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CH₄CIP ClCH ₂ PH ₂	Chloromethylphosphine Structure by ED, MW and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
C₂H₃AsCl₂ CH ₂ CHAsCl ₂	Vinyldichloroarsine Structure by ED and computational methods <i>R. Noble-Eddy, S. L. Masters, D. W. H. Rankin, H. E. Robertson and J.-C. Guillemin</i> J. Mol. Struct., in press.
C₂H₃P HC≡CPH ₂	Ethynylphosphine Structure by ED, MW and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
C₂H₅As CH ₂ CHAsH ₂	Vinylarsine Structure by ED and computational methods <i>R. Noble-Eddy, S. L. Masters, D. W. H. Rankin, H. E. Robertson and J.-C. Guillemin</i> J. Mol. Struct., in press.
C₂H₅P CH ₂ =CHPH ₂	Vinyl phosphine Structure by ED, MW and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
C₂H₆Br₄Si₂ Br ₃ SiSiBrMe ₂	1,1,1,2-Tetrabromo-2,2-dimethyldisilane Structure by ED and ab initio calculations <i>S. L. Masters, H. E. Robertson, K. Hassler et al.</i> Manuscript in preparation.
C₃H₅P HC≡CCH ₂ PH ₂	Propargyl phosphine Structure by ED, MW and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
C₃H₅P CH ₂ =C=CHPH ₂	Allenyl phosphine Structure by ED and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
C₃H₆Cl₃N N(CH ₂ Cl) ₃	Tris(chloromethyl)amine Structure by ED and computational methods <i>N. W. Mitzel, J. T. Schirlin, S. L. Masters, D. W. H. Rankin et al.</i> Manuscript in preparation.
C₃H₇P	Allylphosphine Structure by ED and ab initio calculations

$\text{CH}_2=\text{CHCH}_2\text{PH}_2$	<i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
$\text{C}_3\text{H}_9\text{Br}_3\text{Si}_2$ $\text{Br}_3\text{SiSiMe}_3$	1,1,1-Trimethyl-2,2,2-tribromodisilane Structure by ED and ab initio calculations <i>S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont</i> Manuscript in preparation.
$\text{C}_3\text{H}_9\text{Cl}_3\text{Si}_2$ $\text{Me}_3\text{SiSiCl}_3$	1,1,1-Trichloro-2,2,2-trimethyldisilane Structure by ED and ab initio calculations <i>S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont</i> Manuscript in preparation.
$\text{C}_3\text{H}_9\text{F}_3\text{Si}_2$ $\text{F}_3\text{SiSiMe}_3$	1,1,1-Trifluoro-2,2,2-trimethyldisilane Structure by ED and ab initio calculations <i>S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont</i> Manuscript in preparation.
$\text{C}_3\text{H}_{10}\text{Ge}$ Me_3GeH	Trimethylgermane Vibrational spectra and structure by ED and computational methods <i>M. L. Roldán, S. A. Brandán, S. L. Masters (née Hinchley), D. A. Wann, H. E. Robertson, D. W. H. Rankin and A. Ben Altabef</i> J. Phys. Chem. A 113 (2009) 5195-5204
$\text{C}_3\text{H}_{12}\text{Si}_2$ $\text{H}_3\text{SiSiMe}_3$	Trimethylsilylsilane Structure by ED and ab initio calculations <i>S. L. Masters, H. E. Robertson, M. Hölbling, K. Hassler, C. Mitofan and W.-W. du Mont</i> Manuscript in preparation.
$\text{C}_5\text{H}_9\text{P}$ ButCP	tert-Butylphosphaethyne Structure by ED and ab initio calculations <i>C. Jones, H. E. Robertson, S. L. Masters et al.</i> Manuscript in preparation.
$\text{C}_6\text{H}_4\text{BrF}$ $\text{C}_6\text{H}_4\text{BrF}$	1-Bromo-4-fluorobenzene Structure by ED, liquid crystal NMR spectroscopy, ab initio calculations and X-ray diffraction <i>S. L. Masters, I. D. Mackie, D. W. H. Rankin, H. E. Robertson and S. Parsons</i> Manuscript complete.
$\text{C}_6\text{H}_4\text{ClF}$ $\text{C}_6\text{H}_4\text{ClF}$	1-Chloro-4-fluorobenzene Structure by ED, liquid crystal NMR spectroscopy, ab initio calculations and X-ray diffraction <i>S. L. Masters, I. D. Mackie, D. W. H. Rankin, H. E. Robertson and S. Parsons</i> Manuscript complete.
$\text{C}_6\text{H}_7\text{P}$ $\text{C}_6\text{H}_5\text{PH}_2$	Phenyl phosphine Structure by ED and ab initio calculations <i>R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin</i> Inorg. Chem. 48 (2009) 8603-8612
$\text{C}_6\text{H}_8\text{O}_4$	2,2-Dimethyl-1,3-dioxane-4,6-dione (Meldrum's acid) Structure by ED and ab initio calculations <i>R. Noble-Eddy and S. L. Masters</i> Manuscript in preparation.
$\text{C}_6\text{H}_{12}\text{F}_6\text{Si}_2$	1,2-Trifluoromethyl-1,1,2,2-tetramethyldisilane Structure by ED, X-ray diffraction and ab initio calculations, interpretation of Raman spectra

$\text{CF}_3\text{Me}_2\text{SiSiMe}_2\text{CF}_3$	S. L. Masters, D. A. Wann, H. E. Robertson, F. Lennox, D. W. H. Rankin, I. Arnason, K. Hassler et al. Manuscript in preparation.
C_7F_{14} $\text{C}_6\text{F}_{11}\text{CF}_3$	Perfluoromethylcyclohexane Structure by ED and ab initio calculations G. R. Kafka, S. L. Masters, D. W. H. Rankin et al. Manuscript in preparation.
$\text{C}_7\text{H}_9\text{P}$ $\text{C}_6\text{H}_5\text{CH}_2\text{PH}_2$	Benzylphosphine Structure by ED and ab initio calculations R. Noble-Eddy, S. L. Masters (née Hinchley), D. W. H. Rankin, D. A. Wann, H. E. Robertson, B. Khater and J.-C. Guillemin Inorg. Chem. 48 (2009) 8603-8612
$\text{C}_7\text{H}_{16}\text{Cl}_3\text{PSi}$ (tBu)(iPr)PSiCl ₃	(tert-Butyl)(iso-propyl)(trichlorosilyl)phosphine Structure by ED and ab initio calculations E. Seppälä, W.-W. du Mont, S. L. Masters, D. W. H. Rankin and H. E. Robertson Manuscript in preparation.
$\text{C}_9\text{H}_{24}\text{Br}_4\text{Si}_4$ $\text{C}(\text{SiMe}_2\text{Br})_4$	Tetrakis(bromodimethylsilyl)methane Structure by ED and computational methods K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_9\text{H}_{24}\text{Cl}_4\text{Si}_4$ $\text{C}(\text{SiMe}_2\text{Cl})_4$	Tetrakis(chlorodimethylsilyl)methane Structure by ED and computational methods K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_9\text{H}_{24}\text{F}_4\text{Si}_4$ $\text{C}(\text{SiMe}_2\text{F})_4$	Tetrakis(fluorodimethylsilyl)methane Structure by ED and computational methods K. Batz, G. R. Kafka, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_9\text{H}_{28}\text{Si}_4$ $\text{C}(\text{SiMe}_2\text{H})_4$	Tetrakis(dimethylsilyl)methane Structure by ED and computational methods K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_{10}\text{H}_{30}\text{Si}_4$ (Me ₃ Si) ₃ CSiH ₃	(Silyl)tris(trimethylsilyl)methane Structure by ED and computational methods S. L. Masters, D. W. H. Rankin, D. B. Cordes, K. Bätz, P. D. Lickiss, N. M. Boag, A. D. Redhouse and S. M. Whittaker Manuscript submitted to Dalton Trans.
$\text{C}_{11}\text{H}_{30}\text{Br}_2\text{Si}_4$ $\text{C}(\text{SiMe}_3)_2(\text{SiMe}_2\text{Br})_2$	Bis(bromodimethylsilyl)bis(trimethylsilyl)methane Structure by ED and computational methods K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_{11}\text{H}_{30}\text{Cl}_2\text{Si}_4$ (Me ₃ Si) ₂ C(SiClMe ₂) ₂	Bis(chlorodimethylsilyl)bis(trimethylsilyl)methane Structure by ED and computational methods K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin Manuscript in preparation.
$\text{C}_{11}\text{H}_{32}\text{Si}_4$ $\text{C}(\text{SiMe}_3)_2(\text{SiMe}_2\text{H})_2$	Bis(dimethylsilyl)bis(trimethylsilyl)methane Structure by ED and computational methods K. Batz, P. D. Lickiss, S. L. Masters, H. E. Robertson and D. W. H. Rankin

	Manuscript in preparation.
C₁₂Fe₃O₁₂ Fe ₃ (CO) ₁₂	Dodecacarbonyltriiron Structure by ED and ab initio calculations <i>G. R. Kafka, S. L. Masters, D. W. H. Rankin et al.</i> Manuscript in preparation.
C₁₄H₁₄O₂S (C ₆ H ₅ CH ₂) ₂ SO ₂	Dibenzyl sulfone Structure by ED and ab initio / DFT methods <i>R. Noble-Eddy and S. L. Masters</i> Manuscript in preparation.
C₁₈H₅₄Si₈ (SiMe ₃) ₃ SiSi(SiMe ₃) ₃	Hexakis(trimethylsilyl)disilane Vibrational spectra and structure by ED and ab initio calculations <i>K. Hassler, S. L. Masters et al.</i> Manuscript in preparation.
C₄₈H₄₀O₁₂Si₈ Si ₈ O ₁₂ (C ₆ H ₅) ₈	Octaphenylsilsesquioxane Structure by ED and computational methods <i>A. V. Zakharov, S. L. Masters, D. A. Wann, S. A. Shlykov, G. V. Girichev, S. Arrowsmith, D. B. Cordes, P. D. Lickiss, and A. J. P. White</i> Submitted to Dalton Trans.
O₆Sb₄ Sb ₄ O ₆	Antimony(III) oxide Structure by ED and computational methods using new nozzle <i>S. L. Masters, G. V. Girichev, S. A. Shlykov</i> Manuscript complete