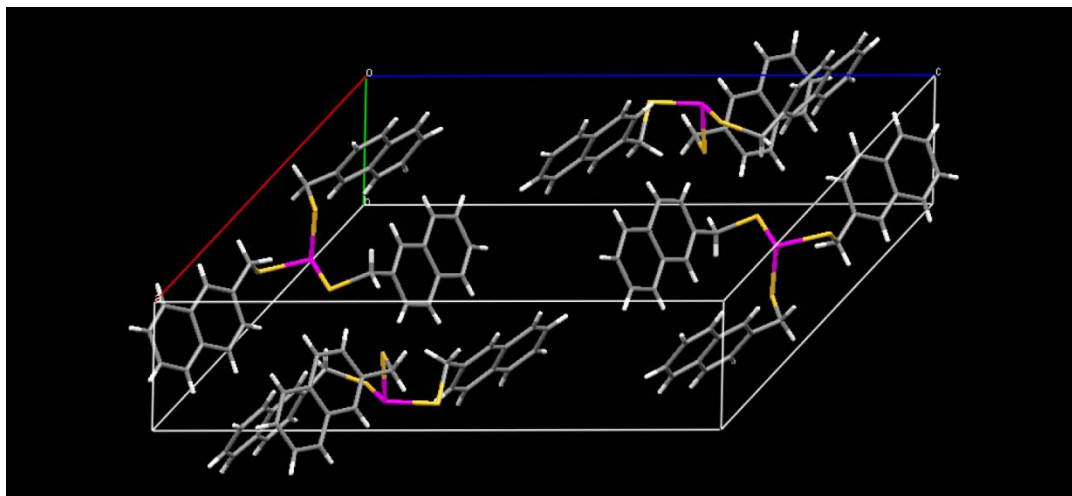
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## Supporting Information

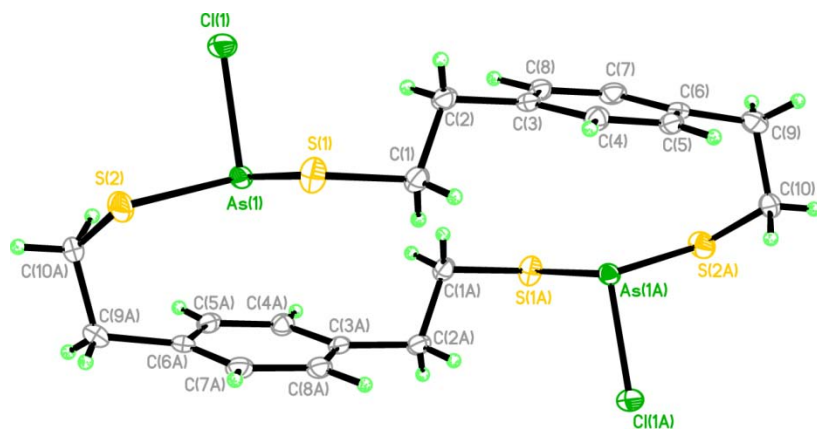
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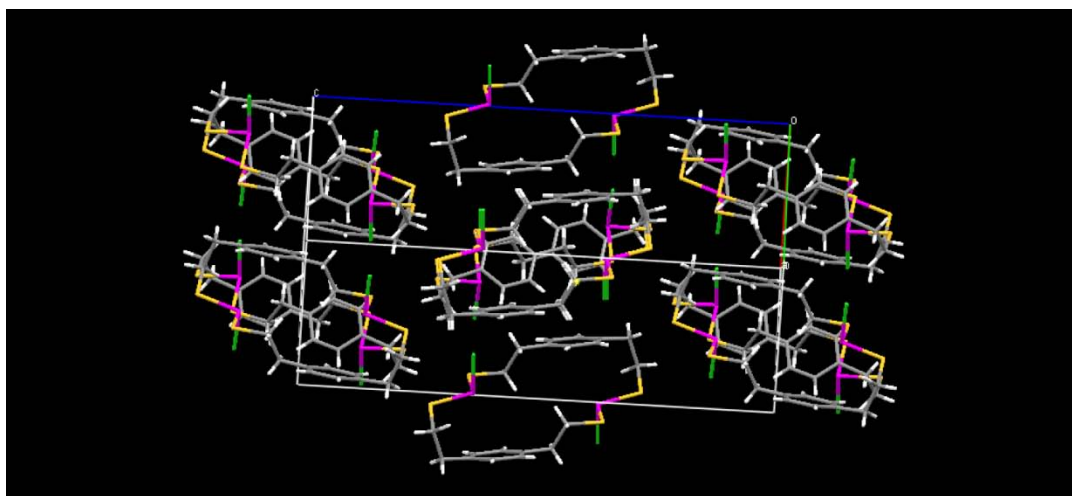
**Figure S1.** ORTEP representation (30% probability) of As(L<sup>4</sup>)<sub>3</sub>.



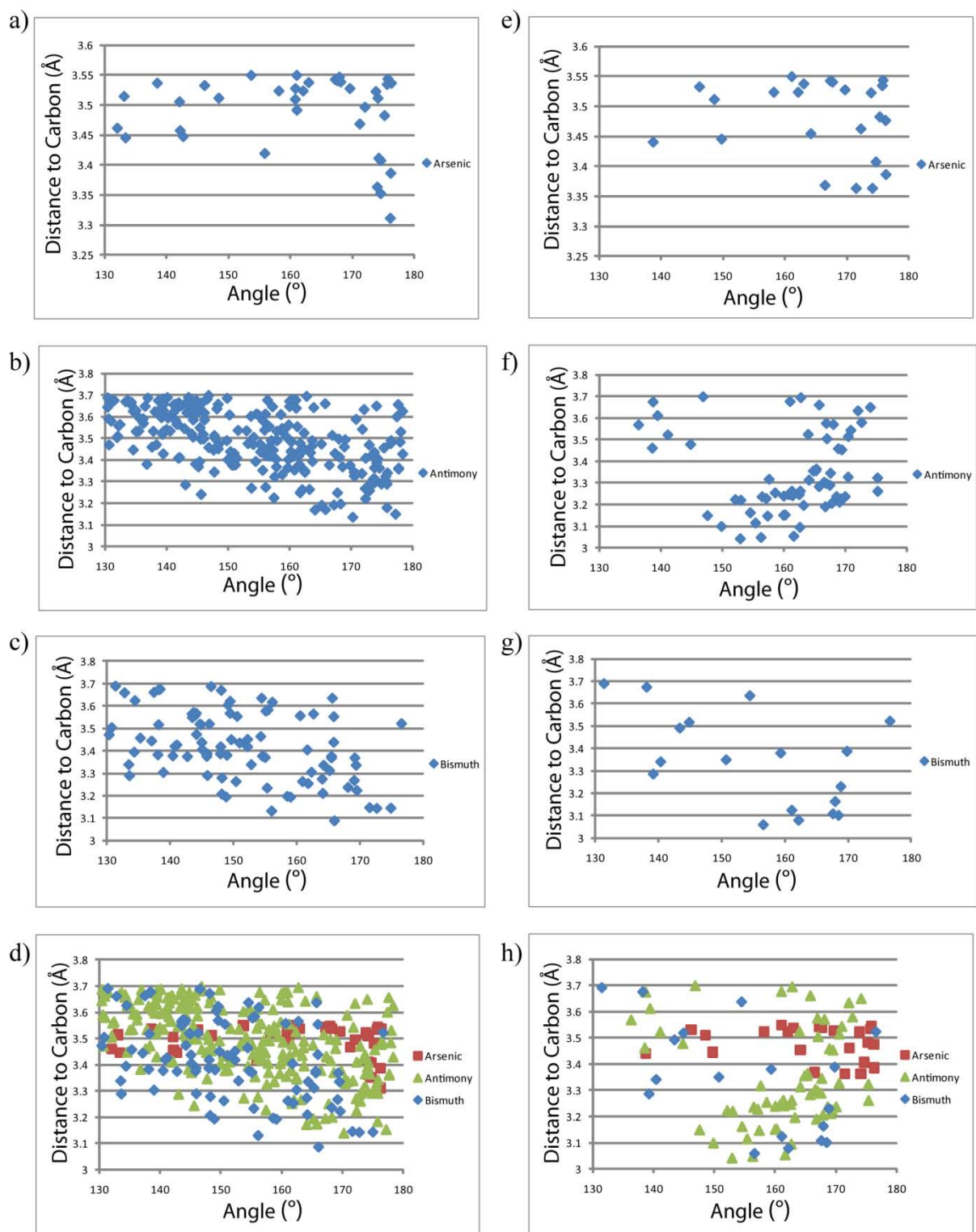
**Figure S2.** Capped-stick representation of packing of As(L<sup>4</sup>)<sub>3</sub>.



**Figure S3.** ORTEP representation (30% probability) of  $\text{As}_2(\text{L}^6)_2\text{Cl}_2$ .



**Figure S4.** Capped-stick representation of packing of  $\text{As}_2(\text{L}^6)_2\text{Cl}_2$ .



**Figure S5.** Distance-angle pairs for CSD structures as measured to the centroid for (a) As (correlation = -0.16), (b) Sb (cor = -0.54), (c) Bi (cor = -0.46), and (d) all pnictogens and to the carbon for (e) As (cor = 0.59), (f) Sb (cor = -0.79), (g) Bi (cor = -0.24), and (h) all pnictogens.

**Table S1.** Refcodes of arsenic-containing crystal structures from the Cambridge Structural Database included in structural survey.

BRPHAS	ESEARS	PDASOB	SALCIR
COPHAZ	FEPXAS	PHASOC	TADFAF
COPHAZ01	HAVMEW	PHASOC01	TAYSIW
DAXLOD	KISWUE	POXARS	ZALHEZ
DPASTS	KUNSIV	RARYIS	
DPASTS01	NEJQID	SADDOQ	
EPSARS	OPIMAS	SAFWEB	

**Table S2.** Refcodes of antimony-containing crystal structures from the Cambridge Structural Database included in structural survey.

BIPHSB10	GEQBUZ	PHENBS	SAVFEB
BUMGEV	GOMWAG	PIDCOV	STISBC01
CECJEZ	IREZOU	PIHVEI	TIDGOC
CUDHOY	ISOYAQ	POSWUP	TUMQOH
CUDHOY01	KIXSAL	POSXAW	VEMKED
DBDSBC01	KUTXOM	POSXEA	WANDAQ
DEJYAS	KUTXUS	PXYLSB	XAVLIP
DEJYEW	KUTYAZ	PYRABR	XDPANT01
DPASBC10	LAFBUQ	PYRSBB10	ZAZYOO
FAFLUU	MXBXS10	QIVWUN	ZOQWUX
FAGFAU	NAPSBC	QIVWUN01	ZZZBAM10
FOFYAR	OCEPAN	SAVDUP	

**Table 5.4.** Refcodes of bismuth-containing crystal structures from the Cambridge Structural Database included in structural survey.

AVIKUL	FUNJUT	RADHAF	YULYAF
EBIHED	ISOYEU	SAJSOM	ZOCWOD
FAKMIN	JEJPAP	WAMPAB	
FAPYOK	KAXYUD	XADQOI	
FAPYOK10	KISXEP	XADRAV	