

PUBLICATIONS: W. CLEGG 1996

463. High-yield synthesis of the cuboidal rhenium cluster  $[\text{Re}_4\text{S}_4(\text{CN})_{12}]^{4-}$  by reaction of the triangular cluster  $[\text{Re}_3\text{S}_7\text{Br}_6]^+$  with cyanide  
V. P. Fedin, M. R. J. Elsegood, W. Clegg and A. G. Sykes.  
*Polyhedron* 1996, **15**, 485–488.
464. Preparation, structure, and solid-state reactivity of lanthanum propynoates  
J. S. Brodtkin, B. M. Foxman, W. Clegg, J. T. Cressey, D. R. Harbron, P. A. Hunt and B. P. Straughan.  
*Chem. Mater.* 1996, **8**, 242–247.
465. Spectroscopic, magnetic and structural studies on the mixed-valence cuboidal clusters  $[\text{Mo}_4\text{E}_4(\text{edta})_2]^{3-}$  (E = S or Se;  $\text{H}_4\text{edta}$  = ethylenediaminetetraacetic acid) and  $[\text{Mo}_4\text{S}_4(\text{H}_2\text{O})_{12}]^{5+}$   
W. McFarlane, M. Nasreldin, D. M. Sellsell, Z. S. Jia, W. Clegg, M. R. J. Elsegood, K. S. Murray, B. Moubaraki and A. G. Sykes.  
*J. Chem. Soc. Dalton Trans.* 1996, 363–369.
466. Hinge distortion in platinum(II) dimers with a  $\text{Pt}_2\text{S}_2$  ring. An *ab initio* molecular orbital study  
M. Capdevila, W. Clegg, P. González-Duarte, A. Jarid and A. Lledós.  
*Inorg. Chem.* 1996, **35**, 490–497.
467. Alkoxide hydrolysis as a route to early transition-metal polyoxometalates: synthesis and crystal structures of heteronuclear hexametalate derivatives  
W. Clegg, M. R. J. Elsegood, R. J. Errington and J. Havelock.  
*J. Chem. Soc. Dalton Trans.* 1996, 681–690.
468. Charge-transfer salts containing cyclic perfluorinated anions  
M. W. Briscoe, R. D. Chambers, W. Clegg, V. C. Gibson, S. J. Mullins and J. F. S. Vaughan.  
*J. Fluorine Chem.* 1996, **76**, 1–2.
469. Reaction of  $[\text{SNS}][\text{AsF}_6]$  with  $\text{Hg}(\text{CN})_2$  and  $\text{PhHgCN}$ : preparation and crystal structures of  $[\text{Hg}(\text{CNSNS})_2][\text{AsF}_6]_2$  and  $[\text{PhS}_4\text{N}_3\text{Ph}][\text{AsF}_6]$   
C. M. Aherne, A. J. Banister, I. Lavender, S. E. Lawrence, J. M. Rawson and W. Clegg.  
*Polyhedron* 1996, **15**, 1877–1886.
470. Selective crystallization of di-*sec*-butylmagnesium-*N,N,N',N'*-tetramethylethylenediamine from solutions containing mixtures of normal-butyl and secondary-butyl isomers  
N. D. R. Barnett, W. Clegg, R. E. Mulvey, P. A. O'Neil and D. Reed.  
*J. Organomet. Chem.* 1996, **510**, 297–300.
471. Structural investigation of homonuclear  $\text{Pt}_2$  and heteronuclear PdPt complexes containing a metal-metal bond bridged by hydrido and sulfido ligands  
W. Clegg, M. Capdevila, P. González-Duarte and J. Sola.  
*Acta Cryst.* 1996, **B52**, 270–276.
472. Synthesis and crystal structures of some bis-benzimidazoles, -benzothiazoles and -benzoxazoles by an alternative route: their complexation with copper(II) salts  
C. J. Matthews, W. Clegg, M. R. J. Elsegood, T. A. Leese, D. Thorp, P. Thornton and J. C. Lockhart.  
*J. Chem. Soc. Dalton Trans.* 1996, 1531–1538.
473. A new architecture in lithium amide chemistry: synthesis of  $[\{(c\text{-C}_5\text{H}_9)\text{N}(\text{H})\}_{12}(\text{O})\text{Li}_{14}]$ , a cage molecule containing a salt-like, distorted, face-centred cube of lithium cations  
W. Clegg, L. Horsburgh, P. R. Dennison, F. M. Mackenzie and R. E. Mulvey.  
*Chem. Commun.* 1996, 1065–1066.

474. Stoichiometric dependence of the long-established reaction of butyllithium with pyridine: a hidden secondary reaction that produces a pyridine adduct of a lithiodihydropyridine  
W. Clegg, L. Dunbar, L. Horsburgh and R. E. Mulvey.  
*Angew. Chem. Internat. Edit. Engl.* 1996, **35**, 753–755.
475. Synthesis and X-ray structure of zinc(II) derivatives of esters of 2-pyridinecarboxylic acid  
P. González-Duarte, R. March, J. Pons, W. Clegg, L. Cucurull-Sánchez, A. Alvarez-Larena and J. F. Piniella.  
*Polyhedron* 1996, **15**, 2747–2754.
476. Tetrahydrofuran adducts of bismuth trichloride and bismuth tribromide  
C. J. Carmalt, W. Clegg, M. R. J. Elsegood, R. J. Errington, J. Havelock, P. Lightfoot, N. C. Norman and A. J. Scott.  
*Inorg. Chem.* 1996, **35**, 3709–3712.
477. The first trimetallic lithium-sodium-potassium complex; synthesis and crystal structure of a twelve-vertex  $\text{Li}_2\text{Na}_2\text{K}_2\text{N}_4\text{O}_2$  cage molecule containing an amide-alkoxide combination  
F. M. Mackenzie, R. E. Mulvey, W. Clegg and L. Horsburgh.  
*J. Am. Chem. Soc.* 1996, **118**, 4721–4722.
478. Competitive nucleophilic attack at CO and  $\text{C}_\beta$  of the allenyl group in  
[ $\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)(\mu\text{-}\eta^1:\eta^2\text{-}(\text{H})\text{C}_\alpha=\text{C}_\beta=\text{C}_\gamma\text{H}_2)$ ]. X-ray crystal structures of  
[ $\text{Fe}_2(\text{CO})_5(\mu\text{-PPh}_2)(\mu\text{-}\eta^1(\text{O}):\eta^1(\text{C}):\eta^2(\text{C})\text{-}\{\text{O}=\text{C}(\text{N}^t\text{BuH})\text{CH}_2\}\text{C}=\text{CH}_2)$ ] $\cdot 0.5\text{C}_6\text{H}_{14}$  and  
[ $\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)(\mu\text{-}\eta^1:\eta^1\text{-CH}_2\text{C}(\text{NCyH})\text{CH}_2)$ ] $\cdot \text{MeCN}$   
S. Doherty, M. R. J. Elsegood, W. Clegg and M. Waugh.  
*Organometallics* 1996, **15**, 2688–2691.
479. Vinylogous tetrathiafulvalene (TTF)  $\pi$ -electron donors and derived radical cations: ESR spectroscopic, magnetic, and X-ray structural studies  
M. R. Bryce, A. J. Moore, B. K. Tanner, R. Whitehead, W. Clegg, F. Gerson, A. Lamprecht and S. Pfenninger.  
*Chem. Mater.* 1996, **8**, 1182–1188.
480. An unprecedented regiospecific attack of phosphorus nucleophiles at  $\text{C}_\alpha$  of the allenyl ligand in  
[ $\text{Fe}_2(\text{CO})_6(\mu\text{-PPh}_2)\{\mu\text{-}\eta^1:\eta^2_{\alpha,\beta}\text{-}(\text{H})\text{C}_\alpha=\text{C}_\beta=\text{C}_\gamma\text{H}_2\}$ ]  
S. Doherty, M. R. J. Elsegood, W. Clegg, T. H. Scanlan and N. H. Rees.  
*Chem. Commun.* 1996, 1545–1546.
481. A diaza analogue of benzo-15-crown-5  
W. Clegg, P. J. Cooper and J. C. Lockhart.  
*Acta Cryst.* 1996, **C52**, 1795–1797.
482. Stereoselective addition of organometallic reagents to *N*-(tosyl)vinylsulfoximines  
R. F. W. Jackson, A. D. Briggs, P. A. Brown, W. Clegg, M. R. J. Elsegood and C. Frampton.  
*J. Chem. Soc. Perkin Trans. 1* 1996, 1673–1682.
483. Benzyl(trimethylsilyl)amidolithium: structural studies by *ab initio* MO and X-ray crystallographic methods, and comparison with the known structures of dibenzyl and bis(trimethylsilyl) analogues  
D. R. Armstrong, D. R. Baker, F. J. Craig, R. E. Mulvey, W. Clegg and L. Horsburgh.  
*Polyhedron* 1996, **15**, 3533–3542.
484. The first magnesium amide trimer, magnesio-1,8-diaminonaphthalene-hexamethylphosphoramidate: introducing an unprecedented cage assembly incorporating an  $\text{Mg}_3$  unit within a  $\text{N}_6$  trigonal prism  
W. Clegg, L. Horsburgh, R. E. Mulvey and R. Rowlings.  
*Chem. Commun.* 1996, 1739–1740.

485. X-ray crystallographic studies and comparative reactivity studies of a sodium diisopropylamide (NDA) complex and related hindered amides  
P. C. Andrews, N. D. R. Barnett, R. E. Mulvey, W. Clegg, P. A. O'Neil, D. Barr, L. Cowton, A. J. Dawson and B. J. Wakefield.  
*J. Organomet. Chem.* 1996, **518**, 85–95.
486. The product of catalysed diboration of bis(4-methoxyphenyl)ethyne by bis(pinacolato-O,O')diboron  
W. Clegg, A. J. Scott, G. Lesley, T. B. Marder and N. C. Norman.  
*Acta Cryst.* 1996, **C52**, 1989–1991.
487. The products of catalysed diboration of bis(*p*-tolyl)ethyne and of 4-cyanophenylethyne by bis(catecholato-O,O')diboron  
W. Clegg, A. J. Scott, G. Lesley, T. B. Marder and N. C. Norman.  
*Acta Cryst.* 1996, **C52**, 1991–1995.
488. Synthesis and reactivity of the first stable chromium(VI) alkylidene complexes  
M. P. Coles, V. C. Gibson, W. Clegg, M. R. J. Elsegood and P. A. Porrelli.  
*Chem. Commun.* 1996, 1963–1964.
489. First results from the new Daresbury chemical/materials single-crystal diffraction beam-line 9.8  
W. Clegg.  
*Acta Cryst.* 1996, **A52**, C13.
490. Investigation of the solid state crystal structures of conjugated rigid-rod compounds: preliminary attempts to correlate packing with liquid crystalline phase behaviour  
A. J. Scott, W. Clegg, C. Dai, P. Nguyen, G. Lesley, F. Somera, M. P. Hirsch, N. J. Taylor and T. B. Marder.  
*Acta Cryst.* 1996, **A52**, C447.
491. A 3:1 disordered solid solution of di- $\mu$ -methoxy-O:O-bis[trimethoxooxomolybdenum(VI)] and di- $\mu$ -methoxy-O:O-bis[chlorodimethoxooxomolybdenum(VI)]  
W. Clegg, M. R. J. Elsegood, R. J. Errington and R. Bakri.  
*Acta Cryst.* 1996, **C52**, 2145–2148.
492. The  $\text{AsF}_6^-$  salt of a 1,2-dithia-4-azolylium cation with sterically demanding substituents  
W. Clegg, M. R. J. Elsegood, A. J. Banister and T. G. Hibbert.  
*Acta Cryst.* 1996, **C52**, 2148–2150.
493. Vanadium complexes containing the 2,4,6-tris(trifluoromethyl)phenyl ('fluoromes') ligand  
V. C. Gibson, C. Redshaw, L. J. Sequeira, K. B. Dillon, W. Clegg and M. R. J. Elsegood.  
*Chem. Commun.* 1996, 2151–2152.
494. Interconversion and reactivity of two heterometallic tin-containing cuboidal clusters from  $[\text{Mo}_3\text{S}_4(\text{H}_2\text{O})_9]^{4+}$ : X-ray structure of the single cube with an  $\text{Mo}_3\text{SnS}_4$  core  
J. E. Varey, G. J. Lamprecht, V. P. Fedin, A. Holder, W. Clegg, M. R. J. Elsegood and A. G. Sykes.  
*Inorg. Chem.* 1996, **35**, 5525–5530.
495. ( $\mu_2$ -Pinacolato-O,O')-bis(pinacolato-O,O')-diboron  
W. Clegg, A. J. Scott, C. Dai, G. Lesley, T. B. Marder, N. C. Norman and L. J. Farrugia.  
*Acta Cryst.* 1996, **C52**, 2545–2547.
496. Conformational flexibility in *N*-benzylideneanilines  
W. Clegg, M. R. J. Elsegood, S. L. Heath, A. Houlton and M. A. Shipman.  
*Acta Cryst.* 1996, **C52**, 2548–2552.

497. Novel octameric structure of the lithium primary amide  $[\{\text{Bu}^t\text{N}(\text{H})\text{Li}\}_8]$  and its implication for the directed synthesis of heterometallic imide cages  
N. D. R. Barnett, W. Clegg, L. Horsburgh, D. M. Lindsay, Q.-Y. Liu, F. M. Mackenzie, R. E. Mulvey and P. G. Williard.  
*Chem. Commun.* 1996, 2321–2322.
498. A sulfonyl-substituted aziridine  
W. Clegg, S. L. Heath, L. Horsburgh, R. F. W. Jackson and A. Wood.  
*Acta Cryst.* 1996, **C52**, 2779–2781.
499. A sulfoximinooxirane  
W. Clegg, M. R. J. Elsegood, R. F. W. Jackson, P. L. Bailey and A. D. Briggs.  
*Acta Cryst.* 1996, **C52**, 2781–2783.
500. Synthesis and characterization of platinum(II)–bis(boryl) catalyst precursors for diboration of alkynes and diynes: molecular structures of *cis*- $[(\text{PPh}_3)_2\text{Pt}(\text{B}-4\text{-Bu}^t\text{cat})_2]$ , *cis*- $[(\text{PPh}_3)_2\text{Pt}(\text{Bcat})_2]$ , *cis*- $[(\text{dppe})\text{Pt}(\text{Bcat})_2]$ , *cis*- $[(\text{dppb})\text{Pt}(\text{Bcat})_2]$ , (*E*)-(4-MeOC<sub>6</sub>H<sub>4</sub>)C(Bcat)=CH(Bcat), (*Z*)-(C<sub>6</sub>H<sub>5</sub>)C(Bcat)=C(C<sub>6</sub>H<sub>5</sub>)(Bcat), and (*Z,Z*)-(4-MoOC<sub>6</sub>H<sub>4</sub>)C(Bcat)=C(Bcat)C(Bcat)=C(4-MeOC<sub>6</sub>H<sub>4</sub>)(Bcat) (cat = 1,2-O<sub>2</sub>C<sub>6</sub>H<sub>4</sub>; dppe = Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>; dppb = Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>4</sub>PPh<sub>2</sub>)  
G. Lesley, P. Nguyen, N. J. Taylor, T. B. Marder, A. J. Scott, W. Clegg and N. C. Norman.  
*Organometallics* 1996, **15**, 5137–5154.
501. Metallocene–nucleobase conjugates. Synthesis, structure and nucleic acid binding  
C. Price, M. Aslanoglu, C. J. Isaac, M. R. J. Elsegood, W. Clegg, B. R. Horrocks and A. Houlton.  
*J. Chem. Soc. Dalton Trans.* 1996, 4115–4120.
502. Macropolyhedral boron-containing cluster chemistry: nineteen-vertex  $[(\text{PPh}_3)\text{NiS}_2\text{B}_{16}\text{H}_{12}(\text{PPh}_3)]$  and eighteen-vertex  $\text{S}_2\text{B}_{16}\text{H}_{14}(\text{PPh}_3)$   
P. Kaur, M. Thornton-Pett, W. Clegg and J. D. Kennedy.  
*J. Chem. Soc. Dalton Trans.* 1996, 4155–4157.
503. Bent *versus* linear imido ligands in five-co-ordinate molybdenum complexes  
V. C. Gibson, E. L. Marshall, C. Redshaw, W. Clegg and M. R. J. Elsegood.  
*J. Chem. Soc. Dalton Trans.* 1996, 4197–4199.
504. Spontaneous magnetization in a sulfur-nitrogen radical at 36 K  
A. J. Banister, N. Bricklebank, I. Lavender, J. M. Rawson, C. I. Gregory, B. K. Tanner, W. Clegg, M. R. J. Elsegood and F. Palacio.  
*Angew. Chem. Internat. Edit. Engl.* 1996, **35**, 2533–2535.
505. A strained cyclonadieneyne  
W. Clegg, A. R. Al Dulayymi and M. S. Baird.  
*Acta Cryst.* 1996, **C52**, 3219–3222.
506. Oxidative addition of a B–B bond by an Ir(I) complex: molecular structure of *mer-cis*- $[\text{Ir}(\text{PMe}_3)_3\text{Cl}(\text{Bcat})_2]$   
C. Dai, G. Stringer, T. B. Marder, R. T. Baker, A. J. Scott, W. Clegg and N. C. Norman.  
*Can. J. Chem.* 1996, **74**, 2026–2031.
507. Synthesis of “phosphine tethered”  $\eta^2$ -allene and  $\mu$ - $\eta^1$ : $\eta^2$ -alkenyl complexes: facile P–C<sub>α</sub> bond formation and C–H activation reactions of bis(diphenylphosphino)methane with  $[\text{Fe}_2(\text{CO})_6(\mu\text{-ER})\{(\mu\text{-}\eta^1:\eta^2_{\alpha,\beta}\text{-H})(\text{C}_\alpha=\text{C}_\beta=\text{C}_\gamma\text{H}_2)\}]$  (E = PPh, R = Ph; E = S, R = <sup>t</sup>Bu)  
S. Doherty, M. R. J. Elsegood, W. Clegg, D. Mampe and N. H. Rees.  
*Organometallics* 1996, **15**, 5302–5308.

- 508.** Bridged bis(imido)molybdenum complexes: isolobal analogues of *ansa*-zirconocenes and bi-zirconocenes  
V. C. Gibson, C. Redshaw, W. Clegg, M. R. J. Elsegood, U. Siemeling and T. Türk.  
*J. Chem. Soc. Dalton Trans.* 1996, 4513–4515.
- 509.** A route to bis(benzimidazole) ligands with built-in asymmetry: potential models for protein binding sites having histidines of different basicity  
C. J. Matthews, T. A. Leese, W. Clegg, M. R. J. Elsegood, L. Horsburgh and J. C. Lockhart.  
*Inorg. Chem.* 1996, **35**, 7563–7571.