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CH₄CIP ClCH ₂ PH ₂	Chloromethylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.
CH₅P CH ₃ PH ₂	Methylphosphine R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, B. Khater and J.-C. Guillemin Structure by ED, MW and <i>ab initio</i> calculations Dalton Trans. (2008), 5041-5047
CH₈BP CH ₃ PH ₂ BH ₃	Methylphosphine borane adduct R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, B. Khater and J.-C. Guillemin Structure by ED, MW and <i>ab initio</i> calculations Dalton Trans. (2008), 5041-5047
C₂H₃P HC≡CPH ₂	Ethynylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.
C₂H₅P CH ₂ =CHPH ₂	Vinylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED, MW and <i>ab initio</i> calculations Manuscript in preparation.
C₂H₆Br₄Si₂ Br ₃ SiSiBrMe ₂	1,1,1,2-Tetrabromo-2,2-dimethyldisilane S. L. Masters, H. E. Robertson, K. Hassler et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.

<p>C₃H₅P CH₂=C=CHPH₂</p>	<p>Allenylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₅P HC≡CCH₂PH₂</p>	<p>Propargylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₆Cl₃N N(CH₂Cl)₃</p>	<p>Tris(chloromethyl)amine N. W. Mitzel, J. T. Schirlin, S. L. Masters, D. W. H. Rankin et al. Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₃H₇P CH₂=CHCH₂PH₂</p>	<p>Allylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₉Br₃Si₂ Br₃SiSiMe₃</p>	<p>1,1,1-Trimethyl-2,2,2-tribromodisilane S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₉Cl₃Si₂ Me₃SiSiCl₃</p>	<p>1,1,1-Trichloro-2,2,2-trimethyldisilane S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₉F₃Si₂ F₃SiSiMe₃</p>	<p>1,1,1-Trifluoro-2,2,2-trimethyldisilane S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₃H₁₀Ge Me₃GeH</p>	<p>Trimethylgermane M. L. Roldán, S. A. Brandán, S. L. Masters, D. A. Wann, H. E. Robertson, D. W. H. Rankin and A. Ben Altabef Vibrational spectra and structure by ED and computational methods</p>

	Manuscript submitted to J.Phys.Chem.A
C₃H₁₂Si₂ H ₃ SiSiMe ₃	Tri-methyl-silylsilane S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.
C₄HCl₃N₂ C ₄ N ₂ Cl ₃	2,4,6-Trichloropyrimidine S. L. Masters, D. A. Wann and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.
C₄H₁₀N₄Si (N ₄ CH)SiMe ₃	1-Trimethylsilyltetrazole D. A. Wann, I. Gronde, T. Foerster, S. A. Hayes, S. L. Masters, H. E. Robertson, N. W. Mitzel and D. W. H. Rankin Structure by ED, X-ray and computational methods Dalton Trans. (2008), 3817-3823
C₄H₁₂Cl₂Ge₂ ClMe ₂ GeGeMe ₂ Cl	1,2-Dichloro-1,1,2,2-tetramethyldigermene M. Hölbling, S. L. Masters (née Hinchley), M. Flock, J. Baumgartner, K. Hassler, H. E. Robertson and D. A. Wann Raman spectra and structure by ED, X-Ray and computational methods Inorg. Chem. 47 (2008), 3023-3033
C₄H₁₄Ge₂ HMe ₂ GeGeMe ₂ H	1,1,2,2-Tetramethyldigermene M. Hölbling, S. L. Masters (née Hinchley), M. Flock, J. Baumgartner, K. Hassler, H. E. Robertson and D. A. Wann Raman spectra and structure by ED, X-Ray and computational methods Inorg. Chem. 47 (2008), 3023-3033
C₅H₉P ButCP	Tert-butylphosphaethyne C. Jones, H. E. Robertson, S. L. Masters et al. Structure by ED and <i>ab initio</i> calculations .
C₅H₁₁N₃Si SiMe ₃ -NNCNC	1-(Trimethylsilyl)-1,2,4-triazole D. A. Wann, I. Gronde, T. Foerster, S. A. Hayes, S. L. Masters, H. E. Robertson, N. W. Mitzel and D. W. H. Rankin Structure by ED and computational methods Dalton Trans. (2008), 3817-3823

<p>C₆H₄BrF C₆H₄BrF</p>	<p>1-Bromo-4-fluorobenzene S. L. Masters, I. D. Mackie, D. W. H. Rankin, H. E. Robertson and S. Parsons , , Structure by ED, liquid crystal NMR spectroscopy, <i>ab initio</i> calculations and X-ray diffraction Manuscript complete.</p>
<p>C₆H₄ClF C₆H₄ClF</p>	<p>1-Chloro-4-fluorobenzene S. L. Masters, I. D. Mackie, D. W. H. Rankin, H. E. Robertson and S. Parsons Structure by ED, liquid crystal NMR spectroscopy, <i>ab initio</i> calculations and X-ray diffraction Manuscript complete.</p>
<p>C₆H₇P C₆H₅PH₂</p>	<p>Phenylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₆H₁₂F₆Si₂ CF₃Me₂SiSiMe₂CF₃</p>	<p>1,2-Trifluoromethyl-1,1,2,2-tetramethyldisilane S. L. Masters, D. A. Wann, H. E. Robertson, F. Lennox, D. W. H. Rankin, I. Arnason, K. Hassler et al. Structure by ED and <i>ab initio</i> calculations, interpretation of Raman spectra Manuscript in preparation.</p>
<p>C₆H₁₈Ge₂ Me₃GeGeMe₃</p>	<p>Hexamethyldigermane M. Hölbling, S. L. Masters (née Hinchley), M. Flock, J. Baumgartner, K. Hassler, H. E. Robertson and D. A. Wann Raman spectra and structure by ED, X-Ray and computational methods Inorg. Chem. 47 (2008), 3023-3033</p>
<p>C₇F₁₄ C₆F₁₁CF₃</p>	<p>Perfluoromethylcyclohexane G. R. Kafka, S. L. Masters, D. W. H. Rankin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₇H₉P C₆H₅CH₂PH₂</p>	<p>Benzylphosphine R. Noble-Eddy, S. L. Masters, B. Khater, J.-C. Guillemin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>

<p>C₇H₁₆Cl₃PSi (tBu)(iPr)PSiCl₃</p>	<p>(tert-Butyl)(iso-propyl)(trichlorosilyl)phosphine E. Seppälä, W.-W. du Mont, S. L. Masters, D. W. H. Rankin and H. E. Robertson Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
<p>C₉H₂₄Br₄Si₄ C(SiMe₂Br)₄</p>	<p>Tetrakis(bromodimethylsilyl)methane K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₉H₂₄Cl₄Si₄ C(SiMe₂Cl)₄</p>	<p>Tetrakis(chlorodimethylsilyl)methane K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₉H₂₄F₄Si₄ C(SiMe₂F)₄</p>	<p>Tetrakis(fluorodimethylsilyl)methane K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₉H₂₈Si₄ C(SiMe₂H)₄</p>	<p>Tetrakis(dimethylsilyl)methane K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₁₀H₃₀Si₄ (Me₃Si)₃CSiH₃</p>	<p>(Silyl)tris(trimethylsilyl)methane K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₁₁H₃₀Br₂Si₄ C(SiMe₃)₂(SiMe₂Br)₂</p>	<p>Bis(bromodimethylsilyl)bis(trimethylsilyl)methane K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
<p>C₁₁H₃₀Cl₂Si₄</p>	<p>Bis(chlorodimethylsilyl)-bis(trimethylsilyl)methane</p>

$(\text{Me}_3\text{Si})_2\text{C}(\text{SiClMe}_2)_2$	<p>K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
$\text{C}_{11}\text{H}_{32}\text{Si}_4$ $\text{C}(\text{SiMe}_3)_2(\text{SiMe}_2\text{H})_2$	<p>Bis(dimethylsilyl)bis(trimethylsilyl)methane K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Structure by ED and computational methods Manuscript in preparation.</p>
$\text{C}_{12}\text{Fe}_3\text{O}_{12}$ $\text{Fe}_3(\text{CO})_{12}$	<p>Dodecacarbonyltriiron G. R. Kafka, S. L. Masters, D. W. H. Rankin et al. Structure by ED and <i>ab initio</i> calculations Manuscript in preparation.</p>
$\text{C}_{16}\text{H}_{38}\text{N}_4\text{W}$ $\text{W}(\text{NHBut})_2(\text{NBut})_2$	<p>Bis(<i>tert</i>-butylamino)-bis(<i>tert</i>-butylimido)tungsten H. Choujaa, S. D. Cosham, A. L. Johnson, G. R. Kafka, M. F. Mahon, S. L. Masters, K. C. Molloy, D. W. H. Rankin, H. E. Robertson and D. A. Wann Structure by ED and <i>ab initio</i> calculations Inorg. Chem. accepted subject to minor revisions</p>
O_6Sb_4 Sb_4O_6	<p>Antimony oxide dimer S. L. Masters, G. V. Girichev, S. A. Shlykov et al. Structure by ED and computational methods Manuscript in preparation.</p>