PUBLICATION LIST - Prof. Cameron Jones (May 2013)

Review Articles


Book Chapters


Referred Articles


49. Low Coordination Arsenic and Antimony Compounds: Synthesis and Characterisation of 2-Arsa- and 2-Stiba-1,3-dionatolithium(I) Complexes, [Li$_2$OC(R)ECl(R)O$_2$]$_2$(L)], E = As or Sb; R = Bu$_t$, C$_6$H$_5$Pr$_2$-2,4,6 or C$_6$H$_5$Bu$_2$-2,4,6; L = Et$_2$O, 1/2 DME or DME, J. Durkin, D.E. Hibbs, P.B. Hitchcock, M.B. Hursthouse, C. Jones, J. Jones, K.M.A. Malik, J.F. Nixon, G. Parry, *J. Chem. Soc., Dalton Trans.*, 1996, 3277.


76. First Structural Characterisation of 1,2,4-Selenadiphosphole and 1,2,4-Telluradiphosphole Ring Systems. Crystal and Molecular Structures of the η⁰-Complexes [M(CO)₅(P₂SeC₂Bu₁₂), (M = Cr, W) and [W(CO)₅(P₂TeC₂Bu₁₂)], M.D. Francis, D.E. Hibbs, P.B. Hitchcock, M.B. Hursthouse, C. Jones, T. Mackewitz, J.F. Nixon, L. Nyulaszi, M. Regitz and N. Sakarya, J. Organomet. Chem., 1999, 580, 156.


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107. Reactions of Bulky Alkyl Lithium Reagents with a Phosphaalkyne (P+CBu\(^3\)): Synthesis and Structural Characterisation of a Mixed Valent Phosphorus Cage Compound, P\(^{III}\)\(μ-\text{C(H)}(\text{Bu})\)\(_2\)\(μ-\text{C(H)}(\text{SiMe}_3)\text{Si(Me)}_2\text{C(H)}\)\(_2\)\(P^V=\text{C(SiMe}_3)\)\(_2\), and a Phosphaalkeny1 Substituted \(η^3\)-Azaallyl-lithium Complex, \(\text{[Li(tmeda)]C(SiMe}_3)(2-N\text{C}_5\text{H}_3\text{Me-H})[P=\text{C(Bu)}(\text{SiMe}_3)]}\), C. Jones and A.F. Richards, *J. Organomet. Chem.*, 2002, **645**, 256-261.

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110. \([\eta^2\text{-C}_5\text{H}_5]\text{Fe(CO)}_2\)\(_2\)\(\text{B(2,4,6-Me}_3\text{C}_6\text{H}_2}\): Synthesis, Spectroscopic and Structural Characterisation of a Transition Metal Complex Containing an Unsupported Bridging Borylene Ligand, S. Aldridge, D.L. Coombs and C. Jones, *Chem. Commun.*, 2002, 856-857.


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146. \([1,3-\text{Di(mesityl)imidazol-2-ylidene}] \text{ gallium Iodide Dihydride, } [\text{GaH}_2\{\text{CN(Mes)C}_2\text{H}_2\text{N(Mes)}\}], \text{ Mes = mesityl, } R.J. \text{ Baker and C. Jones, } *Appl. Organomet. Chem.*, 2003, 17, 807 - 808.

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164. Evidence for the First Oxidative Insertion of a Transition Metal into a Digallane(4): Synthesis, Structural Characterisation and EPR Studies of \([\text{Cp}_2\text{Zr}^{III}\{\text{Ga}[\text{N}(\text{Ar})(\text{H})_2]\}_2][\text{Li(THF)}_4], \text{Ar} = \text{C}_6\text{H}_3\text{Pr}^{2-2,6}\), R.J. Baker, C. Jones and D.M. Murphy, *Chem. Commun.*, 2005, 1339-1341.


173. $\eta^6$-Triphosphabenzene, $\eta^5$-Triphosphacyclohexadienyl and $\eta^5$-Diphosphacyclopentadienyl Complexes of Group 8 and 9 Metals: Heterocycle Transformations at the Metal Center, M.D. Francis, C. Holtel, C. Jones and R.P. Rose, *Organometallics*, 2005, 24, 4216 - 4225.


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198. Homoleptic Lanthanide(II)-Bis(Guanidinate) Complexes, [Ln(Giso)₂] (Giso = [(ArN)₂CN(C₆H₁₁)₂]⁻, Ar = C₆H₃Pr₂-2,6): Planar 4-Coordinate (Ln = Sm or Eu) vs Distorted Tetrahedral (Ln = Yb) Geometries, D. Heitmann, C. Jones, P.C. Junk, K.-A. Lippert and A. Stasch, *Dalton Trans.*, 2007, 187 - 189.


251. Groups 2 and 12 Metal Gallyl Complexes Containing Unsupported Ga-M Covalent Bonds (M = Mg, Ca, Sr, Ba, Zn or Cd), O. Bonello, C. Jones, A. Stasch and W.D. Woodul, Organometallics, 2010, 29, 4914-4922.


288. Comparative study of phosphine and NHC stabilized group-13 adducts $[\text{L}(\text{E}H_3)]$ and $[\text{L}_2(\text{E}_2\text{H}_n)]$ ($\text{E} = \text{B} – \text{In}; \text{L} = \text{PMe}_3, \text{NHC}; n = 4, 2, 0; \text{NHC} = \text{N}$-heterocyclic carbene), N. Holzmann, A. Stasch, C. Jones and G. Frenking, *Chem. Eur. J.*, in press.


292. Electronic Structure and Bonding Energy Analysis of the Metal-yllyne Complexes of Molybdenum and Tungsten $[(\eta^5-\text{C}_5\text{H}_5)(\text{CO})_2\text{M}\equiv\text{EN(SiMe}_3)(\text{Ph})]$ (M = Mo, W; E = Si, Ge, Sn, Pb) and $[(\eta^5-\text{C}_5\text{H}_5)(\text{CO})_2\text{Mo}≡\text{GeN(SiMe}_3)(\text{Mes})]$: A Theoretical Study, K.K. Pandey and C. Jones, *J. Organomet. Chem.*, submitted.

293. Nature of M-Ge Bonds in Metallo-Germylene Complexes of Chromium, Molybdenum and Tungsten $[(\eta^5-\text{C}_5\text{H}_5)(\text{CO})_3\text{M(EN(SiMe}_3)R})$ and $[(\eta^5-\text{C}_5\text{H}_5)(\text{CO})_3\text{M(EN(Ph)R})$ (R = Ph, Mesityl (Mes)): A Theoretical Study, K.K. Pandey and C. Jones, *Organometallics*, submitted.

**Invited Lectures**

1. "New Directions in Low Coordination Group 15 Chemistry", Chemistry Department, Tohoku University, Sendai, Japan, April 1995.

2. "New Directions in Low Coordination Group 15 Chemistry", Chemistry Department, University of Leeds, February, 1996.

3. "New Directions in Low Coordination Group 15 Chemistry", Chemistry Department, Imperial College of Science, Medicine and Technology, April, 1996.

5. "New Directions in Low Coordination Group 15 Chemistry", Chemistry Department University of Western Australia, August 1996.

6. "New Directions in Low Coordination Group 15 Chemistry", Chemistry Department University of Waterloo, Canada, April 1997.

7. RSC Sponsored Lecture - "The Low Coordination Chemistry of Arsenic and Antimony" Chemistry Department, University of Wales, Cardiff, October 1997.


10. "The Low Coordination Chemistry of Arsenic and Antimony", Chemistry Department, University of Ohio, Athens, USA, April, 1998.


20. "The Stabilisation and Reactivity of Indium Hydride Complexes" Chemistry Department, University of Western Australia, July, 2000.

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<tr>
<td>31.</td>
<td>&quot;Developments in Low Oxidation State Gallium and Indium Chemistry&quot; invited lecture at the RSC meeting on New Strategies in Metal Chemistry. Chemistry Department, Nottingham University, February, 2003.</td>
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38. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Research School of Chemistry, Australian National University, August, 2004.

   Chemistry Department, Monash University, Australia, August, 2004.

40. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, University of Adelaide, Australia, August, 2004.

41. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, University of Western Australia, August, 2004.

42. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, University of Bath, November, 2004.

43. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, Stratchclyde University, December, 2004.

44. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, Oxford University, February, 2005.

45. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Chemistry Department, St. Andrews University, May 2005.

46. "Anionic Gallium(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Invited lecture of the German Chemical Society, University of Münster, May 2005.


48. "Group 13 Metal(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   Texas Christian University, December, 2005.

49. "Group 13 Metal(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
   University of Texas at Austin, December, 2005.

50. "Group 13 Metal(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
    University of California at Davis, December, 2005.


52. "Group 13 Metal(I) Heterocycles: Analogies with N-Heterocyclic Carbenes?"
    Reading University, February, 2006.


54. "Group 13 Metal(I) Heterocycles: Metal Donor Lewis Bases and N-heterocyclic Carbene Analogues"., Bochum University, Germany, November, 2006


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<tr>
<td>75.</td>
<td>Group 2 Metal(I) Heterocycles: Stabilisation, Verification and Application. Department of Chemistry, University of Sydney, April, 2009.</td>
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<td>76.</td>
<td>&quot;Bulky Guanidinates: Analogues of β-Diketimimates for the Stabilisation of low Oxidation State Metallacycles&quot;, Department of Chemistry, La Trobe University, June, 2009.</td>
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<td>77.</td>
<td>&quot;Bulky Guanidinates: Analogues of β-Diketimimates for the Stabilisation of low Oxidation State Metallacycles&quot;, Department of Chemistry, University of Western Australia, June, 2009.</td>
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<td>80.</td>
<td>&quot;Bulky Guanidinates and Related Ligands for the Stabilisation of Metal(I) Heterocycles&quot;, Department of Chemistry, Oxford University, September, 2009.</td>
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<td>81.</td>
<td>&quot;Bulky Guanidinates and Related Ligands for the Stabilisation of Metal(I) Heterocycles&quot;, Invited Humboldt Prize Lecture, Department of Chemistry, Technische Universität, Berlin, Germany, September, 2009.</td>
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<td>82.</td>
<td>&quot;Bulky Guanidinates and Related Ligands for the Stabilisation of Metal(I) Heterocycles&quot;, Department of Chemistry, Essen University, Germany, September, 2009.</td>
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87. "Molecular Magnesium(I) Compounds: From Chemical Landmarks to Versatile Reagents", Invited lecture of the German Chemical Society, Department of Chemistry, Münster Universty, Germany, April, 2010.

88. "Molecular Magnesium(I) Compounds: From Chemical Landmarks to Versatile Reagents", Invited lecture of the German Chemical Society, Department of Chemistry, Marburg Universty, Germany, April, 2010.


100. "Molecular Magnesium(I) Compounds: "Bespoke" Reducing Agents for the Synthetic Chemist", Department of Chemistry, Heidelberg University, Germany, October, 2011.

101. "Modern Main Group Chemistry: From Fundamental Advances to Functional Molecules" RACI Burrows Award Lecture, IC11, University of Western Australia, December, 2011.


