

PUBLICATIONS: W. CLEGG 1999

- 616.** Kinetically inert cryptate systems: solid state and solution NMR studies
D. C. Apperley, W. Clegg, S. Coles, J. L. Coyle, N. Martin, B. Maubert, V. McKee and J. Nelson.
J. Chem. Soc. Dalton Trans. 1999, 229–236.
- 617.** An *in situ* microcrystal X-ray diffraction study of the synthetic aluminophosphate zeotypes DAF-1 and CoAPSO-44
G. Muncaster, G. Sankar, C. R. A. Catlow, J. M. Thomas, R. G. Bell, P. A. Wright, S. Coles, S. J. Teat, W. Clegg and W. Reeve.
Chem. Mater. 1999, **11**, 158–163.
- 618.** Protecting-group strategies for the synthesis of N^4 -substituted and N^1,N^8 -disubstituted spermidines, exemplified by hirudomine
B. T. Golding, A. Hutchinson, W. Clegg, M. R. J. Elsegood and R. J. Griffin.
J. Chem. Soc. Perkin Trans. 1 1999, 349–356.
- 619.** An unusual ring expansion from the Zav'yalov pyrrole synthesis: formation of oxacino[2,3-*c*]pyrroles
C. D. Gabbatt, J. D. Hepworth, B. M. Heron, M. R. J. Elsegood and W. Clegg.
Chem. Commun. 1999, 289–290.
- 620.** Synthesis, characterisation and a theoretical investigation of the formation of lithium dialkylaluminium amides
W. Clegg, S. T. Liddle, K. W. Henderson, F. E. Keenan, A. R. Kennedy, A. E. McKeown and R. E. Mulvey.
J. Organomet. Chem. 1999, **572**, 283–289.
- 621.** An insight into ion-transport by calixarenes; the structure of the dipotassium complex of *p*-*tert*-butylcalix[8]arene crystallised from a protogenic, coordinating solvent [ethanol/diethylcarbonate (10:1)]
N. P. Clague, W. Clegg, S. J. Coles, J. D. Crane, D. J. Moreton, E. Sinn, S. J. Teat and N. A. Young.
Chem. Commun. 1999, 379–380.
- 622.** The molecular structure and one-pot synthesis of $[\text{Li}(\text{thf})_3\cdot\text{Sn}(\text{SiMe}_3)_3]$
C. J. Cardin, D. J. Cardin, W. Clegg, S. J. Coles, S. P. Constantine, J. R. Rowe and S. J. Teat.
J. Organomet. Chem. 1999, **573**, 96–100.
- 623.** Cluster build-up reactions via the ionic coupling of tetraosmium anions and the $[\text{RhCp}^*(\text{NCMe})_3]^{2+}$ cation; the crystal and molecular structures of $[\text{Os}_4\text{Rh}(\mu\text{-H})_3(\text{MeC=NH})(\text{CO})_{11}(\eta^5\text{-Cp}^*)]$, $[\text{Os}_4\text{Rh}(\mu\text{-H})_2(\text{CO})_{13}(\eta^5\text{-Cp}^*)]$ and $[\text{Os}_4\text{Rh}_2(\mu\text{-H})_2(\text{CO})_{11}(\eta^5\text{-Cp}^*)_2]$ ($\text{Cp}^* = \text{C}_5\text{Me}_5$)
W. Clegg, N. Feeder, A. M. M. Castro, S. Nahar, P. R. Raithby, G. P. Shields and S. J. Teat.
J. Organomet. Chem. 1999, **573**, 237–246.
- 624.** Towards an understanding of the conjugate addition of organolithium reagents to α,β -unsaturated ketones: the isolation and solid-state structure of a monomeric lithium aluminate with very short agostic $\text{Li}\cdots\text{HC}$ interactions
W. Clegg, E. Lamb, S. T. Liddle, R. Snaith and A. E. H. Wheatley.
J. Organomet. Chem. 1999, **573**, 305–312.
- 625.** Enantiomerically pure 2,2-dibromocyclopropanecarboxylic acids, simple chiral building blocks
M. S. Baird, P. Licence, V. V. Tverezovsky, I. G. Bolesov and W. Clegg.
Tetrahedron 1999, **55**, 2773–2784.

- 626.** Regioselective addition of tris(dialkylamino)phosphines to $[\text{Fe}_2(\text{CO})_6(\mu\text{-PPPh}_2)\{\mu\text{-}\eta^1\text{:}\eta^2\text{-(H)}\text{C=C=CH}_2\}]$: novel P—C coupling reactions and unusual hydrocarbyl rearrangements
 S. Doherty, M. Waugh, T. H. Scanlan, M. R. J. Elsegood and W. Clegg.
Organometallics 1999, **18**, 679–696.
- 627.** *N*-Alkoxy- β -ketoiminate complexes of groups 4 and 5: synthesis and characterization of the complexes $[(\eta^5\text{-C}_5\text{H}_4\text{R})\text{M}\{\text{CH}_3\text{C(O)CHC(NCH}_2\text{CHR')O}\text{CH}_3\}\text{Cl}_n]$ ($\text{M} = \text{Ti}$, $n = 1$; $\text{M} = \text{Nb}$, $n = 2$; $\text{R} = \text{H, Me}$; $\text{R}' = \text{H, Me}$), $[\text{Ti}\{\text{CH}_3\text{C(O)CHC(NCH}_2\text{CHR')O}\text{CH}_3\}\text{Cl}_2(\text{thf})]$ and $[\text{Ti}\{\text{CH}_3\text{C(O)CHC(NCH}_2\text{CHR')O}\text{CH}_3\}]_2$
 S. Doherty, R. J. Errington, N. Housley, J. Ridland, W. Clegg and M. R. J. Elsegood.
Organometallics 1999, **18**, 1018–1029.
- 628.** Dis-assembling lithium amide ladder structures: new insight through the structure of $\{[\text{PhCH}_2\text{N(H)Li}]_2\cdot\text{thf}\}_\infty$, a polymer of $(\text{NLi})_2$ planar rings connected by thf-bridged $(\text{NLi})_2$ butterfly junctions
 W. Clegg, S. T. Liddle, R. E. Mulvey and A. Robertson.
Chem. Commun. 1999, 511–512.
- 629.** New functional perfluoroaryl boranes. Synthesis and reactivity of the *ortho*-phenylene-bridged diboranes $1,2\text{-}[\text{B}(\text{C}_6\text{F}_5)_2]_2\text{C}_6\text{X}_4$ ($\text{X} = \text{H, F}$)
 V. C. Williams, W. E. Piers, W. Clegg, M. R. J. Elsegood, S. Collins and T. B. Marder.
J. Am. Chem. Soc. 1999, **121**, 3244–3245.
- 630.** Oxidative-addition reactions of diiodine to dinuclear rhodium pyrazolate complexes
 C. Tejel, M. Bordonaba, M. A. Ciriano, A. J. Edwards, W. Clegg, F. J. Lahoz and L. A. Oro.
Inorg. Chem. 1999, **38**, 1108–1117.
- 631.** Synthesis, structure, and properties of molybdenum and tungsten cyano complexes with cuboidal $\text{M}_4(\mu_3\text{-E})_4$ ($\text{M} = \text{Mo, W}$; $\text{E} = \text{S, Se, Te}$) cores
 V. P. Fedin, I. V. Kalinina, D. G. Samsonenko, Y. V. Mironov, M. N. Sokolov, S. V. Tkachev, A. V. Virovets, N. V. Podberezhskaya, M. R. J. Elsegood, W. Clegg and A. G. Sykes.
Inorg. Chem. 1999, **38**, 1956–1965.
- 632.** “Smart” rotaxanes: shape memory and control in tertiary amide peptido[2]rotaxanes
 W. Clegg, C. Gimenez-Saiz, D. A. Leigh, A. Murphy, A. M. Z. Slawin and S. J. Teat.
J. Am. Chem. Soc. 1999, **121**, 4124–4129.
- 633.** Salts of the bis(catecholato)borate anion with rhodium- and iridium-phosphine complex cations
 W. Clegg, M. R. J. Elsegood, A. J. Scott, T. B. Marder, C. Dai, N. C. Norman, N. L. Pickett and E. G. Robins.
Acta Cryst. 1999, **C55**, 733–739.
- 634.** 5-Benzylxyloxy-1-phenyltetrazole: catalytic transfer hydrogenolysis of benzyl ethers
 A. F. Brigas, W. Clegg, R. A. W. Johnstone and R. F. Mendonca.
Acta Cryst. 1999, **C55**, 778–781.
- 635.** *catena-Poly[[bis(μ -2,6-dimethylpiperidinido-*N*:*N*)dilithium]- μ -(*N,N,N',N'*-tetramethyl-ethylenediamine-*N*:*N'*)]}
 W. Clegg, L. Horsburgh, S. A. Couper and R. E. Mulvey.
Acta Cryst. 1999, **C55**, 867–869.*
- 636.** Dibenzylbis(*tert*-butylimido)molybdenum(VI), containing both η^1 - and η^2 -benzyl ligands
 W. Clegg, M. R. J. Elsegood, P. W. Dyer, V. C. Gibson and E. L. Marshall.
Acta Cryst. 1999, **C55**, 916–918.

- 637.** Structural studies of a novel heterocyclic phosphorane
 C. D. Gabbott, J. D. Hepworth, B. M. Heron, A. M. Jones, E. S. Raper and W. Clegg.
Phosphorus, Sulfur and Silicon 1999, **143**, 221–230.
- 638.** An approach to *megalo*-boranes. Mixed and multiple cluster fusions involving iridaborane and platinaborane cluster compounds. Crystal structure determinations by conventional and synchrotron methods.
 J. Bould, W. Clegg, S. J. Teat, L. Barton, N. P. Rath, M. Thornton-Pett and J. D. Kennedy.
Inorg. Chim. Acta 1999, **289**, 95–124.
- 639.** Monomeric alkali metal complexes of a sterically demanding, donor-functionalised secondary phosphide ligand
 W. Clegg, S. Doherty, K. Izod, H. Kagerer, P. O'Shaughnessy and J. M. Sheffield.
J. Chem. Soc. Dalton Trans. 1999, 1825–1829.
- 640.** Preparation of [1,2,4]triazoloquinazolinium betaines and molecular rearrangements of putative [1,2,4]triazolo[4,3-*a*][1,3,5]triazinium betaines
 D. L. Crabb, K. J. McCullough, P. N. Preston, G. M. Rosair, B. C. Bishop, S. H. B. Wright, W. Clegg and S. Coles.
J. Chem. Soc. Perkin Trans. 1 1999, 1517–1525.
- 641.** Lithiated organophosphorus enamines: a new synthetic approach and the first crystal structures
 W. Clegg, R. P. Davies, L. Dunbar, N. Feeder, S. T. Liddle, R. E. Mulvey, R. Snaith and A. E. H. Wheatley.
Chem. Commun. 1999, 1401–1402.
- 642.** Two potential pyridine-borane oligomer and polymer building blocks. Structural characterisation of $[NC_5H_4.C_5H_4N.B_{10}H_{12}.NC_5H_4.C_5H_4N]$ and $[Me_2S.B_{10}H_{12}.NC_4H_4N.B_{10}H_{12}.SMe_2]$ by conventional and synchrotron X-ray methods
 M. G. S. Londesborough, C. Price, M. Thornton-Pett, W. Clegg and J. D. Kennedy.
Inorg. Chem. Commun. 1999, **2**, 298–300.
- 643.** Metallaborane reaction chemistry. Part 8. Phenylacetylene trimerisation by $[6,6,6-(PPh_3)_2H-nido-6-IrB_9H_{13}]$ and the structure of $[2-(\eta^6-C_6H_3Ph_3)-closo-2-IrB_9H_8-10-(PPh_3)]$ by synchrotron X-ray diffraction analysis
 J. Bould, W. Clegg, T. R. Spalding and J. D. Kennedy.
Inorg. Chem. Commun. 1999, **2**, 315–318.
- 644.** Synthesis and characterisation of 2,6-diisopropylphenylimido complexes of chromium in oxidation states IV–VI
 K. C. Chew, W. Clegg, M. P. Coles, M. R. J. Elsegood, V. C. Gibson, A. J. P. White and D. J. Williams.
J. Chem. Soc. Dalton Trans. 1999, 2633–2639.
- 645.** A novel heterometallic alkoxide: lithium-potassium *tert*-butoxide $[(Bu^tO)_8Li_4K_4]$
 W. Clegg, A. M. Drummond, S. T. Liddle, R. E. Mulvey and A. Robertson.
Chem. Commun. 1999, 1569–1570.
- 646.** Synthesis of 3-alkoxy- and 3-alkylamino-2-alkyl-3-arylisoindolinones
 M. S. Kitching, W. Clegg, M. R. J. Elsegood, R. J. Griffin and B. T. Golding.
Synlett. 1999, 997–999.
- 647.** First structurally authenticated heavier alkali metal phosphinomethanide
 W. Clegg, K. Izod and P. O'Shaughnessy.
Organometallics 1999, **18**, 2939–2940.

- 648.** Synthesis of dialkylscandium complexes supported by β -diketiminato ligands and activation with tris(pentafluorophenyl)borane
 L. W. M. Lee, W. E. Piers, M. R. J. Elsegood, W. Clegg and M. Parvez.
Organometallics 1999, **18**, 2947–2949.
- 649.** Regioselective addition of *tert*-BuN≡C to the α carbon atom of the allenyl ligand in $[\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)\{\mu\text{-}\eta^1\text{:}\eta^2_{\alpha,\beta}\text{-(H)}\text{C}_\alpha=\text{C}_\beta=\text{C}_\gamma\text{H}_2\}]$: formation of $[\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)\{\mu\text{-}\eta^1\text{:}\eta^1\text{-(}tert\text{-BuN}\equiv\text{C)\text{C=CH}_3}\}]$ and $[\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)\{\mu\text{-}\eta^1\text{:}\eta^2\text{-(}tert\text{-BuNHC(O)CH}_2\text{\})\text{C=CH}_2\}]$ via competitive 1,3-hydrogen migration and hydrolysis of the reactive allene-bridged intermediate $[\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)\{\mu\text{-}\eta^1\text{:}\eta^1\text{-(}tert\text{-BuNC)\text{HC=C=CH}_2\}]$
 S. Doherty, G. Hogarth, M. Waugh, T. H. Scanlan, W. Clegg and M. R. J. Elsegood.
Organometallics 1999, **18**, 3178–3186.
- 650.** Three Pt^{II} catecholate and 1,2-dithiocatecholate complexes
 M. J. G. Lesley, W. Clegg, T. B. Marder, N. C. Norman, A. G. Orpen, A. J. Scott and J. Starbuck.
Acta Cryst. 1999, **C55**, 1272–1275.
- 651.** Extending knowledge on the nucleophilicity of the {Pt₂S₂} core: Ph₂PCH₂CH₂PPh₂ as an alternative terminal ligand in [L₂Pt(μ -S)₂PtL₂] metalloligands
 M. Capdevila, Y. Carrasco, W. Clegg, R. A. Coxall, P. González-Duarte, A. Lledós and J. A. Ramírez
J. Chem. Soc. Dalton Trans. 1999, 3103–3113.
- 652.** Synthesis, structure and redox properties of ferrocenylmethylnucleobases
 A. Houlton, C. J. Isaac, A. E. Gibson, B. R. Horrocks, W. Clegg and M. R. J. Elsegood.
J. Chem. Soc. Dalton Trans. 1999, 3229–3234.
- 653.** Tris(triorganosilyl)methyl derivatives of potassium and lithium bearing dimethylamino or methoxy substituents at silicon. Crystal structures of KC(SiMe₃)₂(SiMe₂NMe₂), KC(SiMe₂NMe₂)₃ and [LiC(SiMe₃)(SiMe)₂OMe]₂₂
 S. S. Al-Juaid, C. Eaborn, S. El-Hamruni, A. Farook, P. B. Hitchcock, M. Hopman, J. D. Smith, W. Clegg, K. Izod and P. O'Shaughnessy.
J. Chem. Soc. Dalton Trans. 1999, 3267–3273.
- 654.** Highly active and selective catalysts for the production of methyl propanoate via the methoxycarbonylation of ethene
 W. Clegg, G. R. Eastham, M. R. J. Elsegood, R. P. Tooze, X. L. Wang and K. Whiston.
Chem. Commun. 1999, 1877–1878.
- 655.** Palladium complexes of C₂-, C₃-, and C₄-bridged bis(phospholyl) ligands: remarkably active catalysts for the copolymerization of ethylene and carbon monoxide
 S. Doherty, G. R. Eastham, R. P. Tooze, T. H. Scanlan, D. Williams, M. R. J. Elsegood and W. Clegg.
Organometallics 1999, **18**, 3558–3560.
- 656.** Regioselective metalation of a tertiary phosphine. Solution and solid-state structures of an unusual aminobenzyllithium complex
 W. Clegg, K. Izod, W. McFarlane and P. O'Shaughnessy.
Organometallics 1999, **18**, 3950–3952.
- 657.** Tetraphenoxoborate complexes of barium: crystal structures of the metalloborates [Ba(thf)₄{B(OPh)₄}₂] and [Ba(dme)₂{B(OPh)₄}₂]
 R. J. Errington, M. Tombul, G. L. P. Walker, W. Clegg, S. L. Heath and L. Horsburgh.
J. Chem. Soc. Dalton Trans. 1999, 3533–3534.

- 658.** The first molecular main group metal species containing interstitial hydride
D. R. Armstrong, W. Clegg, R. P. Davies, S. T. Liddle, D. J. Linton, P. R. Raithby, R. Snaith and A. E. H. Wheatley.
Angew. Chem. Internat. Edit. Engl. 1999, **38**, 3367–3370.
- 659.** 1:1 Adducts of 4-picoline with methylcatecholborane and phenylcatecholborane
W. Clegg, A. J. Scott, F. E. S. Souza and T. B. Marder.
Acta Cryst. 1999, **C55**, 1885–1888.
- 660.** Control of single crystal structure and liquid crystal phase behaviour via arene-perfluoroarene interactions
C. Dai, P. Nguyen, T. B. Marder, A. J. Scott, W. Clegg and C. Viney.
Chem. Commun. 1999, 2493–2494.
- 661.** 2-(2-Fluoro-4-nitroanilinoethyl)benzaldehyde and *N*-(2-fluoro-4-nitrophenyl)-1-methoxy-1,2,3,4-tetrahydroisoquinoline
W. Clegg, M. R. J. Elsegood, S. P. Stanforth, K. A. Hedley, A. L. Stanley, E. S. Raper and J. R. Creighton.
Acta Cryst. 1999, **C55**, 2163–2167.
- 662.** $(\text{CN}_3\text{H}_6)_2\text{Zn}_4\text{H}_5(\text{PO}_4)_5$, a new layered guanidinium zinc phosphate built up from 3-, 4-, and 8-ring units
W. T. A. Harrison, M. L. F. Phillips, W. Clegg and S. J. Teat.
J. Solid State Chem. 1999, **148**, 433–437.
- 663.** Activation of $[\text{Cp}_2\text{ZrMe}_2]$ with new perfluoroaryl diboranes: solution chemistry and ethylene polymerization behavior in the presence of $\text{MeAl}(\text{BHT})_2$
V. C. Williams, C. Dai, Z. Li, S. Collins, W. E. Piers, W. Clegg, M. R. J. Elsegood and T. B. Marder.
Angew. Chem. Internat. Edit. Engl. 1999, **38**, 3695–3698.
- 664.** Silver(I) complexes of 6-methyl-2-pyridinecarboxylic acid: the crystal structure of $[\text{Ag}(\text{MeC}_5\text{H}_3\text{NCOO})(\text{MeC}_5\text{H}_3\text{NCOOH})]$
À. Leiva, W. Clegg, L. Cucurull-Sánchez, P. González-Duarte and J. Pons.
J. Chem. Cryst. 1999, **29**, 1097–1101.
- 665.** Difficult structures: improving your chances with synchrotron radiation
W. Clegg.
Acta Cryst. 1999, **A55**, C91–C92.
- 666.** Supramolecular chemistry of benzene polycarboxylates
M. R. J. Elsegood, W. Clegg, S. J. Richards, M. J. Hemmings, K. E. Holmes and C. Harvey.
Acta Cryst. 1999, **A55**, C163–C164.
- 667.** Use of a Microsource X-ray tube and generator with a four-circle diffractometer
P. A. Champkin and W. Clegg.
Acta Cryst. 1999, **A55**, C235.
- 668.** Structural studies of novel mixed rubidium lithium alkoxide cages linked by bridging ligands
S. T. Liddle and W. Clegg.
Acta Cryst. 1999, **C55**, C413.