

Publications

Key to Symbols Used to Identify Research Workers

The following symbols have been used to indicate the status of individuals who were not regular members of the RSC during 2002.

- * Not a member of the Australian National University
- † Former member of the Research School of Chemistry
- ‡ Summer Research Scholar
- ‡‡ Former Summer Research Scholar
- ≠ Visiting Fellow
- ≠≠ Former Visiting Fellow
- + Faculty of Science (Chemistry)
- #1 IAS (John Curtin School of Medical Research)
- #2 IAS (Research School of Physical Sciences and Engineering)
- #3 IAS (Research School of Biological Sciences)

Journal titles and abbreviations are taken directly from SciFinder Scholar.

Angus, P.A.^{†,+}, Geue, R.J.[†], Jensen, N.K.B.^{*}, Larsen, F.K.^{*}, Qin, C.J.[†], Sargeson, A.M.[≠] **An unusual pendant-arm macrocycle formed by condensation of a cobalt(III) tripodal complex with methanal.** *J. Chem. Soc., Dalton Trans.* (2002), 260–4263.

Armitt, D.J.[†], Banwell, M.G., Freeman, C.^{#1}, Parish, C.R.^{#1} **C-Glycoside formation via Lewis acid promoted reaction of O-glycosylimidates with pyrroles.** *J. Chem. Soc., Perkin Trans. 1* (2002), (15), 1743–1745.

Arnold, D.P.[≠], Hartnell, R.D.^{*}, Heath, G.A., Newby L.^{*}, Webster, R.D. **Remarkable homology in the electronic spectra of the mixed-valence cation and anion radicals of a conjugated bis(porphyrinyl)butadiyne.** *Chem. Commun.* (2002), (7), 54–755.

Baldwin, R.[†], Bennett, M. A.[≠], Hockless, D.C.R.[†], Pertici, P.^{≠≠}, Verrazzani, A.^{*}, Barretta, G.U.^{*}, Marchetti, F.^{*}, Salvadori, P.^{*} **Synthesis, structures and dynamic NMR spectra of C_6 -hexaethylbenzene complexes of ruthenium(0) and ruthenium(II).** *J. Chem. Soc., Dalton Trans.* (2002), 4488–4496.

Baldwin, D.S.^{*}, Bowden, B.F.^{*}, Duckworth, P.A.^{*}, Lindoy, L.F.^{*}, McCool, B.J.^{*}, Meehan, G.V.[,], Vasilescu, I. M.^{*}, Wild, S.B. **New macrocyclic ligands. XIV. Synthesis and X-ray structures of potentially pentadentate ligands incorporating non-symmetrically arranged N_4S -, N_3OS -, $\text{N}_2\text{O}_2\text{S}$ - and $\text{N}_2\text{S}_2\text{O}$ -heteroatoms.** *Aust. J. Chem.* (2002) 55, 597–603.

Banwell, M.G., Bray, A.M.^{*}, Edwards, A., Wong, D.J.[†] **Rapid and convergent assembly of the polycyclic framework assigned to the cytotoxic marine alkaloid halitulin.** *J. Chem. Soc., Perkin Trans. 1* (2002), (11), 1340–1343.

Banwell, M.G., Clark, G.R.^{*}, Hockless, D.C.R.[†], Pallich, S.[†] **Model studies directed towards the synthesis of the oxetane D-ring of paclitaxel: assessment of the oxyanion-assisted retro-Diels-Alder reaction as a means for generating oxete.** *Aust. J. Chem.* (2001), 54(11), 691–704.

Banwell, M.G., Coster, M.J., Karunaratne, O.P., Smith, J.A.[†] **A chemoenzymatic synthesis of the styryllactone (+)-goniodiol from naphthalene.** *J. Chem. Soc., Perkin Trans. 1* (2002), (14), 1622–1624.

Banwell, M.G., Edwards, A.J., Harfoot, G.J., Jolliffe, K.A.[†] **A chemoenzymatic synthesis of (–)-hirsutene from toluene.** *J. Chem. Soc., Perkin Trans. 1* (2002), (22), 2439–2441.

Banwell, M.G., Edwards, A.J., Lambert, J.N.^{*}, Ma, X.H., Watson, K.G.^{*} **A chemoenzymatic synthesis of differentially protected D-talose derivatives.** *Aust. J. Chem.* (2002), 55(1 & 2), 95–103.

Banwell, M.G., Jolliffe, K.A.[†], Loong, D.T.J., McRae, K.J.[†], Vounatsos, F.[#] **A chemoenzymatic synthesis of the 12-membered macrolide (–)-cladospolide A.** *J. Chem. Soc., Perkin Trans. 1* (2002), (1), 22–25.

Banwell, M.G., Smith, J.A.[†] **Exploiting multiple nucleophilic sites on pyrrole for the assembly of polyheterocyclic frameworks: application to a formal total synthesis of (±)-aspidospermidine.** *J. Chem. Soc., Perkin Trans. 1* (2002), (23), 2613–2618.

Banwell, M.G., Stewart, S.G.[†] **Methyl 6-methoxy-1-oxoindan-4-carboxylate.** *OPPI* (2002), 34(2), 177–182.

Barr, L., Easton, C.J., Lee, K.[†], Lincoln, S.F.[‡], Simpson, J.S. **Metallocyclodextrin catalysts for hydrolysis of phosphate triesters.** *Tetrahedron Lett.* (2002), 43(43), 7797–7800.

Beckwith, A.L.J.[‡], Poole, J.S.[†] **Factors affecting the rates of addition of free radicals to alkenes—Determination of absolute rate coefficients using the persistent aminoxy method.** *J. Am. Chem. Soc.* (2002), 124(32), 9489–9497.

Bendahl, L.^{*}, Hammershøi, A.^{**}, Jensen, D.K.^{*}, Larsen, S.^{*}, Riisager, A.^{*}, Sargeson, A.M.[‡], Sorensen, H.O.^{*} **Metal complex amino acid synthons: syntheses, structures and stereoselective reactions of (iminoacetato)cobalt(III) complexes.** *J. Chem. Soc., Dalton Trans.* (2002), 3054–3064.

Bennett, M.A.[‡], Bhargava, S.K.[†], Mohr, F.^{*}, Welling, L.L., Willis, A.C. **Synthesis and X-ray structure of a heterovalent, cycloaurated pentafluorophenylgold(I)/pentafluorophenylgold(III) complex.** *Aust. J. Chem.* (2002), 55, 267–270.

Bennett, M.A.[‡], Contel, M.[†], Hockless, D.C.R.[†], Welling, L.L., Willis, A.C. **Bis{(2-diphenylphosphino)phenyl}mercury: A P-donor ligand and precursor to mixed metal–mercury (d^8 – d^{10}) cyclometalated complexes containing 2-C₆H₄PPh₂.** *Inorg. Chem.* (2002), 41, 844–855.

Bennett, M.A.[‡], Harper, J.R. **Tethered arene complexes of ruthenium.** *Modern Coordination Chemistry: the Legacy of Joseph Chatt*, Eds. G.J. Leigh and N. Winterton, Royal Society of Chemistry: London (2002), pp 163–168.

Bennett, M.A.[‡], Kwan, L.^{##}, Rae, A.D., Wenger, E., Willis, A.C. **Preparation and reactivity of mononuclear platinum(0) complexes containing a π^2 -coordinated alkynylphosphine.** *J. Chem. Soc., Dalton Trans.* (2002), (2), 226–233.

Bennett, J.⁺, Rae, A.D., Salem, G.⁺, Ward, N.C.⁺, Waring, P.⁺, Wells, K.⁺, Willis, A.C. **Synthesis of bis[palladium(II)] and bis[platinum(II)] complexes containing chiral, linear, quadridentate ligands with a P₂N₂ donor set.** *J. Chem. Soc., Dalton Trans.* (2002), (2), 234–243.

Publications

Bettens, R.P.A.[†], Collins, M.A. **Multiple surface long-range interaction potentials between C (3P_1) and closed-shell molecules.** *J. Chem. Phys.* (2002), 116(1), 101–104.

Borzsák, I.* Cummings, P.T.* Evans, D.J., **Shear viscosity of a simple fluid over a wide range of strain rates**, *Mol. Phys.* (2002) 100, 2735–2738.

Bowyer, P.K.[†], Cook, V.C.[†], Gharib-Naseri, N.^{**}, Gugger, P.A., Rae, A.D., Swiegers, G.F.[†], Willis, A.C., Zank, J.* Wild, S.B. **Configurationally homogeneous diastereomers of a linear hexa(tertiary phosphine): enantioselective self-assembly of a double-stranded parallel helicate of the type (P)-[Cu₃(hexaphos)₂](PF₆)₃.** *Proc. Natl. Acad. Sci. (USA)* (2002), 99, 4877–4882.

Brasch, N.E., Cregan, A.G., Vanselow, M.E.^{‡‡} **Studies on the mechanism of the reaction between 5'-deoxyadenosylcobinamide and cyanide.** *J. Chem. Soc., Dalton Trans.* (2002), 1287–1294.

Brink, F.J., Withers, R.L., Friese, K.* Madariaga, G.* Norén, L. **An electron diffraction and XRPD study of superlattice ordering in the Elpasolite-related oxyfluoride K₃MoO₃F₃.** *J. Solid State Chem.* (2002), 163(1), 267–274.

Brink, F. J., Withers, R.L., Norén, L. **An electron diffraction and crystal chemical investigation of oxygen/fluorine ordering in niobium oxyfluoride, NbO₂F.** *J. Solid State Chem.* (2002), 166(1), 73–80.

Brown, D.J.* **The Pyrazines: Supplement I.** John Wiley and Sons: New York (2002), pp xvii–557. [Vol. 58 within the Series, *The Chemistry of Heterocyclic Compounds*, Eds. E.C. Taylor, P. Wipf, and the late A. Weissberger].

Bruno, T.J.* Lewandowska, A.* Tsvetkov, F.* Hanley, H.J.M. **Wall coated open tubular column chromatography on an organo-clay stationary phase.** *J. Chrom. A.* (2002) 973, 143–149.

Butler, P.A.* Crane, C.G.[†], Golding, B.T.^{**}, Hammershøi, A.^{**}, Hockless, D.C.[†], Petersen, T.B.* Sargeson, A.M.* Ware, D.C.* **Synthesis of 2-(nitromethyl)ornithine from ornithine mediated by cobalt(III).** *Inorg. Chim. Acta* (2002), 331, 318–321.

Cieslinski, M.M., Clements, P., May, B.L., Easton, C.J., Lincoln, S.F.* **Complexation by α - and β -cyclodextrin C(6) linked homo- and hetero-dimers of Brilliant Yellow tetraanion: a study of host-guest size relationships.** *J. Chem. Soc., Perkin Trans. 2* (2002), (5), 947–952.

Christy, A.G.^{†*}, Tabira, Y., Hölscher, A., Grew, E.S., Schreyer, W.* **Synthesis of beryllian sappharine in the system MgO-BeO-Al₂O₃-SiO₂-H₂O and comparison with naturally occurring beryllian sappharine and khmaralite. Part 1: Experiments, TEM, and XRD.** *American Mineralogist.* (2002), 87, 1104–1112.

Collins, M.A. **Molecular potential-energy surfaces for chemical reaction dynamics.** *Theor. Chem. Acc.* (2002), 108(6), 313–324.

Cook, V.C.[†], Willis, A.C., Zank, J.* Wild, S.B. **Synthesis and resolution of (R*,R*)-(\pm)-1,1,4,7,10,10-hexaphenyl-1,10-diarsa-4,7-diphosphadecane: New ligand for the stereoselective self-assembly of dicopper(I), disilver(I), and digold(I) helicates.** *Inorg. Chem.* (2002), 41, 1897–1906.

Coote, M.L.* , Wood, P.F.* , Radom, L. **Methyl radical addition to C=S double bonds: kinetic versus thermodynamic preferences.** *J. Phys. Chem. A* (2002) 106, 12124–12138.

Cram, S.* , Knott, R.B.* , Hanley, H.J.M. □ **A SANS Study of the adsorption of guar gum on talc surfaces.** ANSTO publication, (2001) ANSTO/E-746, 1–24.

Dance, I.* , Wenger, E., Harris, H.* **Towards rational syntheses of the elusive metallocarbohedrenes: density functional prescriptions for electronic and geometric structures.** *Chem. Eur. J.* (2002), 8, 3497–3511.

Delhommelle, J.* , Evans, D.J. **Poiseuille flow of a micropolar fluid.** *Mol. Phys.* 100, (2002) 2857–2865.

Delhommelle, J.* , Evans, D.J. **Correspondence between configurational temperature and molecular kinetic temperature thermosats.** *J. Chem. Phys.*, (2002) 117, 6016–6021.

Drabarek, E.* , Bartlett, J.R.* , Hanley, H.J.M., Woolfrey J.L.* , Muzny, C.D.* **Effect of processing variables on the structural evolution of silica gels.** □ *International Journal of Thermophysics*, (2002) 23, 145–160.

Easton, C.J. **Cyclodextrins: industrial waste with applications in pharmacy, catalysis and microelectronics.** *Chem. N. Z.* (2002), 66(1), 49–52.

Easton, C.J., Ferrante, A.* , Robertson, T.A.† , Xia, L. **Antioxidant behaviour of thia fatty acids.** *Aust. J. Chem.* (2002), 55(10), 647–653.

Edwards, A.J., Retbøll, M.* , Wenger, E. **The tetrahedral tetrakis(phosphine) complex [bis(diphenylphosphino)butane- P_2P]nickel(0)–benzene (1/2.5).** *Acta Crystallogr., Sect. E* (2002), 58, m375–m377.

Edwards, A.J., Retbøll, M.* , Wenger, E. **The nickel(II) complex $[\text{NiBr}(\text{Ph})\{(\text{C}_6\text{H}_{11})_2\text{P}(\text{CH}_2)_2\text{P}(\text{C}_6\text{H}_{11})_2\}] \bullet \text{PhCl}$.** *Acta Crystallogr., Sect. E* (2002), m497–m499.

Edwards, A.J., Wenger, E. **Simple method for the handling of crystals at low temperature: Application to the X-ray structure determination of $\text{Bu}'_2\text{P}(=\text{NSiMe}_3)\text{NHSiMe}_3$ and $\text{Bu}'_2\text{P}(\text{NSiMe}_3)_2\text{Li}^\bullet(\text{thf})_2$.** *Aust. J. Chem.* (2002), 55, 249–252.

Edwards, A.J., Wenger, E. **The seven-membered nickelacycle $[\text{NiBr}\{\text{o}-\text{CH}=\text{C}(\text{CF}_3)\text{C}_6\text{H}_4\text{CH}_2\text{PPh}_2-\text{C}_6\text{H}_4\text{P}\}\{\text{PPh}(\text{CH}_2\text{Ph})_2\}]$.** *Acta Crystallogr., Sect. C* (2002), 58, m230–m231.

Edwards, A.J., Willis, A.C., Wenger, E. **Reactions of benzyne–nickel(0) complexes with thioalkynes: Preparation and coordination of polydentate thioethers containing a 2,3-naphthylene backbone.** *Organometallics* (2002), 21, 1654–1661.

Evans, D.J., Rondoni, L.* **Comments on the entropy of nonequilibrium steady states.** *J. Stat. Phys.*, (2002) 109, 895–920.

Evans, D.J., Searles, D.J.† **The Fluctuation Theorem.** *Adv. in Phys.* (2002) 51, 1529–1585.

Publications

Evans, P.D.* Owen, N.L.* Schmid, S.† Webster, R.D. **Weathering and photostability of benzoylated wood.** *Polym. Degrad. Stab.* (2002), 76(2), 291–303.

Fischer, H.* Radom, L. **Factors controlling the addition of carbon-centered radicals to alkenes.** *Macromolecular Symposia* (2002), 182 (1), 1–14.

Flanagan, B.M.* Bernhardt, P.V.† Krausz, E.R., Lüthi, S.R.‡ Riley, M.J.† **A ligand-field analysis of the trensal ($H_3trensal=2,2',2''$ -Tris (salicylideneimino) triethylamine) ligand. An application of the angular overlap model to Lanthanides.** *Inorg. Chem.* (2002) 41 (20), 5024–5033.

French, H.M.* Henderson, M.J., Hillman, A.R.* Vieil, E. **Temporal resolution of ion and solvent transfers at nickel hydroxide films exposed to LiOH.** *Solid State Ionics* (2002), 150, 27–37.

Goossens, D.J., Cussen, L.D.* **Optimising neutron polarizers - measuring the flipping ratio and related quantities.** *Nuclear Instruments and Methods in Physics Research* (2002), A481, 475–492.

Gover, R.K.B.* Withers, N.D.* Allen, S.* Withers, R.L., Evans, J.S.O.* **Structure and phase transitions of SnP_2O_7 .** *J. Solid State Chem.* (2002), 166(1), 42–48.

Gugger, P.A., Willis, A.C., Wild, S.B., Heath, G.A., Webster, R.D., Nelson, J.H.* **Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene.** *J. Organomet. Chem.* (2002), 643–644, 136–153.

Guignard, L.* Ozawa, K., Pursglove, S.E.* Otting, G., Dixon, N.E. **NMR analysis of in vitro-synthesized proteins without purification: a high-throughput approach.** *FEBS Lett.* (2002), 524(1-3), 159–162.

Gül, N.* Nelson, J.H.* Willis, A.C., Rae, A.D. **Comparative study of the reactions of two alkynes and an alkene with chiral cyclopalladated complexes derived from N,N -dimethyl- \square -(2-naphthyl)ethylamine and N,N -dimethyl- \square -methylbenzylamine: Insertion or cycloaddition.** *Organometallics* (2002), 21(10), 2041–2048.

Haupt, B.J. Senden, T.J.* Sevick, E.M. **AFM Evidence of Rayleigh instability in single polymer chains.** *Langmuir* (2002), 18, 2174–2182.

Hamdan, S., Bulloch, E.M.† Thompson, P.R.† Beck, J.L.† Yang, J.Y.† Crowther, J.A.† Lilley, P.E., Carr, P.D., Ollis, D.L., Brown, S.E.† Dixon, N.E. **Hydrolysis of the 5'-p-nitrophenyl ester of TMP by the proofreading exonuclease (\square) subunit of Escherichia coli DNA polymerase III.** *Biochemistry* (2002), 41(16), 5266–5275.

Hamdan, S., Carr, P.D., Brown, S.E.† Ollis, D.L., Dixon, N.E. **Structural basis for proofreading during replication of the Escherichia coli chromosome.** *Structure* (2002), 10(4), 535–546.

Hanley, H.J.M., Ruggles, J.* Knott, R.* **The structure of complex fluids under shear.** *The Physicist*, (2002), 39(1), 28–39.

Henry, D. J., Parkinson, C. J.[†], Radom, L. An assessment of the performance of high-level theoretical procedures in the computation of the heats of formation of small open-shell molecules. *J. Phys. Chem. A* (2002), 106 (40), 7927–7936.

Hill, A.F. **Organotransition metal chemistry**. Tutorial Chemistry Texts, Volume 7, Eds. E.W. Abel, A.G. Davies, D. Phillips, J.D. Woollins. Royal Society of Chemistry: Cambridge (2002), pp 1–182.

Hill, A.F., Wilton-Ely, J.D.E.T.^{*}, Rauchfuss, T.B.^{*}, Schwartz, D.E.^{*} **Chlorohydro-tris(pyrazol-1-yl)borato-bis(triphenylphosphine)ruthenium(II)**. *Inorg. Synth.* (2002), 33, 206–208.

Hill, A.F., Wilton-Ely, J.D.E.T.^{*}, Breedlove, B.K.^{*}, Kubiak, C.P.^{*} **Chlorothiocarbonyl-bis(triphenylphosphine) iridium(I) [IrCl(CS)(PPh₃)₂]**. *Inorg. Synth.* (2002), 33, 244–245.

Hirano, M., Shibasaki, T., Komiya, S., Bennett, M.A. **Synthesis of and stereospecific hydride migration in cationic (tricyclic arene) (cyclooctadiene) ruthenium(II) complexes**. *Organometallics*, (2002), 21, 5738–5745.

Holt, S.A[†]., Henderson, M.J., White, J.W. **Thermal denaturation of interfacial protein layers**. *Aust. J. Chem.*, Special Edition of Plenary Lectures, 25 Australian Polymer Symposium, (2002), 55, 449–459.

Holt, S.A[†]., Ruggles, J.L.[†], White, J.W., Garrett, R.F. **Structure development in octadecyl trimethylammonium templated silicate films grown at the air/water Interface**. *J. Phys. Chem B*, (2002), 106 (9), 2330–2336.

Honal, M., Welberry, T.R. **Monte Carlo study of the quasicrystal-to-crystal transformation using an approach based on the gummelt covering**. *Z. Kristallogr.*, (2002), 217, 109–118.

Huber, T.[†], Torda, A.E. **Protein structure prediction by threading: Force field philosophy, approaches to alignment**. In: *Protein Structure Prediction: Bioinformatic Approach*, Ed. I. F. Tsigelny, International University Line: La Jolla (2002), pp 263–296.

Herlt, A.J., Mander, L.N., Pongoh, E.* Rumampuk, R.J.[‡], Tarigan, P.* **Two major saponins from seeds of Barringtonia asiatica: putative antifeedants toward Epilachna sp. Larvae**. *J. Nat. Prod.* (2002), 65(2), 115–120.

Jacobsen, J.V.* Pearce, D.W.* Poole, A.T.* Pharis, R.P.^{**}, Mander, L.N. **Abscisic acid, phaseic acid and gibberellin contents associated with dormancy and germination in barley**. *Physiol. Plant.* (2002), 115(3), 428–441.

Kapur, A.* Beck, J. L.* Brown, S.E.[†], Dixon, N.E., Sheil, M.M.* **Use of electrospray ionization mass spectrometry to study binding interactions between a replication terminator protein and DNA**. *Protein Science* (2002), 11(1), 147–157.

Kelly, J.F.[†], Krausz, E., Willis, A.C., Samoc, A.^{#2}, Samoc, M.^{#2} **The crystal structure and second order nonlinear optical susceptibility of the addition complex, AsI₃·3S₈**. *Aust. J. Chem.* (2002), 55, 709–714.

Keniry, M.A., Carver, J.A.^{**} **NMR spectroscopy of large proteins**. In *Annual Reports on NMR Spectroscopy*. Volume 48, Ed. G.A. Webb, Academic Press: London (2002), pp 31–69.

Publications

Laval, G.* Clegg, W.* Crane, C.G.† Hammershøi, A.** Sargeson, A.M.* Golding, B.T.** Assembly of polyamines via amino acids from three components using cobalt(III) template methodology. *Chem. Commun.* (2002), 1874–1875.

Lazzaroni, R.* Settambolo, R.* Caiazzo, A.* Bennett, M.A.* Rhodium-catalyzed hydroformylation of 4-vinylpyridine: 4-ethylpyridine formation via an unusual cleavage of the Rh–C bond by the enolic form of the oxo product. *Organometallics* (2002), 21, 2454–2459.

Lee, C.K.Y., Easton, C.J., Gebara-Coghlan, M., Radom, L., Scott, A.P., Simpson, G.W.* Willis, A.C. Substituent effects in isoxazoles: identification of 4-substituted isoxazoles as Michael acceptors. *J. Chem. Soc., Perkin Trans. 2* (2002), (12), 2031–2038.

Lucas, N.T.+ Blitz, J.P.+ Petrie, S.+ Stranger, R.+ Humphrey, M.G.+ Heath, G.A., Otieno-Alego, V.* Mixed-metal cluster chemistry. 19. Crystallographic, spectroscopic, electrochemical, spectroelectrochemical, and theoretical studies of systematically varied tetrahedral group 6-iridium clusters. *J. Am. Chem. Soc.* (2002), 124(18), 5139–5153.

Lue, L.* Jepps, O.G.† Delhommelle, J.† Evans, D.J. Configurational thermostats for molecular systems. *Mol. Phys.*, (2002) 100(14), 2387–2395.

Macgregor, S.A.† Wenger, E. Theoretical studies on the insertions of unsymmetrical alkynes into the metal–carbon bond of phosphanickelacycles: electronic factors. *Organometallics* (2002), 21, 1278–1289.

Mahon, P.J., Myland, J.C.* Oldham, K.B.* A fresh approach to voltammetric modelling. *J. Electroanal. Chem.* (2002), 537, 1–5.

Minervini, L.* Grimes, R.W.* Tabira, Y.† Withers, R.L., Sickafus, K.E.* The oxygen positional parameter in pyrochlores and its dependence on disorder. *Philosophical Magazine A: Physics of Condensed Matter: Structure, Defects and Mechanical Properties* (2002), 82(1), 123–135.

Mittag, E.† Searles, D.J.† Evans, D.J.. Isobaric-isothermal fluctuation theorem. *J. Chem. Phys.*, (2002) 116(16), 6875–6879.

Nelson, J.H.* Ghebreyessus, K.Y.* Cook, V.C.† Edwards, A.J., Wielandt, W., Wild, S.B., Willis, A.C. Synthesis and characterization of [(C_6 -arene)RuCl₂(R₂AsCH=CH₂)] and tethered arsinopropylarene–ruthenium(II) complexes. *Organometallics* (2002), 21, 1727–1733.

Norén, L., Tan, E.S.Q.‡ Withers, R.L., Sterns, M.+ Rundlöf, H.* A neutron, X-ray and electron diffraction study of the structures of Pb₃O₂X₂ (X = Cl, Br). *Mat. Res. Bull.* (2002), 37(8), 1431–1442.

Norén, L., Withers, R.L., García-García, F.J.* Larsson, A.-K.† Cd(OH)₂-NiAs related phases in the Co–Se system. *Solid State Sci.* (2002), 4(1), 27–36.

Owen, E.A., Burley, G.A.* Carver, J.A.** Wickham, G.* Keniry, M.A. Structural investigation of the hedamycin:d(ACCGT)₂ complex by NMR and restrained molecular dynamics. *Biochem. Biophys. Res. Commun.* (2002), 290(5), 1602–1608.

Parker, R.J.*, Lu, K.D.*, Batten, S.R.*, Moubaraki, B.*, Murray, K.S.*, Spiccia, L.*[†], Cashion, J.D., Rae, A.D., Willis, A.C. **Synthesis, crystal structures and magnetic properties of linear and bent trinuclear complexes formed by hexacyanometallates and copper(II) complexes.** *J. Chem. Soc., Dalton Trans.* (2002), (19), 3723–3730.

Parker, R.J.*[†], Spiccia, L.*[†], Moubaraki, B.*[†], Murray, K.S.*[†], Hockless, D.C.R.[†], Rae, A.D., Willis, A.C. **Structure and magnetism of heptanuclear complexes formed on encapsulation of hexacyanoferrate(II) with the Mn(II) and Ni(II) complexes of 1,4-Bis(2-pyridylmethyl)-1,4,7-triazacyclononane.** *Inorg. Chem.* (2002), 41(9), 2489–2495.

Pearce, D.A.[†], Hartshorn, R.M.^{†,‡}, Sargeson, A.M.[‡] **Facile reduction of coordinated \square -imino acids to amino acids by dithionite and borohydride.** *J. Chem. Soc., Dalton Trans.* (2002), 1747–1752.

Pearce, D.W.*[†], Hutt, O.E., Rood, S.B.*[†], Mander, L.N. **Gibberellins in shoots and developing capsules of *Populus* species.** *Phytochem.* (2002), 59(6), 679–687.

Porter, K.A.[†], Willis, A.C., Zank, J.[‡], Wild, S.B. **Phosphine-stabilised arsenium salts: Water-stable, labile, coordination complexes.** *Inorg. Chem.* (2002), 41, 6380–6386.

Retbøll, M.[‡], Edwards, A.J., Rae, A.D., Willis, A.C., Bennett, M.A.[‡], Wenger, E. **Preparation of benzyne complexes of group 10 metals by intramolecular Suzuki coupling of ortho-metallated phenylboronic esters: molecular structure of the first benzyne-palladium(0) complex.** *J. Am. Chem. Soc.* (2002), 124, 8348–8360.

Retbøll, M.[‡], Wenger, E., Willis, A.C. **A palladium(0) complex of dibenzylidene-acetone and a chelating diphosphine.** *Acta Crystallogr., Sect. E* (2002), 58, m275–m277.

Reynolds, P.A., Henderson, M.J., Holt, S.A.[†], White, J.W. **The interfacial structure of a high internal phase emulsion near a solid surface.** *Langmuir* (2002), 18, 9153–9157.

Rickards, R.W.[‡], Skropeta, D.[†] **Electrocyclic processes in aromatic biomimetic study of pseudorubrenoic acid A.** *Tetrahedron* (2002), 58, 3793–3800.

Rousseau, B., Petracic, J. **Transport coefficients of xylene isomers,** *J. Phys. Chem. B* (2002), 106, 13010–13017.

Ryan, D.*[†], Antolovich, M.*[†], Herlt, T., Prenzler, P.D.[†], Lavee, S.*[†], Robards, K.*[†] **Identification of phenolic compounds in tissues of the novel olive cultivar Hardy's Mammoth.** *J. Agric. Food Chem.* (2002), 50(230), 6716–6724.

Smith, P.J.[†], Peterson, S., Masters, V.M., Wydrzynski, T.^{#3}, Styring, S.*[†], Krausz, E., Pace, R.J.[†] **Magneto-optical measurements of the pigments in fully active photosystem II core complexes from plants.** *Biochemistry* (2002), 41, 1981–1989.

Snook, I.*[†], Yarovsky, I.*[†], Hanley, H.J.M., Lin, M.*[†], Mainwaring, D.*[†], Rogers, D.*[†], Zulli, P. **Characterisation of metallurgical chars by small angle neutron scattering,** *Energy and Fuels*, (2002), 16, 1009–1015.

Publications

Wang, G.M., Sevick, E.M., Mittag, E.[†], Searles, D.J.[†], Evans, D.J., Experimental demonstration of violations of the Second Law of Thermodynamics for small systems and short time scales, *Phys. Rev. Lett.*, (2002) 89(5), 050601/1–4.

Webster, R.D. *In situ* electrochemical-ATR-FTIR spectroscopic studies on solution phase carboxylate radical anions. *J. Chem. Soc., Perkin Trans. 2* (2002), (11), 1882–1888.

Welberry, T.R., Honal, M. 'Size-effect'-like distortions in quasicrystalline structures. *Z. Kristallogr.*, (2002), 217, 422–426.

Welberry, T.R. Analysis of single-crystal diffuse x-ray scattering via automatic refinement of a Monte Carlo Model. *From Semiconductors to Proteins: Beyond the average structure, (Fundamental Materials Research,* Eds Billinge, S.J.L., and Thorpe, M.F.) pp 1-22, Kluwer Academic/Plenum Publishers, New York (2002).

Wetmore, S.D.[†], Smith, D. M.[†], Bennett, J. T.[#], Radom, L. Understanding the mechanism of action of B₁₂-dependent ethanolamine ammonia-lyase: Synergistic interactions at play. *J. Am. Chem. Soc.* (2002), 124 (47), 14054–14065.

Wild, S.B. Specialist Periodical Report: Organophosphorus chemistry, Volume 30, edited by: D.W. Allen, J. Tebby. *J. Chem. Soc., Perkin Trans. 1* (2001), 1342. (Book review)

Williams, N.K.[†], Prosselkov, P., Liepinsh, E.^{*}, Line, I.^{*}, Sharipo, A.^{*}, Littler, D.R.^{*}, Curni, P.M.G.^{*}, Otting, G., Dixon, N.E. *In vivo* protein cyclization promoted by a circularly permuted *Synechocystis* sp. PCC6803 DnaB mini-intein. *J. Biol. Chem.* (2002), 277(10), 7790–7798.

Withers, R.L., Norén, L., Liu, Y., Brink, F. Electron microscopy and its application to the study of incommensurately modulated compositionally and/or displacively flexible phases. *Microsc. Microanal.* (2002), 8 (Suppl. 2), 306–307.

Withers, R.L., Tabira, Y.[†], Liu, Y., Höche, T.* A TEM and RUM study of the inherent displacive flexibility of the fresnoite framework structure type. *Phys. Chem. Minerals* (2002), 29(9), 624–632.

Zhang, D.H.* , Yang, M.* , Collins, M.A., Lee, S.Y.* Probing the transition state via photoelectron and photodetachment spectroscopy of H₃O[−]. *Proc. Nat. Acad. Sci.*, (2002), 99(18), 11579–11582.

Patents

Armitt, D.J.[†], Banwell, M.G. Process for synthesising C-glycosides. Australian Provisional Patent Application No. PS 2747.

Banwell, M.G., Flynn, B.L.⁺ Synthesis of a variety of lamellarin compounds and analogues. United States Patent No. US6469171 B1, (2002), 19 pp.

Banwell, M.G., Liu, L.[†], Parish, C.R.^{#1}, Freeman, C.G.^{#1} Linked cyclitols and their polysulfated derivatives. International Patent Application No. PCT/AU02/00884, incorporating Australian Provisional Patent Applications No. PR 6128 and PS 1969.

Brasch, N.E., Xia, L. **A method of synthesis.** Provisional US patent application 200260/379,354.

Easton, C.J., Barratt, B.J., Simpson, J.S. **Enzyme inhibitors.** Australian Provisional Patent Application No. 2002950185.

Oakeshott, J.G.* , Devonshire, A.* , Coppin, C.W.* , Heidari, R., Dorrian, S.J.* and Russell, R.J.* **Esterases with lipase activity.** International Patent Application No PCT/AU02/00113 filed 6 February 2002.

Russell, R.J.* , Heidari, R., Devonshire, A.* , Dorrian, S.J.* and Oakeshott, J.G.* **Degradation of hydrophobic ester pesticides and toxins.** International Patent Application No PCT/AU02/00114 filed 6 February 2002.