

PROFESSOR PETER DAY FRS

PUBLICATIONS

- (1) Spectra and Photoconduction of Phthalocyanine Complexes (I), P. Day and R.J.P. Williams, *J. Chem. Phys.* 37, 567-570 (1962)
- (2) Photoconductivity of Manganese Phthalocyanine, P. Day, G. Scogg and R.J.P. Williams, *Nature* 197, 589-590 (1963)
- (3) Spectra and Constitution of Antimony (III), Antimony (V) Hexahalide Salts and Related Compounds, P. Day, *Inorg. Chem.* 2, 452-456 (1963)
- (4) Point-charge Crystal-Field Calculations for Cupric Halides, P. Day, *Proc. Chem. Soc.* 18 (1964)
- (5) Low Energy Excited States of Metal Complexes, P. Day, G. Scogg and R.J.P. Williams, *Biopolymers Symposia* 1, 271-282 (1964)
- (6) Charge-transfer Spectra of some Inorganic Complexes in Solution, P. Day and J.C. Barnes, *J. Chem. Soc.* 3886-3892 (1964)
- (7) A Simple Molecular Orbital Model of Transition-metal Halide Complexes, P. Day and C.K. Jørgensen, *J. Chem. Soc.* 6226-6234 (1964)
- (8) Electronic Absorption Spectra of Square Planar d⁸ Complexes in Different Crystal Environments, P. Day, A.F. Orchard, A.J. Thomson and R.J.P. Williams, *J. Chem. Phys.* 42, 1973-1981 (1965)
- (9) Photoconductivity of Copper Phthalocyanine in the Near Infrared, P. Day and R.J.P. Williams, *J. Chem. Phys.* 42, 4049-4050 (1965)
- (10) Charge Transfer in Solid Chlorocuprates (I, II), D. Culpin, P. Day, P.R. Edwards and R.J.P. Williams, *Chem. Communs.*, No. 19 (1965)
- (11) Charge Transfer in Chlorocuprates (I, II), D. Culpin, P. Day, P.R. Edwards and R.J.P. Williams, *Chem. Soc. Anniversary Meeting, Glasgow, Paper XI* (1965)
- (12) Conjugated Ligands Modify Metal Ion Properties, P. Day, *Chem. and Eng. News*, 95 (1965)
- (13) Crystal Spectra of Magnus' Green Salt Analogs, P. Day, A.F. Orchard, A.J. Thomson and R.J.P. Williams, *J. Chem. Phys.* 43, 3763-3764 (1965)
- (14) The Crystal Structure of [Co(NH₃)₆]Cu₅Cl₁₇, P. Murray-Rust, P. Day and C.K. Prout, *J. Chem. Soc., Chem. Comm.* 277-278 (1966)
- (15) Ultraviolet Spectra of some First Transition Series Pseudohalide Complexes, P. Day, *Inorg. Chem.* 5, 1619-1621 (1966)

- (16) Some Reactions of Cobalt Phthalocyanines, P. Day, H.A.O. Hill and M.G. Price, J. Chem. Soc. A 90-93 (1968)
- (17) The Vibrational Spectra of Some Chloro-anions, T. Barrowcliffe, I.R. Beattie, P. Day and K. Livingston, J. Chem. Soc. A 1810-1812 (1967)
- (18) Crystal Spectra of a Heme and some Heme-Protein Complexes, P. Day, D.W. Smith and R.J.P. Williams, Biochemistry 6, 1563-1566 (1967)
- (19) Crystal Spectra of Ferric Haemoproteins, P. Day, D.W. Smith and R.J.P. Williams, Proc. British Biophysical Society Meeting, Oxford, 24 (1967)
- (20) A Theory of the Optical Properties of Vitamin B₁₂ and its Derivatives, P. Day, Theoretica Chim. Acta 7, 328-341 (1967)
- (21) The Electronic Structure and Spectrum of Vitamin B₁₂, P. Day, Coord. Chem. Rev. 2, 109-116 (1967)
- (22) Mixed Valence Compounds – a Survey and Classification, M.B. Robin and P. Day, Adv. Inorg. Chem. and Radiochem. 10, 248 (1967)
- (23) The Spectra of Complexes of Conjugated Ligands. Part I. Charge-transfer in Phenanthroline Complexes: Energy Shifts on Substitution, P. Day and N. Sanders, J. Chem. Soc. A, 1530-1536 (1967)
- (24) Spectra of Complexes with Conjugated Ligands. Part II. Charge-transfer in Substituted Phenanthroline Complexes: Intensities, P. Day and N. Sanders, J. Chem. Soc. A, 1536-1541 (1967)
- (25) Charge Transfer in Mixed Valence Solids, Part I. Crystal Spectra of Chlorocuprates (I, II), P. Day and D.W. Smith, J. Chem. Soc. A, 1045-1046 (1967)
- (26) Far-ultraviolet Spectra of Metal Halide Complexes, B.D. Bird and P. Day, J. Chem. Soc., Chem. Comm. 741-742 (1967)
- (27) Polarised Crystal Spectra of some Dimeric Palladium (II) and Platinum (II) Halide Complexes, P. Day, M.J. Smith and R.J.P. Williams, J. Chem. Soc. A, 668-672 (1968)
- (28) Crystal Spectra of Some Ferric Hemoproteins, P. Day, D.W. Smith and R.J.P. Williams, Biochemistry 6, 3747-3750 (1967)
- (29) Electron Transfer Bands of Hexachloro-iridate (IV) at 20°K, P. Day and C.K. Jørgensen, Chem. Phys. Letts. 1, 507-508 (1968)
- (30) Analysis of the Charge-Transfer Spectra of Some First-Transition-Series Tetrahalide Complexes, B.D. Bird and P. Day, J. Chem. Phys. 49, 392-403 (1968)
- (31) Charge Transfer Spectra of Metal Halide Complexes, B.D. Bird, P. Day and E.A. Grant, Proc. XII Int. Conf. on Coord. Chem., Haifa, 556-558 (1968)

- (32) Charge Transfer in Mixed-valence Solids. Part II. Formula and Structural Variation of Chlorocuprates (I, II), P. Day, J. Chem. Soc. A, 1835-1838 (1968)
- (33) Charge Transfer in Mixed-valence Solids. Part III. Spectra and Semiconductivity of Chlorocuprates (I, II), D. Culpin, P. Day, P.R. Edwards and R.J.P. Williams, J. Chem. Soc. A, 1838-1842 (1968)
- (34) Semiconductivity of Magnus' Green Salt Analogues, L. Atkinson, P. Day and R.J.P. Williams, Nature 218, 668-669 (1968)
- (35) Chapter 12, "General Conclusions", P. Day and H.A.O. Hill, In "Physical Methods in Advanced Inorganic Chemistry", edited by H.A.O. Hill and P. Day, London, Interscience (1968)
- (36) The Photoconductivity of Metal-free and Copper Phthalocyanine Crystals in High and Ultra-High Vacua, P. Day and M.G. Price, J. Chem. S. A, 236-240 (1969)
- (37) Cooperative Effects in the Electronic Spectra of Inorganic Solids, P. Day, Inorg. Chim. Acta Reviews 3, 81-97 (1969)
- (38) Vibrational Broadening of a Charge-transfer Band in an Inorganic Crystal, P. Day and E.A. Grant, J. Chem. Soc., Chem. Comm. 123-124 (1969)
- (39) The Spectra of Complexes of Conjugated Ligands. Part III. Charge-transfer Spectra of Bisnioximebis(substituted pyridine)iron(II) Complexes, P. Day and N. Sanders, J. Chem. Soc. A, 2303-2308 (1969)
- (40) Charge Transfer in Mixed-valence Solids. Part IV. Electronic Spectra of Hexachloroantimonates (III, V), L. Atkinson and P. Day, J. Chem. Soc. A, 2423-2431 (1969)
- (41) Charge Transfer in Mixed-valence Solids. Part V. Semiconductivity of Hexachloroantimonates (III, V), L. Atkinson and P. Day, J. Chem. Soc. A, 2432-2436 (1969)
- (42) Low Temperature Charge-transfer Spectra of Hexahalogenoiridates(IV) and -osmates(IV), B.D. Bird, P. Day and E.A. Grant, J. Chem. Soc. A, 100-109 (1970)
- (43) Single Crystal Polarized Electronic Spectrum of *trans*-Difluorobis(ethylenediamine)-chromium(III) Perchlorate, L. Dubicki, M.A. Hitchman and P. Day, Inorg. Chem. 9, 188-190 (1970)
- (44) Low Temperature Crystal Spectra of Tetrahedral Cobalt (II) Halide Complexes, B.D. Bird, E.A. Grant and P. Day, Proc. XIV Int. Conf. on Coord. Chem., Krakow, 159 (1971)
- (45) Mixed Valence Compounds, P. Day, Endeavour 29, 45-49 (1970)
- (46) The Spectra of Complexes of Conjugated Ligands. Part IV. Zero Differential Overlap Calculations of Phenanthroline and its Mono-complexes, N. Sanders and P. Day, J. Chem. Soc. A, 1190-1196 (1970)

- (47) Molecular Orbital Theory and the Assignment of Charge Transfer Transitions, P. Day, Czech. J. Phys. B20, 641-653 (1970)
- (48) Magnetic Circular Dichroism and the Assignment of Charge Transfer Transitions in Tetrahalide Complexes, P. Day, B.D. Bird, J.C. Rivoal and B., Symp. Faraday Soc. 3, 70-83 (1969)
- (49) The Conductivity of Manganese(II) Phthalocyanine, L. Atkinson, P. Day and M.G. Price, Phys. Stat. Sol. (a) 2, K157-159 (1970)
- (50) Electronic Transitions of Permanganate and Manganate Ions in the Near Infrared, P. Day, L. Disipio and L. Oleari, Chem. Phys. Letts. 5, 533-536 (1970)
- (51) Charge Transfer in Mixed-valence Solids. Part VI. Spectra and Semiconductivity of Hexachloroplumbates (II, IV) and Hexachloroindates(III), P. Day and I.D. Hall, J. Chem. Soc. A, 2679-2682 (1970)
- (52) The Electronic Spectra of Tetragonal Chromium (III) Complexes, L. Dubicki and P. Day, Inorg. Chem. 10, 2043-2049 (1971)
- (53) The Electronic Spectrum of Trinuclear Chromium (III) Acetate, L. Dubicki and P. Day, Inorg. Chem. 11, 1868-1875 (1972)
- (54) The Magnetic Circular Dichroism Spectrum of the Tetraiodocobaltate(II) Ion, B.D. Bird, J.C. Collingwood, P. Day and R.G. Denning, J. Chem. Soc., Chem. Comm. 225-226 (1971)
- (55) Magnetic Circular Dichroism of the $^4A_2 \rightarrow ^2E(^2D)$ Transition in Cs_3CoCl_5 , J.C. Collingwood, P. Day and R.G. Denning, Chem. Phys. Letts. 10, 274-276 (1971)
- (56) Low Temperature Photoconductivity of Matrix Isolated Molecules, P. Day and J. Langton, Disc. Faraday Soc. 51, 85-93 (1971)
- (57) Electronic Spectrum of the Manganate Ion, L. Di Sipio, L. Oleari and P. Day, J. C. S., Faraday Trans. (II) 68, 1032-1048 (1972)
- (58) Magnetic Circular Dichroism Spectrum of the Permanganate Ion in $Ba(ClO_4)_2 \cdot 3H_2O$ at 4.2°K, J.C. Collingwood, P. Day, R.G. Denning, D.J. Robbins, L. Disipio and L. Oleari, Chem. Phys. Letts. 13, 567-570 (1972)
- (59) Electronic Spectra, P. Day and N. Sanders, ch. in "Electronic Structure and Magnetism of Inorganic Compounds", Chem. Soc. Specialist Report, Vol. 1, 63-138 (1972)
- (60) Trapping of Valence States in a Ruthenium (II, III)-Pyrazine Complex, P. Day and B. Mayoh, J. Amer. Chem. Soc. 94, 2885-2886 (1972)
- (61) Derivation and Testing of a Molecular Orbital Description of Ligand Field Spectra, B.D. Bird, E.A. Cooke, P. Day and A.F. Orchard, Phil. Trans. Roy. Soc. A, 276, 277 (1974)
- (62) Electronic Spectra of some Post-transition-metal Halide Complexes, P. Day and R.H. Seal, J. Chem. Soc., Dalton Trans. 2054-2058 (1972)

- (63) Vibrational Fine Structure in the Low Temperature Absorption and Magnetic Circular Dichroism Spectra of Metal Complexes, P. Day, P.N. Quested and D.J. Robbins, Proc. XV Int. Conf. on Coord. Chem., Moscow, 147 (1973)
- (64) Magnetic Circular Dichroism of the Tetraiodonickelate(II) Ion, J.C. Collingwood, P. Day and R.G. Denning, J. Chem. Soc., Faraday Trans. (II), 69, 591-607 (1973)
- (65) Polarisation, Temperature Dependence and Absorption Mechanism of the Electronic Transitions in Some Linear Antiferromagnets, P. Day and L. Dubicki, J. Chem. Soc., Faraday Trans. (II), 69, 363-376 (1973)
- (66) Electronic Spectra, P. Day and N Sanders, ch. in "Electronic Structure and Magnetism of Inorganic Compounds", Chem. Soc. Specialist Periodical Report, Vol. 2 (1973)
- (67) Optical Properties of Ferromagnetic K_2CrCl_4 , P. Day, A.K. Gregson and D.H. Leech, Phys. Rev. Letts. 30, 19-22 (1973)
- (68) Crystal Lattice Effects on the Electronic Spectrum of the Manganate Ion, P. Day, L. Di Sipio, C. Ingletto and L. Oleari, J. Chem. Soc., Dalton Trans. 2595-2605 (1973)
- (69) Magnetic Field Effects on the Optical Spectrum of $FeCl_2$, D.J. Robbins and P. Day, Chem. Phys. Letts. 19, 529-531 (1973)
- (70) Magnetic Circular Dichroism Spectrum of OsO_4 , P.N. Quested, D.J. Robbins, P. Day and R.G. Denning, Chem. Phys. Letts. 22, 158-160 (1973)
- (71) Charge Transfer in Mixed Valence Solids, Part VII. Perturbation Calculations of Valence Delocalization in Fe (II, III) Cyanides and Silicates, B. Mayoh and P. Day, J. Chem. Soc., Dalton Trans. 846-852 (1973)
- (72) Electronic Spectroscopy, P. Day, ch. in "Electronic Structure and Magnetism of Inorganic Compounds", Chem. Soc. Specialist Periodical Report, Vol. 3 (1974)
- (73) Valence Delocalization Coefficients for $[(NH_3)_5Ru^{II}(pyr)Ru^{III}(NH_3)_5]^{5+}$, B. Mayoh and P. Day, Inorg. Chem. 13, 2273-2274 (1974)
- (74) Isotope Splitting of Vibronic Sidebands in the Electronic Spectra of Transition Metal Chloro-complexes, R.J. Tacon, P. Day and R.G. Denning, J. Chem. Phys. 61, 751-752 (1974)
- (75) High Resolution Absorption and Magnetic Circular Dichroism of Spin-Forbidden Ligand Field Transitions in Cs_3CoBr_5 , P.N. Quested, J. Tacon, P. Day and R.G. Denning, Mol. Phys. 22, 1553-1583 (1974)
- (76) Neutron Diffraction Study of the Crystal and Magnetic Structure of the Ionic Ferromagnet Cs_2CrCl_4 , M.T. Hutchings, A.K. Gregson, P. Day, D.H. Leech, Solid State Comm. 15, 313-316 (1974)
- (77) Charge-transfer Spectra of Post-transition-metal Halide Complexes, P. Day, P.J. Diggle and G.A. Griffiths, J. Chem. Soc., Dalton Trans., 1446-1452 (1974)

- (78) Charge Transfer Spectra of Mono-substituted Oxo-ions: Low-temperature Polarised Absorption Spectra and Magnetic Circular Dichroism, D.B. Jeans, J.D. Penfield and P. Day, J. Chem. Soc., Dalton Trans. 1777-1783 (1974)
- (79) Local and Collective States in Single and Mixed Valency Chain Compounds, P. Day, ch. in "Extended Interactions between Metal Ions", P. Day, Amer. Chem. Soc. Symp. Ser., No. 5, 234-253 (1974)
- (80) Magneto-Optical Study of Ferromagnetically Coupled Cobalt (II) Pairs in Cadmium Bromide, A. Bailey, D.J. Robbins and P. Day, Mol. Phys. 28, 1519-1536 (1974)
- (81) Magneto-Optical Studies of Exchange Coupled Ion Pairs in Cadmium Halide Layer Lattices, A Bailey, P Day, D J Robbins and B Wild, Chem. Soc. Meeting, Norwich, paper B14 (1973)
- (82) Magneto-Optical Properties of the Transparent Ferromagnet Rb₂CrCl₄, A.K. Gregson, M.J. Fair and P. Day, Chem. Soc. Meeting, Norwich, paper B15 (1973)
- (83) Optical Properties and Magnetic Ordering in Transition Metal Dihalides, L. Adams, A. Bailey, D.J. Robbins and P. Day, Chem. Soc. Meeting, Norwich, paper B20 (1973)
- (84) A 'Simultaneous' Circular Dichroism and Absorption Spectrometer, J.C. Collingwood, P. Day, R.G. Denning, P.N. Quested, T.N. Snellgrove, J. Phys.: Sci. Instr. E7, 991-996 (1974)
- (85) Magnetic Susceptibility and Magnetization of the Ionic Ferromagnets Dipotassium, Dirubidium, and Dicaesium Tetrachlorochromate(II), A.K. Gregson, P. Day, D.H. Leech and M.J. Fair, J. Chem. Soc., Dalton Trans. 1306-1311 (1975)
- (86) Electronic Spectra, P. Day and E.R. Krausz, ch. in "Electronic Structure and Magnetism of Inorganic Compounds", Chem. Soc. Specialist Periodical Report, Vol. 4, 1 (1975)
- (87) Mixed Valence Chemistry and Metal Chain Compounds, P. Day, ch. in "Low Dimensional Cooperative Phenomena", ed. by H.J. Keller, Plenum Publishing Corp., New York, 191-214 (1975)
- (88) Excitons in One-Dimensional Tetracyanoplatinite Salts, P. Day, J. Amer. Chem. Soc. 97, 1588-1589 (1975)
- (89) Magnetic Circular Dichroism Study of the Jahn-Teller Effect in the $^1\text{A}_1 \rightarrow ^1\text{T}_2$ Charge-transfer Band of MnO₄⁻ in KIO₄, P.A. Cox, D.J. Robbins and P. Day, Mol. Phys. 30, 405-411 (1975)
- (90) Electronic States of Inorganic Compounds: New Experimental Techniques, Proceedings of NATO Adv. Study Inst., Oxford, P. Day (ed.), D. Reidel Publishing Co., Dordrecht, Holland (1975)
- (91) "Meeting Point", P. Day, Chem. in Brit., Vol. 11, No. 4, 145 (1975)
- (92) Temperature Variation of Exciton-Magnon Absorption Bands in Metamagnetic Transition-metal Dihalides, D.J. Robbins and P. Day, J. Phys. C. Sol. St. Phys. 9, 867-882 (1976)

- (93) Temperature Variation of the ^{121}Sb Mössbauer Spectrum of the Mixed Valence Compound Cs_2SbCl_6 , G. Longworth and P. Day, Inorg. Nucl. Chem. Lett. 12, 451-453 (1976)
- (94) Spectroscopic and Magnetic Studies of a Mixed-Valence Iron Fluoride $\text{Fe}_2\text{F}_5 \cdot 7\text{H}_2\text{O}$, E.G. Walton, P.J. Corvan, D.B. Brown and P. Day, Inorg. Chem. 15, 1737-1739 (1976)
- (95) Electronic Spectrum of the Manganate(V) Ion, R. Borromei, L. Oleari and P. Day, J. Chem. Soc., Faraday Trans. (II), 73, 135-146 (1977)
- (96) Optical and Neutron Diffraction Study of the Magnetic Phase Diagram of NiBr_2 , P. Day, A. Dinsdale, E.R. Krausz and D.J. Robbins, J. Phys. C. Sol. St. Phys. 9, 2481-2490 (1976)
- (97) Neutron Scattering Measurement of Spin-wave Dispersion in Rb_2CrCl_4 : A Two-Dimensional Easy-Plane Ferromagnet, M.T. Hutchings, M.J. Fair, P. Day and R.J. Walker, J. Phys. C. Sol. St. Phys. 9, L55-60 (1976)
- (98) Magneto-Optical Investigation of the Linear-Chain Ferromagnets AFeCl_3 ($\text{A} = \text{K}, \text{Rb}, \text{Cs}$), E.R. Krausz, S.M. Viney and P. Day, J. Phys. C. Sol. St. Phys. 10, 2685-2699 (1977)
- (99) Temperature Dependent Intensity in the Optical Absorption Spectrum of Ferromagnetic K_2CrCl_4 , A.K. Gregson, P. Day, A. Okiji and R.J. Elliott, J. Phys. C. Sol. St. Phys. 9, 4497-4502 (1976)
- (100) Neutron Scattering Study of CsCrCl_3 : An Approximation to a One Dimensional Antiferromagnet with Single Ion Anisotropy, M.T. Hutchings, A.K. Gregson, D.H. Leech, P. Day and B.D. Rainford, Institute of Physics, Solid State Physics Conference, Manchester, 1974
- (101) Charge Transfer in Mixed-valence Solids. Part VIII. Contribution of Valence Delocalisation to the Ferromagnetism of Prussian Blue, B. Mayoh and P. Day, J. Chem. Soc., Dalton Trans. 1483-1486 (1976)
- (102) Electronic Spectra, P. Day, ch. in "Electronic Structure and Magnetism of Inorganic Compounds", Chem. Soc. Specialist Periodical Report, Vol. 5, 1 (1977)
- (103) Optical and Neutron Spectroscopy of Magnetic Insulators, P. Day, Proc. Chemistry Information Meeting, Institut Laue-Langevin, Grenoble, ed. J.S. Higgins, 12 (1976)
- (104) Optical Properties of Ferromagnetic Compounds, P. Day, Colloques Internationaux du CNRS, 255, 237-242 (1977)
- (105) Neutron Scattering Study of the Magnetism of Rb_2CrCl_4 : A Two-Dimensional Easy-Plane Ferromagnet, M.J. Fair, A.K. Gregson, P. Day and M.T. Hutchings, Physica B, 86-88, 657-659 (1977)
- (106) Neutron Scattering Study of the Magnetism of Rb_2CrCl_4 , A Two Dimensional Easy Plane Ferromagnet, M.J. Fair, A.K. Gregson, P. Day and M.T. Hutchings, Amer. Inst. Phys. Conf. Proc. 29, 263 (1976)

- (107) Bis(monoalkylammonium)tetrachlorochromates(II): A New Series of Two-Dimensional Ionic Ferromagnets, C. Bellitto and P. Day, J. Chem. Soc., Chem. Comm. 870-871 (1976)
- (108) Collective States in Single and Mixed Valence Metal Chain Compounds, P. Day, ch. in "Physics and Chemistry of One-Dimensional Metals", ed. H.J. Keller, New York, Plenum Publishing Corp., 197-223 (1977)
- (109) Inter-electron Repulsion Integrals for the Three-Open-Shell Configurations $t_1^5 t_2^x e^y$ and $t_2^5 t_2^x e^y$ ($x+y = 1-9$), C. Daul and P. Day, Mol. Phys. 33, 1421-1428 (1977)
- (110) Molecular Orbital Description of the Ligand-Field Spectra of some Tetrahalogeno-anions, C. Daul and P. Day, Mol. Phys. 34, 1701-1716 (1977)
- (111) Magneto-Optical Study of the Magnetic Phase Diagram of the Dilute Metamagnet $Fe_pMg_{1-p}Cl_2$, T.E. Wood and P. Day, J. Phys. C. 10, L333-335 (1977)
- (112) Inter-electron Repulsion Integrals for Three-open-shell Configurations in Cubic Symmetry, B.D. Bird, C. Daul and P. Day, Computer Phys. Comm. 14, 273-285 (1978)
- (113) Electronic Spectra of $CoBr_2$: $CdBr_2$ Mixed Crystals, A. Bailey and P. Day, Nouveau Journal de Chimie 1, 383-387 (1977)
- (114) Why is Silver Chromate Red? The 4.2K Polarised Electronic Spectrum of Chromate in Silver Sulphate, D.J. Robbins and P. Day, Mol. Phys. 34, 893-898 (1977)
- (115) Magneto-optical Study of Ferromagnetically Coupled Iron(II) Pairs in Cadmium Chloride, J.B. Wild and P. Day, J. Phys. C. 10, 4079-4088 (1977)
- (116) Chemical Classification of Structures and Properties of Low-dimensional Inorganic Compounds, P. Day, Ann. N.Y. Acad. Sci. 313, 9-24 (1978)
- (117) Charge Transfer Spectra of Transition Metal Ions in Cadmium Halide Lattices, A.G. Coutts and P. Day, Phys. Stat. Sol. (b) 88, 767-772 (1978)
- (118) Optical Study of the Magnetic Phase Diagram of the Metamagnetic Ferrous Bromide, T.E. Wood, A. Muirhead and P. Day, J. Phys. C. 11, 1619-1633 (1978)
- (119) Magnetic Susceptibility and Optical Spectra of the Organic -intercalated Two-dimensional Ionic Ferromagnets Bis(monomethylammonium)- and Bis(monoethylammonium)-tetrachlorochromate, C. Bellitto and P. Day, J. Chem. Soc., Dalton Trans. 1207-1212 (1978)
- (120) Neutron Diffraction of Mixed-Valence $CsAuCl_3$ at High Pressure, P. Day, C. Vettier and G. Parisot, Inorg. Chem. 17, 2319-2320 (1978)
- (121) Temperature Dependence of Spin Waves in Rb_2CrCl_4 : A two-dimensional Easy-plane Ferromagnet, M.J. Fair, M.T. Hutchings and P. Day, J. Phys. C. 11, L813-817 (1978)
- (122) Correlation of Magnetic and Optical Properties in the Organic-intercalated Two-dimensional Ionic Ferromagnet Bis(monomethylammonium) tetrachlorochromate (II), C. Bellitto and P. Day, J. Chem. Soc., Chem. Commun. 511-512 (1978)

- (123) The Excited States of Bipyridyl and Phenanthroline Complexes of Fe(III), Ru(II) and Ru(III): A Molecular Orbital Study, B. Mayoh and P. Day, *Theoret. Chim. Acta* **49**, 259-275 (1978)
- (124) Charge Transfer in Mixed-valence Solids, Part 9. Preparation, Characterization and Optical Spectroscopy of the Mixed-valence Mineral Voltaite [Aluminium Pentairon(II) Tri-iron(III) Dipotassium Dodecasulphate 18-Hydrate] and its Solid Solutions with Cadmium(II), D. Beveridge and P. Day, *J. Chem. Soc., Dalton Trans.* 648-653 (1979)
- (125) Optical Properties of Metamagnets, P. Day, E.R. Krausz and S.M. Viney, *J. Opt. Soc. Amer.* **65**, 1168 (1975)
- (126) Valence Delocalization in Mixed Valence Oligomers and Solids, P. Day, *Proc. 170th Amer. Chem. Soc. Meeting*, 49 (1975)
- (127) Electronic Spectrum of Chromate(V) ion in $\text{Sr}_5(\text{PO}_4)_3\text{Cl}$ Host Lattice, P. Day, R. Borromei and L. Oleari, *J. Chem. Soc., Faraday Trans. II*, **75**, 401-413 (1979)
- (128) A Mössbauer-Effect Study of the Electronic and Magnetic Properties of Voltaite, a Mixed Valence Mineral, G.L. Long, D. Beveridge and P. Day, *Inorg. Chem.* **19**, 821-829 (1980)
- (129) New Transparent Ferromagnets, P. Day, *Acc. Chem. Research* **12**, 236-243 (1979)
- (130) Valence Delocalization in Prussian Blue, $\text{Fe}_4^{\text{III}}[\text{Fe}^{\text{II}}(\text{CN})_6]_3 \cdot x\text{D}_2\text{O}$, by Polarized Neutron Diffraction, F. Herren, A. Ludi, H.U. Güdel, D. Givord and P. Day, *Helv. Chim. Acta* **63**, 148-153 (1980)
- (131) Temperature-Dependent Optical Spectra of Manganese Acetate: Intratrimer Exchange, T.E. Wood, G. Kokoszka and P. Day, *Inorg. Chem.* **18**, 2936-2939 (1979)
- (132) New Highly Conducting Coordination Compounds, D.B. Brown, K. Carneiro, P. Day, B. Hoffman, H.J. Keller, W.A. Little, A.E. Underhill and J.M. Williams, in *Molecular Metals*, ed. W.E. Hatfield, New York, Plenum Press, 527 (1979)
- (133) Optical Estimation of the Zone-Centre Magnon Gap in Rb_2CrCl_4 : a Two-dimensional Easy-plane Ionic Ferromagnet, P. Day, E. Janke, T.E. Wood and D. Woodwark, *J. Phys. C* **12**, L329-334 (1979)
- (134) Polarized Low-Temperature Crystal Spectra of Inorganic Complexes, P. Day, *Angew. Chemie, Int. Ed. Engl.* **19**, 290-301 (1980)
- (135) Novel Applications of Chiral Polymer and Liquid Crystalline Polymer Hosts for the Characterization of Intramolecular Charge-Transfer and Exciton Bands in $\text{Cs}_2\text{Pt}(\text{CN})_4$ by Circular Dichroism Spectropolarimetry, F.D. Saeva, G.R. Olin, R.J. Ziolo and P. Day, *J. Amer. Chem. Soc.* **101**, 5419-5421 (1979)
- (136) High Resolution Linearly Polarised Absorption Spectra and Zeeman Splitting of Spin-forbidden Ligand Field Transitions in Cs_3CoBr_5 , R.J. Tacon, P. Day and R.G. Denning, *Mol. Phys.*, to be submitted
- (137) Les Composés à Valence Mixte, P. Day, *La Recherche*, **12**, 304-311 (1981)

- (138) Co-operative Jahn-Teller Ordering in the Crystal Structure of Rb_2CrCl_4 : a Two-Dimensional Easy-plane Ionic Ferromagnet, P. Day, M.T. Hutchings, E. Janke and P.J. Walker, *J. Chem. Soc., Chem. Commun.* 711-713 (1979)
- (139) Solid-State Structure and Electronic Properties of a Mixed Valence Two-Dimensional Metal, KCu_4S_3 , D.B. Brown, J.A. Zubrieta, P.A. Valla, J.T. Wroblecki, T.W. Watt, W.E. Hatfield and P. Day, *Inorg. Chem.* 19, 1945-1950 (1980)
- (140) Intermolecular Interactions and Electronic Spectra of Metal Complexes in Crystals, P. Day, *J. Mol. Structure* 59, 109-121 (1980)
- (141) The Magnetic Properties of CsCrCl_3 , an Antiferromagnetic Chain Compound with Single-Ion Anisotropy, P. Day, A.K. Gregson, D.H. Leech, M.T. Hutchings and B.D. Rainford, *J. Magn. Magnetic Mat.* 14, 166-168 (1979)
- (142) Introduction to Mixed-Valence Chemistry, P. Day, ch. in "Mixed Valency Compounds in Chemistry, Physics and Biology", ed. D.B. Brown, Dordrecht, D. Reidel, 3-24 (1980)
- (143) Survey of Metal Chain Compounds, ch. in "Physics and Chemistry of Low-dimensional Solids", ed. L. Alcacer, New York, Plenum, 305-320 (1980)
- (144) Magnetic Phase Diagrams of Mixed Metamagnetic Dihalides by Magnetically Induced Light Scattering, T.E. Wood and P. Day, *J. Magn. and Magn. Mat.* 15-18, 782-784 (1980)
- (145) Incommensurate Spin Structure in the Low-Temperature Magnetic Phase of NiBr_2 , P. Day and K.R.A. Ziebeck, *J. Phys. C* 13, L523-525 (1980)
- (146) Mixed Valency in Chemistry, Physics and Biology, P. Day, *Chem. in Brit.* 16, 217 (1980)
- (147) Room Temperature Faraday Rotation of FeBr_2 in a Pulsed Field, P. Day and I. Trabjerg, *J. Phys. D (Applied Physics)* 13, L43-46 (1980)
- (148) Optical and Neutron Diffraction Experiments on the Incommensurate Spin Structure of NiBr_2 , P. Day and K.R.A. Ziebeck, Inst. of Physics, 17th Annual Solid State Phys. Conf., Warwick, paper B7.1 (1980)
- (149) Optical Spectroscopy of Mixed Matamagnetic $\text{Fe}_x\text{Co}_{1-x}\text{Cl}_2$ Crystals, F. Seitz, T.E. Wood and P. Day, *Z. Naturforsch.* 35a, 1013-1019 (1980)
- (150) Non-stoichiometry in Metal Chain Compounds, P. Day, ch. in 'Extended Linear Chain Compounds', ed. J.S. Miller, New York, Plenum Press (1980)
- (151) The Cooperative Jahn-Teller Distortion and its Relationship to the Ferromagnetic Exchange in Rb_2CrCl_4 , E. Janke, P. Day, M.T. Hutchings and P.J. Walker, Inst. of Phys., 17th Annual Solid State Physics Conf., Warwick, paper B7.2 (1980)
- (152) Spin-wave Renormalisation and Damping below and above T_c in the Pseudo-two-dimensional Ferromagnet Rb_2CrCl_4 , E. Janke, P. Day, M.J. Fair, M.T. Hutchings and P.J. Walker, Inst. of Phys. 17th Annual Solid State Physics Conf., Warwick, paper B7.5 (1980)

- (153) Electronic Structure and Magnetism of Inorganic Compounds, P. Day (Senior Reporter), Specialist Periodical Report, Chemical Society, (1980)
- (154) Review of Cartmell and Fowles, 'Valency and Molecular Structure', Chem. in Brit. 14, 302 (1978)
- (155) Review of Miller and Epstein, 'Synthesis and Properties of Low-dimensional Compounds', Endeavour 4, 127 (1980)
- (156) The Intermolecular Potential in Tetracyanoplatinite Salts and Other Ionic Molecular Crystals, P.A. Cox, P. Day and C.J. Ballhausen, Chem. Phys. Lett. 82, 15-17 (1981)
- (157) Interactions between Metal Complexes in Crystals Give Unusual Optical Properties, P. Day, Chem. in Australia, 48, 64-67 (1981)
- (158) Review of Eschenfelder, 'Magnetic Bubble Technology', J. Chem. Soc., Faraday Trans. II (1980)
- (159) Dimensionality in Structures and Properties of Inorganic Solids, J. Educ. Modules in Materials Sci., Eng. 3, 594-623 (1982)
- (160) Optical Absorption Intensity and Short-range Spin Correlation in the Ionic Ferromagnets A_2CrCl_4 ($A = Rb, CH_3NH_3, CH_3CH_2NH_3$), C. Bellitto, M.J. Fair, T.E. Wood and P. Day, J. Phys. C 13, L627-630 (1980)
- (161) Polarised Absorption, Emission and Reflectivity of the One-dimensional Compound $BaPt(CN)_4H_2O$, P. Day and J. Ferguson, J. Chem. Soc., Faraday Trans. II, 77, 1579-1588 (1981)
- (162) Collective Excitations in the 1-D Ferromagnet $CsFeCl_3$ with Singlet Ground State, M. Steiner, K. Kakurai, W. Knop, B. Dorner, R. Pynn, U. Happek, P. Day and G. McLean, Solid State Commun. 38, 1179-1184 (1981)
- (163) University Glory Could Lie in 'Useless' Research, P. Day, Oxford Times, 27 June 1980
- (164) Dynamic Jahn-Teller Effect in a Ligand-Field Excited State of MnO_4^{3-} in $Sr_5(PO_4)_3Cl$, P. Day, R. Borromei and L. Oleari, Chem. Phys. Lett. 77, 214-216 (1981)
- (165) Electronic Spectrum of the Manganate(V) Ion in Different Host Lattices, R. Borromei, L. Oleari and P. Day, J. Chem. Soc., Faraday Trans. II, 77, 1563-1578 (1981)
- (166) Low Temperature Polarised Crystal Spectra of Metal Complexes, P. Day, Theory of Structure and Properties of Complex Compounds; Invited Papers of 9th Int. Summer School on Coord. Chem., 1975 (publ. 1979), ed. J.B. Tzrebiatowska, J. Legeniewicz and M.F. Rudolf, Warsaw, Panst. Wydawn. Nauk.
- (167) Neutron Diffraction Study of the Incommensurate Magnetic Phase of $Ni_{0.92}Zn_{0.08}Br_2$, P. Day, M.W. Moore, C. Wilkinson and K. Ziebeck, J. Phys. C 14, 3423-3432 (1981)

- (168) Review of C.J. Ballhausen 'Molecular Electronic Structure of Transition Metal Complexes', Int. Rev. Phys. Chem. 1, 93 (1981)
- (169) Optical and Magneto-optical Study of the Magnetic Phase Diagram and Incommensurate Magnetic Phase of NiBr_2 and $\text{Ni}_{1-x}\text{Zn}_x\text{Br}_2$, M.W. Moore, T.E. Wood and P. Day, J. Chem. Soc., Faraday Trans. II 77, 1611-1619 (1981)
- (170) Electrical Properties of $\text{Na}_3\text{Cu}_4\text{S}_4$, a Mixed-Valence One-Dimensional Metal, Z. Peplinski, D.B. Brown, T.Watt, W.E. Hatfield and P. Day, Inorg. Chem. 21, 1752-1755 (1982)
- (171) Pressure Dependence of the Incommensurate Magnetic Phase of NiBr_2 and $\text{Ni}_{0.92}\text{Zn}_{0.08}\text{Br}_2$, P. Day and C. Vettier, J. Phys. C 14, L195-197 (1981)
- (172) Optical and Neutron Diffraction Study of the Magnetic Phase Diagrams of the Mixed Metamagnets $\text{Fe}_{1-p}\text{Mn}_p\text{Cl}_2$, S.K. Haywood, T.E. Wood and P. Day, J. Phys. C 14, 2697-2704 (1981)
- (173) Enhancement of Ferromagnetism in Rb_2CrCl_4 by an Applied Magetic Field, M.T. Hutchings, P. Day, P.J. Fyne, E. Janke and R. Pynn, paper E4.3, Inst. of Phys., 18th Annual Solid State Phys. Conf., York, 1981
- (174) Optical Absorption Studies of the 2-D Ionic Ferromagnet $(\text{CH}_3\text{NH}_3)_2\text{CrCl}_4$, C. Bellitto, T.E. Wood and P. Day, paper E6.3, Inst. of Phys., 18th Annual Solid State Phys. Conf., York, 1981
- (175) Linear Birefringence and Spin Correlations in Rb_2CrCl_4 , W. Kleeman, F.J. Schlafer and P. Day, J. Phys. C 15 3987-3997 (1982)
- (176) Mixed Valency Chemistry: a Survey of 10 Years Progress, P. Day, Int. Rev. Phys. Chem. 1, 149-193 (1981)
- (177) Theory and Experiments on Valence Delocalization in Mixed-Valence Compounds, P. Day, Comments on Inorg. Chem. 1, 155-167 (1981)
- (178) Electronic Spectrum of Ni^{II} in MgWO_4 , ZnWO_4 and CdWO_4 at 4.2K, R. Borromei, G. Ingletto, L. Oleari and P. Day, J. Chem. Soc., Faraday Trans. II, 77, 2249-2266 (1981)
- (179) Solid State Photo-Polymerization of Unsaturated Organic Cations in Layer Perovskite Halide Salts, R.C. Ledsham and P. Day, J. Chem. Soc., Chem. Commun. 921 (1981)
- (180) Neutron Diffraction Study of the Crystal and Magnetic Structure of Rb_2CrCl_4 : a Two-Dimensional Ionic Ferromagnet, E. Janke, M.T. Hutchings, P. Day and P.J. Walker, J. Phys. C (Sol. State Phys.), 16, 5959-5968 (1983)
- (181) Magnetic Field Effect on the Ordering of Rb_2CrCl_4 : a Two-Dimensional Easy-Plane Ionic Ferromagnet, M.T. Hutchings, P. Day, P.J. Fyne, E. Janke and R. Pynn, J. Phys. C (Sol. State Phys.), to be submitted (draft manuscript available)
- (182) Inelastic Neutron Scattering Study of the Spin-Wave Dispersion in Rb_2CrCl_4 , a Two-Dimensional Easy-Plane Ferromagnet, and the Variation of the Spin-waves with

Temperature, E. Janke, M.T. Hutchings, P. Day and R. Pynn, J. Phys. C (Sol. State Phys.), to be submitted (draft manuscript available)

- (183) Organic-Inorganic Molecular Composites as Possible Low-Dimensional Conductors: Photo-Polymerization of Organic Moeities Intercalated in Inorganic Layer Compounds, P. Day and R.D. Ledsham, Mol. Cryst. and Liq. Cryst. 86, 163-174 (1982)
- (184) Neutron Scattering Study of Static and Dynamic Spin Correlations in Rb_2CrCl_4 , a Two-Dimensional Easy-Plane Ferromagnet, near the Curie Temperature, M.T. Hutchings, E. Janke, P. Day, R. Pynn and P.J. Walker, J. Phys. C (Sol. State Phys.) to be submitted (draft manuscript available)
- (185) Optical and Magneto-Optical Study of the Transparent Ionic Ferro-Magnet Rb_2CrCl_4 , E. Janke, T.E. Wood, C. Ironside and P. Day, J. Phys. C (Sol. State Phys.) 15, 3809-3820 (1982)
- (186) Optical Absorption Studies of the 2-D Ionic Ferromagnets $(\text{RNH}_3)_2\text{CrCl}_4$ ($\text{R} = \text{CH}_3, \text{C}_2\text{H}_5$), C. Bellitto, T.E. Wood and P. Day, Swiss-Italian Inorg. Chem. Conf., Assoc. Ital. Chim. Inorg., paper 26 (1981)
- (187) Preparation, Characterization and Magnetic Properties of Organic-Intercalated Two-Dimensional Ionic Ferromagnets $(\text{C}_n\text{H}_{2n+1}\text{NH}_3)_2\text{CrCl}_4$ ($n = 3, 5, 12$), M.J. Stead and P. Day, J. Chem. Soc., Dalton Trans., 1081-1084 (1982)
- (188) Crystal Growth of Bis(benzylammonium) Tetrachlorochromate (II), a New Two-Dimensional Ionic Ferromagnet, C. Bellitto and P. Day, J. Cryst. Growth, 58, 641 (1982)
- (189) Temperature Dependence of Dark and Photoconductivity in Single Crystals of Metal-Free, Iron and Copper Phthalocyanines from 300-85K, J. Langton and P. Day, J. Chem. Soc., Faraday Trans. II, 78, 1633-1640 (1982)
- (190) Effect of Adsorbed Gases on the Dark and Photoconductivity of Fe^{II} Phthalocyanine Crystals, J. Langton and P. Day, J. Chem. Soc., Faraday Trans. II, 78, 1675-1685 (1982)
- (191) Heat Capacity of the Two-dimensional Ferromagnet Bis(Monomethylammonium) Tetrachlorochromate (II) from 10 to 302K, A. Rahman, L.A.K. Staveley, C. Bellitto and P. Day, J. Chem. Soc., Faraday Trans. II 78, 1895-1903 (1982)
- (192) New Physical Methods in Inorganic Chemistry, P. Day, NATO Sci. Publ. Newsletter 7, 6 (1982)
- (193) Mixed Valency Compounds, P. Day, Sci. Prog., Oxf. 68, 83-96 (1982)
- (194) Neutron Diffraction and Magneto-Optical Study of the Effect of Chloride Doping on the Incommensurate Magnetic Phase of NiBr_2 , K. Turner, D. Visser, T.E. Wood and P. Day, Phys. St. Sol. (b) 113, 623-634 (1982)
- (195) Electronic Spectrum of Cobalt(II) in ZnWO_4 and MgWO_4 at 4.2K, R. Borromei, G. Ingletto, L. Oleari and P. Day, J. Chem. Soc., Faraday Trans. II 78, 1705-1720 (1982)

- (196) Temperature Dependence of Emission Spectra and Excited-state Lifetimes in Nickel-Doped One-Dimensional BaPt(CN)₄.4H₂O, S. Clark, D. Huddart, C. Ironside and P. Day, J. Chem. Soc., Faraday Trans. II 79, 65-76 (1983)
- (197) Impurity-induced Absorption Bands in the Ionic Ferromagnet Rb₂CrCl₄ Doped with Mn²⁺, T.E. Wood, P.A. Cox, P. Day and P.J. Walker, J.Phys. C: Sol. State Phys. 15, L787-790 (1982)
- (198) Neutron Scattering Study of the Magnetic Excitations in the Pseudo 1-D Singlet Ground State Ferromagnet TiFeCl₃, D. Visser, R. Pynn, D.McK. Paul, D.R.A.Zeibek, W. Knop and P. Day, J.Magn. Magn. Mat. (1983)
- (199) Dynamic Critical Behaviour of Rb₂CrCl₄, a Nearly Two-Dimensional Easy-Plane Ferromagnet, P. Day, M.T. Hutchings, E. Janke and R. Phynn, The Neutron and its Applications, Cambridge Conference (1982)
- (200) Low-Dimensional Solids, P. Day, Chem. in Brit. 19, 306-314 (1983)
- (201) Magnetic Structure and Moment Distribution in the Ionic Ferromagnet Rb₂CrCl₄ by Unpolarised and Polarised Neutron Diffraction, P. Day, P.J. Fyne, M.T. Hutchings, E. Janke, G. Münnighof, F. Tasset and P.J. Walker, The Neutron and its Applications, Cambridge Conference 1982
- (202) Synthesis, Characterization and Magnetic Properites of Bis(benzyl-ammonium)tetrachlorochromate (II): a New Two-Dimensional Ionic Ferromagnet, C. Bellitto, P. Day and T.E. Wood, Proc. XV Ital. Congr. Inorg. Chem. 313 (1982)
- (203) Polarised Neutron Diffraction and Spin Density in Cs₂KFe(CN)₆, a Low Spin 3d⁵ Compound, P.J. Brown, P. Day, P. Fischer, H.U. Güdel, F. Herren and A. Ludi, J. Physique 43, C7-235-240 (1982)
- (204) Magnetic Moment Distribution in the Ionic Ferromagnet Rb₂CrCl₄, G. Münnighof, E. Hellner, P.J. Fyne, P. Day, M.T. Hutchings and F. Tasset, Prof. Int. Conf. on Polarised Neutron Scattering, J. Physique 43, C7-243-247 (1982)
- (205) Chain Compounds and One-Dimensional Properties, ch. in 'Solid State Inorganic Chemistry', ed. A.K. Cheetham and P. Day, Oxford University Press, pp. 31-59 (1991)
- (206) Magnetic Field-Induced Incommensurable Magnetic Phases in the Singlet-Ground State System CsFeCl₃, W. Knop, M. Steiner and P. Day, J. Magn. Magn. Mat., 31-34, 1033-1034 (1983)
- (207) Anion Ordering in Mixed-Valence Cs₂SbCl₆ and Related Salts, K. Prassides, A.K. Cheetham and P. Day, J. Amer. Chem. Soc., 105, 3366-3368 (1983)
- (208) Low Temperature Absorption Spectrum of the Ni(II) Ion in Single Crystals of the Columbite NiNb₂O₆, R. Borromei, G. Ingletto, L. Oleari and P. Day, J. Chem. Soc., Faraday Trans. II, 79, 847-863 (1983)

- (209) The Chemical Interest of Polarised Neutron Studies, P. Day, Invited Review Lecture to Int. Conf. on Pol. Neutrons, J. Physique 43, C7-341-350 (1982)
- (210) Organic-Inorganic Molecular Composites: Photopolymerization of Organic Moeities in Inorganic Layer Compounds, P. Day, ch. in Handbook of Conducting Polymers, ed. T. Skotheim, Marcel Dekker Inc., 1986, Vol. 1, pp 117-131
- (211) Temperature Variation of the Intervalence Absorption Band of Hexachloroantimonate(III,V) Ions in a Crystal Lattice, K. Prassides and P. Day, J. Chem. Soc., Faraday Trans. II 80, 85-95 (1984)
- (212) Temperature and Field Dependence of the Magnetization of Rb_2CrCl_4 , C. Cornelius, P.J. Fyne, P. Day, M.T. Hutchings and P.J. Walker, Phys. 20th Solid State Physics Conf. (1983)
- (213) Optically Detected Ferromagnetic Resonance in the Ionic Ferromagnet Rb_2CrCl_4 , P.J. Fyne, P. Day, M.T. Hutchings, S. Depinna, B.C. Cavenett and R. Pynn, J. Phys. C: Sol. State Phys. 17, L245-249 (1984)
- (214) Inelastic Neutron Scattering Study of Magnetic Excitations in the Helimagnetic and Antiferromagnetic Phases of NiBr_2 , P. Day, M.W. Moore, T.E. Wood, D. McK. Paul, K.R.A. Ziebeck, L.P. Regnault and J. Rossat-Mignod, Sol. State Commun., 51, 627-630 (1984)
- (215) The Absorption Spectrum of Manganate(VI) in BaSO_4 : A Reinterpretation, R. Borromei, L. Oleari and P. Day, Phys. Stat. Sol. (b) 124, 707-718 (1984)
- (216) Magnon Sideband Profiles and Structural Distortions in Organic-Intercalated Mn(II) Layer Perovskite Halide Salts, P. Day and G. Ingletto, J. Chem. Soc., Chem. Commun. 829-831 (1984)
- (217) Estimation of the Effective On-Site One-Center Coulomb Repulsion Energy U in Mixed-Valence Cs_2SbCl_6 , K. Prassides and P. Day, Inorg. Chem., 24, 1109-1110 (1985)
- (218) Low-Temperature Optical and Magneto-Optical Study of the Organic-Intercalated Two-Dimensional Ferromagnet $(\text{CH}_3\text{NH}_3)_2\text{CrCl}_4$, C. Bellitto, T.E. Wood and P. Day, Inorg. Chem. 24, 558-562 (1985)
- (219) Magnetic Ordering in the Mixed Ferromagnetic Singlet Ground State System $\text{Rb}_{1-x}\text{Cs}_x\text{FeCl}_3$, P. Day, A. Harrison, W. Knop, M. Steiner and D. Visser, Hahn-Meitner Inst. Rep. (1984)
- (220) Crystal Structures of Mixed-Valency and Mixed-Metal Salts $\text{A}_2\text{M}^{\text{III}}_{0.5}\text{Sb}^{5-}{}^{\text{V}}\text{X}_6$ ($\text{A}=\text{Rb}$, Cs ; $\text{M}=\text{Sb}$, Bi , In , Tl , Fe , Rh ; $\text{X}=\text{Cl}$, Br): A Powder Diffraction Study, K. Prassides, P. Day and A.K. Cheetham, Inorg. Chem., 24, 545-552 (1985)
- (221) Magnetic Ordering in the Random Singlet-magnetic Ground State System $\text{Rb}_{(1-x)}\text{Cs}_x\text{FeCl}_3$, A. Harrison, D. Visser, P. Day, W. Knop and M. Steiner, J. Phys. C: Sol. St. Phys., 19, 6811-6824 (1986)

- (222) Organic-Inorganic Layer Compounds: Physical Properties and Chemical Reactions, P. Day, Phil. Trans. Roy. Soc., A314, 145-158 (1985)
- (223) Magnetic Phase Diagrams and Helical Magnetic Phases in $M_xNi_{1-x}Br_2$ ($M=Fe, Mn$): a Neutron Diffraction and Magneto-optical Study, M.W. Moore and P. Day, J. Sol. St. Chem., 59, 23-41 (1985)
- (224) The Effect of Iodide Doping on the Incommensurate Helical Magnetic Structure of $NiBr_2$, M.W. Moore, P. Day, C. Wilkinson and K.R.A. Ziebeck, Sol. St. Commun., 53, 1009-1013 (1985)
- (225) Phonons in Mixed-Valency and Mixed-Metal Salts $A_2M_0.5Sb_0.5Cl_6$ ($A=Rb, Cs; M=Sb, Bi, Tl$): an Inelastic Neutron Scattering Study, K. Prassides and P. Day, Inorg. Chem., 24, 3035-3043 (1985)
- (226) Modelling of Magnetic Satellite Intensity in the Neutron Diffraction of an Incommensurate Helical Structure: $NiBr_2$ and $Ni_{0.91}Fe_{0.09}Br_2$, P. Day, M.W. Moore, C. Wilkinson and K.R.A. Ziebeck, J. Mag. Mag. Mat. 50, 1-6 (1985)
- (227) Mixed Valency in Inorganic Chemistry, P. Day in 'Physics and Chemistry of Electrons and Ions in Condensed Matter', ed. J.V. Acrivos, D. Reidel, Dordrecht 1984, p. 109 (abstract only)
- (228) Structural Domains and Phase Transitions in Organic-Intercalated Layer Perovskite Halide Salts $(RNH_3)_2MX_4$: Optical Micrography and Diffraction, N.W.J. Avery and P. Day, J. Cryst. Growth, 73, 268-274 (1985)
- (229) Temperature Dependence of Emission Lifetimes in the Site-Diluted Quasi-Two-Dimensional Antiferromagnets $(RNH_3)_2Mn_xCd_{1-x}Cl_4$ ($R=CH_3, C_2H_5$), P. Day, G. Ingletto, T. Low, J.O.R. Norris and B. Stewart, J. Chem. Soc., Faraday Trans. II, 81, 1201-1208 (1985)
- (230) Powder Neutron Diffraction Study of the Crystal and Magnetic Structures of Ferromagnetic Mixed Anion Salts $Rb_2CrCl_{4-x}X_x$, P.J. Fyne, P. Day and M.T. Hutchings, Mat. Res. Bull. 20, 197-201 (1985)
- (231) Analysis of the Intervalence Absorption Band Edge in the Mixed Valency Sb(III, V) Salt $Rb_{2.67}SbCl_6$; K. Prassides and P. Day, J. Chem. Soc., Faraday Trans. II, 81 1259-1268 (1985)
- (232) Temperature and Field Dependence of the Magnetisation of Rb_2CrCl_4 : a Two-Dimensional Easy-Plane Ionic Ferromagnet, C. Cornelius, P. Day, P.J. Fyne, M.T. Hutchings and P.J. Walker, J. Phys. C., 19, 909-917 (1986)
- (233) Polarized Neutron Diffraction Study of the Magnetization Density Distribution in Rb_2CrCl_4 : a Two-dimensional Ionic Ferromagnet, P. Day, P.J. Fyne, M.T. Hutchings, G. Munninghoff and F. Tasset, Proc. Roy. Soc. A, 406, 39-61 (1986)
- (234) Critical Spin Dynamics in Rb_2CrCl_4 : a Nearly Two-Dimensional Easy-Plane Ferromagnet, M.T. Hutchings, P. Day, E. Janke and R. Pynn, J. Mag. Mag. Mat. 54-57 673-674 (1986)

- (235) The Effect of Impurities on the Magnetic Structure of RbFeCl₃, A. Harrison, D. Visser, P. Day and K.R.A.Ziebeck, *J. Mag. Mag. Mat.* 54-57 1273-1274 (1986)
- (236) Correlation of Structures and Properties of Ferromagnetic Tetrachlorochromate (II) Salts, P. Day, *J. Mag. Mag. Mat.*, 54-57, 1442 (1986)
- (237) Magnetic Susceptibility and Optical Study of the Organic-Intercalated Two-Dimensional Ionic Ferromagnet Bis(benzylammonium)tetrachlorochromate (II), C. Bellitto, P. Day and T.E. Wood, *J. Chem. Soc., Dalton Trans.*, 847-851 (1986)
- (238) Neutron Scattering and Optical Study of the Magnetic Properties of the Two-Dimensional Ionic Ferromagnets Rb₂CrCl₃Br and Rb₂CrCl₂Br₂, S.T. Bramwell, P. Day, M.T. Hutchings, J.R.G. Thorne and D. Visser, *Inorg. Chem.*, 25, 417-421 (1986)
- (239) Modelling of Magnetic Satellite Intensity in the Neutron Diffraction of an Incommensurate Helical Structure: NiBr₂ and Ni_{0.9}Fe_{0.1}Br₂, P. Day, M.W. Moore, C. Wilkinson and K.R.A.Ziebeck, *Physica*, 136B, 461-464 (1986)
- (240) Cooperative Optical Phenomena at 0.3 Kelvin, J.R.G. Thorne, S.T. Bramwell, P. Day, R.G. Denning and A.C.T. James, *J. de Physique (Colloques)*, 46, C7-561-565 (1985)
- (241) Vibronic Coupling Model for Mixed-Valence Compounds. Extension to Two-Site Two-Electron Systems, K. Prassides, P.N. Schatz, K.Y. Wong and P. Day, *J. Phys. Chem.*, 90, 5588-5597 (1986)
- (242) Low-Dimensional Ferromagnetic Compounds: Recent Developments, P. Day, *Proc. Ind. Nat. Sci. Acad.*, 52A 117-134 (1986)
- (243) Ion-Exchange Reactions and Physical Properties of the Mica Analogue KNiAsO₄, A.M. Buckley, S.T. Bramwell, D. Visser and P. Day, *J. Sol. St. Chem.* 69, 240-251 (1987)
- (244) Jahn-Teller Effect in the ⁴T₁(G) State of MnCl₄²⁻ in Cs₃MnCl₅, P. Day, A.C.T. James and J.R.G. Thorne, ch. in 'Understanding Molecular Properties', *Festschrift for Prof. C.J. Ballhausen*, ed. J. Avery and J.P. Dahl, D. Reidel Publishing Co., 85-93 (1987)
- (245) Magnetic Properties of the Organic Superconductor β-(BEDT-TTF)₂AuI₂, D.R. Talham, M. Kurmoo, D.S. Obertelli, I.D. Parker and R.H. Friend, *J. Phys. C: Sol. St. Phys.*, 19, L383-388 (1986)
- (246) Properties of AuI₂⁻ and AuBr₂⁻ Salts of BEDT-TTF, I.D. Parker, S.D. Obertelli, R.H. Friend, D.R. Talham, M. Kurmoo, P. Day, J.A.K. Howard and A. Stringer, *Proc. Int. Conf. on Low Dimensional Conductors, Synth. Metals*, 19, 185 (1987)
- (247) High Resolution and Very Low Temperature Absorption and Emission Spectra of Tetrahalogenomanganate (II) Complexes in Crystals, P. Day, *Chimika Chronika, Special Issue*, pp. 54-57 (1986)

- (248) (BEDT-TTF)₂CuCl₂, a New Conducting Charge Transfer Salt, M. Kurmoo, D. Talham, P. Day, J.A.K. Howard, A. Stringer, I. Parker, A. Obertelli and R.H. Friend, *Synth. Metals*, 22, 415-418 (1988)
- (249) Structure and Physical Properties of the Organic Metal (BEDT)₂AuBr₂, D. Talham, M. Kurmoo, P. Day, A. Obertelli, I. Parker, R.H. Friend, A. Stringer and J.A.K. Howard, *Sol. St. Commun.* 61, 459 (1987)
- (250) Vibronic Coupling Model for Mixed Valency Compounds: Application to Wolfram's Red Salt, K. Prassides and P. Day, *Chimika Chronika*, Special Issue, p. 247 (1986)
- (251) Intermolecular Interactions and Physical Properties of Crystals Containing Coordination Complexes, P. Day, *Chimika Chronika*, Special Issue, p. 846 (1986)
- (252) Neutron Diffraction and Optical Studies of the Ionic Ferromagnet Rb₂CrCl₄ doped with Mg²⁺, V²⁺ and Fe²⁺, P.J. Fyne, M.T. Hutchings and P. Day, *Proc. Ind. Acad. Sci. (Chem. Sci.)* 98, 1-12 (1987)
- (253) Mixed-Valency Compounds with a Two Electron Difference in Oxidation State: Recent Theory and Experiment, P. Day and K. Prassides, *J. Chem. Res. (S)* 142 (1987)
- (254) Low Temperature Absorption, Magnetic Circular and Linear Dichroism and Emission Spectra of Halogenomanganate (II) Salts with Pseudo-Tetrahedral Coordination, A.C.W.P. James, J.R.G. Thorne, B. Briat, J.C. Rivoal and P. Day, *Inorg. Chem. in preparation* (draft available)
- (255) Spin Dynamics and Absorption-Band Profiles for the planar Two-Dimensional Easy-Plane Ionic Ferromagnet Rb₂CrCl₄, B. Briat, S. Bramwell, J.C. Cavit, P. Day and J.R.G. Thorne, *Proc. Roy. Soc. A.*, 415, 277-302 (1988)
- (256) Low Temperature Optical and Magneto-Optical Study of the Ligand Field Bands and Spin Dynamics in the Ionic Ferromagnet Rb₂CrCl₄, B. Briat, J.C. Cavit, P. Day, A. Vervoitte and T. E. Wood, *J. Phys. C: Sol. St. Phys.*, in preparation (draft available)
- (257) Crystal Structure and Physical Properties of a New Conducting Charge Transfer Salt: (BEDT-TTF)₃Cl₂.2H₂O, D. Chasseau, D. Watkin, M. Rosseinsky, M. Kurmoo and P. Day, *Proc. 5th Int. Conf. on Elec. and Related Props. of Org. Solids, Mat. Sci. Vol. XIV*, 15 (1988)
- (258) Temperature Dependence of the Crystal Structure of the Ceramic Superconductor La_{1.85}Sr_{0.15}CuO₄: a Powder Neutron Diffraction Study, P. Day, M. Rosseinsky, K. Prassides, W.I.F. David, O. Moze and A. Soper, *J. Phys. C: Solid State Phys.*, 20, L429-434 (1987)
- (259) Structure and Crystal Chemistry of the High-T_c Superconductor YBa₂Cu₃O_{7-x}, W.I.F. David, W.T.A. Harrison, J.M.F. Gunn, O. Moze, A.K. Soper, P. Day, J.D. Jorgensen, D.G. Hinks, M.A. Beno, L. Soderholm, D.W. Capone II, I.K. Schuller, C.U. Segre, K. Zhang and J.D. Grace, *Nature*, 327, 310-312 (1987)

- (260) Crystal Structure and Physical Properties of a New Conducting Charge-Transfer Salt: $(BEDT-TTF)_3Cl_2 \cdot 2H_2O$, D. Chasseau, D. Watkin, M. Rosseinsky, M. Kurmoo and P. Day, in 'Organic and Inorganic Low-Dimensional Crystalline Materials', ed. P. Delhaes and M. Drillon, Plenum Press, 1988, pp. 317-320
- (261) Ligand-Bridged Mixed-Valecy Metal Chain Complexes: Prototype N-Site N-Electron Systems with Electron-Phonon Coupling, P. Day, in 'Organic and Inorganic Low-Dimensional Crystalline Materials', ed P. Delhaes and M. Drillon, Plenum Press, 1988, pp. 33-46
- (262) Solid State Chemistry: Techniques, A.K. Cheetham and P. Day (eds.), Oxford, Clarendon Press, 1987
- (263) Structural Inorganic Chemistry of High Temperature Ceramic Superconductors, P. Day, International Journal of Modern Physics B, 1, 3 & 4, 745-753 (1987)
- (264) The Magnetization Density of Hexacyanoferrate (III) Ion Measured by Polarized Neutron Diffraction in $Cs_2KFe(CN)_6$, C.A. Daul, P. Day, B.N. Figgis, H.U. Gudel, F. Herren, A. Ludi and P.A. Reynolds, Proc. R. Soc. Lond., A419, 205-219 (1988)
- (265) Syntheses, Crystal Structures and Physical Properties of Conducting Salts $(BEDT-TTF)_2X$ ($X = CF_3SO_3$ or $CH_3C_6H_4SO_3$), D. Chasseau, D. Watkin, M.J. Rosseinsky, M. Kurmoo, D.R. Talham and P. Day, Synthetic Metals, 24, 117-125 (1988)
- (266) Timescales of Physical Measurements: Some Elementary Considerations, P. Day, in 'The Time Domain in Surface and Structural Dynamics', eds. G.J. Long and F. Grandjean, Kluwer Academic Publishers, 1988, pp. 1-6
- (267) Dynamics of Interionic Electron Transfer, P. Day, in 'The Time Domain in Surface and Structural Dynamics', Eds. G.J. Long and F. Grandjean, Kluwer Academic Publishers, 1988, pp. 261-269
- (268) Nickel Dibromide: A Magnetic Detective Story, P. Day, Accounts of Chemical Research, 21, 250-254 (1988)
- (269) Spectroscopic and Crystal Field Investigations on a Complex Neodymium (III) Azide, K. Gatterer, P. Day, H.P. Fritzer and G. Sperka, Journal of Molecular Structure, 174, 429-434 (1988)
- (270) A Novel Conducting Charge-Transfer Salt: $(BEDT-TTF)_3Cl_2 \cdot 2H_2O$, M. J. Rosseinsky, M. Kurmoo, D.R. Talham, P. Day, D. Chasseau and D. Watkin, J. Chem. Soc., Chem. Commun., 88-90 (1988)
- (271) Review of 'Magnetic Properties of Low-Dimensional Systems', ed. H.M. Falicov and J.L. Morán-López, P. Day, J. Chem. Soc., Faraday Trans. II, 84, 311 (1988)
- (272) Crystal Structure and Lattice Vibrations of the Ceramic Superconductor $La_{1.85}Sr_{0.15}CuO_4$: Neutron Scattering Studies, P. Day, ch. in 'High Temperature Superconductivity: Preparation, Properties, Processing', ed. W.E. Hatfield, New York, Marcel Dekker, 1988, pp. 211-233

- (273) Ion Exchange Reactions of KNiAsO_4 , A.M. Buckley, S.T. Bramwell and P. Day, Phys. Chem. Min., 15, 446-451 (1988)
- (274) Magnetic Susceptibility Study of KNiAsO_4 , $\text{HMnAsO}_4 \cdot \text{H}_2\text{O}$ and Their Organic-Intercalated Derivatives, S.T. Bramwell, A.M. Buckley, P. Day and D. Visser, Phys. Chem. Min., 15, 465-469 (1988)
- (275) Incoherent Inelastic Neutron Scattering Study of the Low Frequency Phonons in Superconducting $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ and Antiferromagnetic La_2CuO_4 , M. Rosseinsky, K. Prassides, P. Day and A.J. Dianoux, Phys. Rev. B, 37, 2231-2234 (1988)
- (276) Structural Features of High Temperature Ceramic Superconductors, P. Day, Trans. Brit. Ceram. Assoc., No. 40, 57-60 (1988)
- (277) The Magnetic Susceptibility and EPR of the Organic Conductors $\alpha'(\text{BEDT})_2\text{X}$ ($\text{X}=\text{CuCl}_2$, AuBr_2 , $\text{Ag}(\text{CN})_2$), D. Talham, M. Kurmoo, P. Day, D. Parker, J. Phys. Cond. Matt. 1, 5671-5680 (1989)
- (278) The Crystal Structure of Potassium Nickel Arsenate; KNiAsO_4 , A.M. Buckley, S.T. Bramwell, P. Day and W.T.A. Harrison, Z. Naturforsch., B43, 1053-1055 (1988)
- (279) Crystal Structure and Physical Properties of a Metallic Charge Transfer Salt $(\text{BEDT-TTF})_2\text{Ag}(\text{CN})_2 \cdot \text{H}_2\text{O}$, M. Kurmoo, K. Pritchard, D. Talham, P. Day, A.M. Stringer and J.A.K. Howard, Acta Cryst. B46, 348-354 (1990)
- (280) Chemical Characterisation and Superconductivity of Two Phases in the Bi-Sr-Ca-Cu-O System, A.M. Chippindale, S.J. Hibble, J.A. Hriljac, L. Cowey, D.M.S. Bagguley, P. Day and A.K. Cheetham, Physica C 152, 154-156 (1988)
- (281) Microstructural Modulations in Superconducting $\text{Bi}(\text{Sr, Ca})_{1.33}\text{CuO}_x$, P.L. Gai and P. Day, Physica C 152, 335-338 (1988)
- (282) Chemical Stoichiometry and Structure of High Temperature Superconductors, P. Day, ch. in 'High Temperature Superconductors', Proc. 1st Latin American Conf., ed. R. Nicolsky, World Scientific Publishing Co., 1988, p. 57
- (283) BEDT-TTF Salts Containing Magnetic Ions FeCl_4^- , FeBr_4^- and CuCl_4^{2-} , T. Mallah, C. Hollis, S. Bott, P. Day and M. Kurmoo, Synth. Met., 27, 381-386 (1988)
- (284) Low-Dimensional Magnetic Behaviour of the Organic Conductors $\alpha'-(\text{BEDT-TTF})_2\text{X}$: $\text{X}=\text{AuBr}_2\text{CuCl}_2$, $\text{Ag}(\text{CN})_2$, S.D. Obertelli, R.H. Friend, D.R. Talham, M. Kurmoo and P. Day, Synth. Met. 27, A375-380 (1988)
- (285) Structures of Three New $\text{Ag}(\text{CN})_2$ Salts of BEDT-TTF, M. Kurmoo, D.R. Talham, K.L. Pritchard, P. Day, A.M. Stringer and J.A.K. Howard, Synth. Met. 27, A177-182 (1988)

- (286) Competition Between Localization and Superconductivity in (BEDT-TTF)₃Cl₂.2H₂O, M. Kurmoo, M.J. Rosseinsky, P. Day, P. Autan, W. Kang, D. Jerome and P. Batail, *Synth. Met.* 27, A, 425 (1988)
- (287) IR Reflection Studies of some Conducting BEDT-TTF Salts, F.L. Pratt, W. Hayes, M. Kurmoo and P. Day, *Synth. Met.* 27, A, 439-444 (1988)
- (288) Magnetoresistance and Reflectance Studies of β'' -(BEDT-TTF)₂AuBr₂, F.L. Pratt, W. Hayes, A.J. Fisher, J. Singleton, S.J.R.M. Spermon, M. Kurmoo and P. Day, *Synth. Met.* (1988)
- (289) Observation of de Haas-Shubnikov and de Haas-van Alphen Oscillations in β -(BEDT-TTF)₂AuI₂, I.D. Parker, D.D. Pigram, R.H. Friend, M. Kurmoo and P. Day, *Synth. Met.*, 27, A387-392 (1988)
- (290) High Pressure Transport Measurements of α' -BEDT-TTF Salts, I.D. Parker, R.H. Friend, M. Kurmoo and P. Day, *Synth. Mat.*, 27, A433-438 (1988)
- (291) Quantum Oscillations and Negative Magnetoresistance in the Organic Metal β'' (ET)₂AuBr₂, F.L. Pratt, A.J. Fisher, W. Hayes, J. Singleton, S.J.R.M. Spermon, M. Kurmoo and P. Day, *Phys. Rev. Lett.* 61, 2721-2724 (1988)
- (292) The Relationship between Chemical Composition and Superconductivity in the Tl-Ba-Ca-Cu-O Superconductors, S.J. Hibble, A.K. Cheetham, A.M. Chippindale, P. Day and J.A. Hriljac, *Physica C*. 156, 604-606 (1988)
- (293) Cooperative Vibronic Effects: Electron Transfer in Solution and the Solid State, P. Day, ch. in *Vibronic Processes in Inorganic Chemistry*, ed. C.D. Flint, Kluwer Scientific, p. 283-300 (1989)
- (294) La_{2-x}Sr_xCuO_{4-δ}: Structural, Magnetic and Transport Measurements on Antiferromagnets, Insulators and Superconductors, M.J. Rosseinsky, K. Prassides and P. Day, *J. Mat. Chem.* 1 (4), 597-610 (1991)
- (295) Structural Phase Relations of the La_{2-x-y}Ln_xSr_yCuO_{4-δ} and the Ln_{2-x}Ce_xCuO_{4-δ} Systems: A Powder Neutron Diffraction Study, M. Rosseinsky, K. Prassides and P. Day, *Physica C*, 161, 21-33 (1989)
- (296) High Pressure Transport Measurements of α' -BEDT-TTF Salts, I.D. Parker, R.H. Friend, M. Kurmoo and P. Day, *J. Phys. C.: Cond. Matter*, 1, 5681-5688 (1989)
- (297) Future Molecular Electronics: Towards a Supermolecular Information Processor, P. Day, *Chem. in Brit.*, 26 (1), 52-54 (1990)
- (298) Identification of Fluctuating Susceptibility Components in Rb₂CrCl₄: A Quasi-2-Dimensional Easy Plane Ferromagnet, S.T. Bramwell, M.T. Hutchings, J. Norman, R. Pynn and P. Day, *J. Physique, Colloque C8*, Suppl. au no. 12, Tome 49, C8-1435-1436 (1988)

- (299) Crystal Structures and Physical Properties of Bis(ethylenedithio)-tetrathiafulvalene Charge-transfer Salts with FeX_4^- ($\text{X}=\text{Cl}, \text{Br}$) Anions, T. Mallah, C. Hollis, S. Bott, M. Kurmoo and P. Day, J. Chem. Soc., Dalton Trans., 859-865 (1990)
- (300) Cooperative Optical Effects in Solid State Coordination Chemistry, P. Day, Coord. Chem. Rev. 100, 155-168 (1990)
- (301) Ferromagnetism in Two-Dimensional Cr(II) Halide Salts: Neutron Scattering and Optical Experiments, S.T. Bramwell, B. Briat, P. Day, P.J. Fyne, M.T. Hutchings, F. Tasset and J.R.G. Thorne, Mol. Cryst. Liq. Cryst. 176, 451 (1989)
- (302) Pressure Dependence of the Transport Properties of the Molecular Superconductor κ -(BEDT-TTF)₂Cu(NCS)₂, I.D. Parker, R.H. Friend, M. Kurmoo, P. Day, C. Lenoir and P. Batail, J. Phys.: Condens. Matter 1, 4479-4484 (1989)
- (303) Intercalation Reactions of Krautite: HMnAsO₄.H₂O, A.M. Buckley, S.T. Bramwell and P. Day, Amer. Min., 75, 1140-1146 (1990)
- (304) Superconductivity in Molecular and Oxide Lattices: a Comparison, P. Day, ch. in 'Lower Dimensional Systems and Molecular Devices', ed. R.M. Metzger, P. Day and G. Pappavassiliou, Plenum Press, New York 1990, pp. 115-128
- (305) Magnetic Order in $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_{4-\delta}$, M.J. Rosseinsky, K. Prassides and P. Day, J. Chem. Soc., Chem. Commun., 1734-1736 (1989)
- (306) Electron Paramagnetic Resonance of Organic Conductors (BEDT-TTF)₂X, M. Kurmoo, D.R. Talham and P. Day in 'Lower Dimensional Systems and Molecular Devices', ed. R.M. Metzger, P. Day and G. Pappavassiliou, Plenum Press, New York 1990, pp. 169-173
- (307) Structure and Properties of Tris[bis(ethylenedithio)tetrathiafulvalenium]tetrachloro-copper(II) Hydrate, (BEDT-TTF)₃CuCl₄.H₂O: First Evidence for Coexistence of Localized and Conduction Electrons in a Metallic Charge-Transfer Salt, M. Kurmoo, T. Mallah, L. Marsden, M. Allan, R.H. Friend, F.L. Pratt, W. Hayes, D. Chasseau, G. Bravic, L. Ducasse and P. Day, J. Am. Chem. Soc., 114, 10722-10729 (1992)
- (308) Shubnikov-De Haas Effect and Fermi Surface of κ -(BEDT-TTF)₂Cu(NCS)₂, F.L. Pratt, J. Singleton, M. Kurmoo, S.J.R.M. Spermon, W. Hayes and P. Day, J. Phys. Cond. Matter Sci.(1989)
- (309) Trends in Structures and Properties of Organic and Inorganic Superconductors, P. Day in 'The Physics and Chemistry of Organic Superconductors' (ed. G. Saito and S. Kagoshima, Springer-Verlag 1990), Springer Proceedings in Physics 51, pp.8-14
- (310) Structural Properties of Transition Metal Pyroarsenates $\text{M}_2\text{As}_2\text{O}_7$ ($\text{M}=\text{Mn,Co,Ni}$), A.M. Buckley, S.T. Bramwell and P. Day, J. Sol. St. Chem., 86, 1-15 (1990)
- (311) Pressure Dependence of the Structural and Electronic Properties of Organic Superconductors, D. Chasseau, J. Gaultier, H. Houbib, L. Ducasse, M. Kurmoo and P. Day, Mat. Res. Soc. Symp. Proc., Advanced Organic Solid State Materials 173, 131-136 (1990)

- (312) Fermi Surface and Band Structure of κ -(BEDT-TTF)₂Cu(NCS)₂, F.L. Pratt, J. Singleton, M. Kurmoo, S.J.R.M. Spermon, W. Hayes and P. Day, in 'The Physics and Chemistry of Organic Superconductors' (ed. G. Saito and S. Kagoshima, Springer-Verlag 1990) Springer Proceedings in Physics 51, pp 200-203
- (313) Synthesis, Crystal Structure and Properties of (BEDT-TTF)₃CuCl₄.H₂O, M. Kurmoo, T. Mallah, P. Day, I. Marsden, M. Allan, R.H. Friend, F.L. Pratt, W. Hayes, D. Chasseau, J. Gaultier and G. Bravic, 'The Physics and Chemistry of Organic Superconductors' (ed. G. Saito and S. Kagoshima, Springer-Verlag 1990) Springer Proceedings in Physics 51, pp 290-293
- (314) Electronic Properties of (BEDT-TTF)₃Cl₂.2H₂O, S.D. Obertelli, I.R. Marsden, R.H. Friend, M. Kurmoo, M.J. Rosseinsky, P. Day, F.L. Pratt and W. Hayes, in 'The Physics and Chemistry of Organic Superconductors' (ed. G. Saito and S. Kagoshima, Springer-Verlag 1990) Springer Proceedings in Physics 51, pp 181-184
- (315) Syntheses, Structures and Solid State Properties of One-Dimensional Halogen-Bridged Ni(III)-X-Ni(III) Compounds (X=Cl and Br), K. Toriumi, H. Okamoto, T. Mitani, S. Bandow, M. Yamashita, Y. Wada, Y. Fujii, R.J.H. Clark, D.J. Michael, A.J. Edward, D. Watkin, M. Kurmoo and P. Day, *Mol. Cryst. Liq. Cryst.* 181, 333-342 (1990)
- (316) Pressure Dependence of the Transport Properties of κ -(BEDT-TTF)₂Cu(NCS)₂, I.D. Parker, R.H. Friend, M. Kurmoo, P. Day, C. Lenoir and P. Batail, in 'The Physics and Chemistry of Organic Superconductors' (ed. G. Saito and S. Kagoshima, Springer-Verlag 1990) Springer Proceedings in Physics 51, pp 272-275
- (317) Mixed Valency Systems: Retrospect and Prospect, P. Day, in 'Mixed Valency Systems in Chemistry, Physics and Biology', ed. K. Prassides, NATO ARI Series, D. Reidel Publishing Co. Dordrecht, (1991), p. 419
- (318) Mixed Valency in the Organic-Inorganic Composites (BEDT-TTF)₆Cu₂Br₆ and (BEDT-TTF)₆Cu₂Cl₂Br₄, M. Kurmoo, D. Kanazawa and P. Day, in 'Mixed Valency Systems in Chemistry, Physics and Biology', ed. K. Prassides, NATO ARI Series, D. Reidel Publishing Co. Dordrecht, (1991)
- (319) Magnetic Structure of KMnPO₄.H₂O, D. Visser, S. G. Carling, P. Day and J. Deportes, *J. Appl. Phys.*, 69, 6016–6018 (1991)
- (320) (BEDT-TTF)₂GaCl₄: Structure, Electrical and Magnetic Properties, M. Kurmoo, P. Day, M. Allan, R. H. Friend, D. Chasseau and G. Bravic. *Synth. Met.* 41-43, 2127-2130 (1991)
- (321) EPR of BEDT-TTF Salts Containing Magnetic Anions Cu^{II}X₄²⁻, (X=Cl,Br), M. Kurmoo, D. Kanazawa and P. Day. *Synth. Met.* 41-43, 2123-2126 (1991)
- (322) Magnetic Order and Crystal Chemistry of Nd_{2-x}Ce_xCuO_{4-δ}, M. J. Rosseinsky, K. Prassides and P. Day, *Inorg. Chem.* 30, 2680-2687 (1991)
- (323) Crystal and Magnetic Structures of Layer Phosphates, S. G. Carling, P. Day and D. Visser, *Acta Cryst. A* 46, (Suppl) C-278 (1990)

- (324) Compressibility and X-Ray Crystal Structure at 7×10^2 MPa of a Molecular Superconductor $(BEDT-TTF)_2Cu(NCS)_2$. M. Rahal, J. Gaultier, D. Chasseau, L. Ducasse, M. Kurmoo and P. Day, *Acta Cryst. A46 (Suppl)* C-356 (1990)
- (325) The ties that bind so many chemicals, P. Day, *New Scientist*, 10 November 1990, p. 50
- (326) Structural Properties of Two Modifications of Hydrated BEDT-TTF Chloride Salts, G. Bravic, D. Chasseau, M. Kurmoo, J. Gaultier, M.J. Rosseinsky, A. Filhol and P. Day, *Synth. Met. 41-43*, 2035-2038 (1991)
- (327) Pressure Dependence of the Structural Properties of the Molecular Superconductor, κ - $(BEDT-TTF)_2Cu(NCS)_2$, J. Gaultier, M. Rahal, L. Ducasse, M. Kurmoo and P. Day, *Synth. Met. 41-43*, 2057 (1991)
- (328) Magnetotransport Studies of $(BEDT-TTF)_2Cu(SCN)_2$, F.L. Pratt, J. Singleton, M. Doporto, M. Kurmoo, T. Janssen, W. Hayes and P. Day, *Synth. Met. 41-43*, 2195-2198 (1991)
- (329) Pressure Dependence of the Structural and Electronic Properties of the Molecular Superconductor $(BEDT-TTF)_2Cu(SCN)_2$, D. Chasseau, J. Gaultier, M. Rahal, L. Ducasse, M. Kurmoo and P. Day, *Synth. Met. 41-43*, 2039-2042 (1991)
- (330) Phonon Density of States of (Ba,K) (Pb,Bi,Sb)O₃ Ceramic Oxides, A.J. Dianoux, M.J. Rosseinsky, K. Prassides and P. Day, in 'Physics and Materials Science of High Temperature Superconductors', vol. 2, eds. R. Kossowsky, B. Raveau and S. Patapis, Kluwer Scientific, Dordrecht, 1992.
- (331) Structures and Properties of BEDT-TTF Salts Containing Magnetic Anions, M. Kurmoo, T. Mallah, P. Day, I.H. Marsden, M. Allen, R.H. Friend, G. Bravic and D. Chasseau, Int. Conf. on Synthetic Metals, Tubingen 1990, p. 295
- (332) Organic-Intercalated Halogenochromates(II): Low-Dimensional Magnets, C. Bellitto and P. Day, *J. Mater. Chem.*, 2(3), 265-271 (1992)
- (333) Crystal and Electronic Structure of $(BEDT-TTF)_2AuBr_2$ at 10 and 300K and at 11kbar, D. Chasseau, M. Rahal, H. Houbib, G. Bravic, J. Gaultier, L. Ducasse, M. Kurmoo and P. Day, *Proc. Mat. Res. Soc. Conf.*, Boston 1991
- (334) Electronic and Magnetic Properties of a Triflate Salt of BEDT-TTF $(BEDT-TTF)_2CF_3SO_3$, I.R. Marsden, S.D. Obertelli, M.L. Allen, R.H. Friend, M. Kurmoo, M.J. Rosseinsky and P. Day, *Synth. Met. 41-13*, 2151-2154 (1991)
- (335) Temperature and Composition Evolution of the Phonon Density of States in (Ba,K) (Pb,Bi,Sb)O₃ Ceramic Oxides, K. Prassides, M.J. Rosseinsky, A.J. Dianoux and P. Day, *J. Phys.: Condens. Matter*, 4, 965-975 (1992)
- (336) Magnetotransport Studies of the Organic Metals $(BEDT-TTF)_2AuBr_2$ and $(BEDT-TTF)_2KHg(SCN)_4$, F.L. Pratt, M. Doporto, J. Singleton, T.J.B.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo, W. Hayes and P. Day, *Physica B*, 177, 333-338, (1992)

- (337) Cyclotron Resonance and Electron-Electron Interactions in the Organic Metal (BEDT-TTF)₂KHg(SCN)₄, M. Doporto, J. Singleton, F.L. Pratt, T.J.B.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo, W. Hayes and P. Day, *Physica B*, 177, 348-352, (1992)
- (338) Far Infrared Cyclotron Resonance Study of Electron Dynamics in (BEDT-TTF)₂KHg(SCN)₄, J. Singleton, F.L. Pratt, M. Doporto, W. Hayes, T.J.B.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo and P. Day, *Phys. Rev. Letts.*, 68, 2500-2503, (1992)
- (339) Magnetotransport and Fermi-surface topology of [bis(ethylenedithio)tetrathiafulvalene]₂KHg(SCN)₄, F.L. Pratt, J. Singleton, M. Doporto, A.J. Fisher, T.J.B.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo, W. Hayes and P. Day, *Phys. Rev. B*, 45, 13904-13912 (1992)
- (340) Comment on 'Angular Dependence of the Cyclotron Effective Mass in Organic Superconductors', M. Doporto, F.L. Pratt, J. Singleton, W. Hayes, T.J.B.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo and P. Day, *Phys. Rev. Letts.*, 69, 991, (1992)
- (341) The Institut Laue-Langevin: A Crucible of European Sciences, P. Day, *Proc. Roy. Inst. G.B.*, 64, 51-68 (1993).
- (342) Structures and Properties of Some Molecular Superconductors, P. Day, Materials Science and Development, Sultan Qaboos University, Oman, 211-218 (1992)
- (343) Superconductivity: A Parable of Materials Science, P. Day, Materials Science and Development, Sultan Qaboos University, Oman, 37-49 (1992)
- (344) John Stuart Anderson, B.G. Hyde and P. Day, Biographical Memoirs of the Royal Society, 38, 1-27 (1992)
- (345) Polarised Neutron Diffraction from Cs₂KFe(CN)₆: the Orbital Moment and its Anisotropy, P. Day, C.D. Delfs, B.N. Figgis, P.A. Reynolds and F. Tasset, *Mol. Phys.*, 78, 769-780 (1993).
- (346) Magnetoresistance Studies of β'' -ET₂AuBr₂, M. Duporto, F.L. Pratt, W. Hayes, J. Singleton, T. Janssen, M. Kurmoo and P. Day, *Synth. Mat.* 42, 1903–1906 (1991)
- (347) Electrical Transport Properties of (d₈-BEDT-TTF)₄Cl₂.6D₂O Under Pressure, M. Kurmoo, M.J. Rosseinsky, P. Day, I.R. Marsden and R.H. Friend, *Synth. Met.*, 56/1, 2274-2280 (1993).
- (348) (BEDT-TTF)₆(CuX₂Y₂)₂ (X=Br; Y=Cl or Br): Electrical Transport Properties Under Pressure and Magnetic Properties, M. Kurmoo, D. Kanazawa, P. Day, I.R. Marsden, M. Allan and R.H. Friend, *Synth. Met.*, 56/1, 2347-2352 (1993).
- (349) Effects of Open Sections of the Fermi Surface on the Physical Properties of Two-dimensional Organic Molecular Metals, J. Canlfield, J. Singleton, F.L. Pratt, M. Duporto, W. Lubczynski, W. Hayes, M. Kurmoo, P. Day, P.T.J. Hendricks and J.A.A.J. Perenboom, *Eur. Mat. Res. Soc. Conf. Proc.* 45, 63-67 (1993)
- (350) Cyclotron Resonance Studies of Electron Dynamics in BEDT-TTF Salts, J. Singleton, F.L. Pratt, M. Doporto, S. Hill, T.J.B.M. Janssen, M. Kurmoo, J.A.A.J. Perenboom, W. Hayes and P. Day, *Synth. Met.*, 55-57, 2566-2571 (1993).

- (351) Anomalous Negative Magnetoresistance in (BEDT-TTF)₂Cu(SCN)₂, F.L. Pratt, L. Cowey, J. Singleton, M. Doporto, M. Kurmoo, J.A.A.J. Perenboom, W. Hayes and P. Day, *Synth. Met.*, 55-57, 2289-2295 (1993).
- (352) High Field Magnetotransport Studies and Fermiology of β'' -(BEDT-TTF)₂AuBr₂, J. Singleton, F.L. Pratt, M. Doporto, J. Caulfield, S. Hill, T.J.B.M. Janssen, M. Kurmoo, J.A.A.J. Perenboom, W. Hayes and P. Day, *Synth. Met.*, 55-57, 2572-2577 (1993).
- (353) High Field Magnetotransport Studies of (BEDT-TTF)₂MHg(SCN)₄ Salts (M=K, NH₄), F.L. Pratt, J. Singleton, M. Doporto, J. Caulfield, I. Deckers, M. Kurmoo, W. Hayes, P. Day, T.J.B.M. Janssen, J.A.A.J. Perenboom, G. Pitsi and F. Herlach, *Synth. Met.*, 55-57, 2198-2206 (1993).
- (354) Field Dependence of the Spin-Peierls Transition in α' (BEDT-TTF)₂Ag(CN)₂, M. Kurmoo, P. Day, F.L. Pratt, W. Hayes and C. Bellitto, *Synth. Met.*, 56/1, 2380-2385 (1993).
- (355) Magneto-Optical and Magneto-Transport Studies of Electron-Electron Interactions in Organic Conductors Using Fields up to 50T, J. Singleton, F.L. Pratt, M. Doporto, J.M. Caulfield, S.O. Hill, T.J.B.M. Janssen, I. Dekkers, G. Pitsi, F. Herlach, W. Hayes, J.A.A.J. Perenboom, M. Kurmoo and P. Day, *Physica B*, 184, 470-480 (1993)
- (356) Organic Ferromagnetism in Nitronyl Nitroxides P-NPNN and 3QNNN: MUSR, EPR and AC Susceptibility Studies, F.L. Pratt, R. Valladis, J. Caulfield, I. Deckins, J. Singleton, A.J. Fisher, W. Hayes, M. Kurmoo and P. Day, *Eur. Mat. Res. Soc. Symp. Proc.* 45, 171-175 (1993)
- (357) Phonon Softening in Ceramic Superconductors, K. Prassides, M.J. Rosseinsky, A.J. Dianoux and P. Day, *Physica B*, 180-181, 393-395 (1992)
- (358) Halides Magnetic, Halides Superconducting, P. Day, *Chem. Soc. Rev.*, 22, 51-57 (1993).
- (359) Synthesis, Structure and Physical Properties of the Organic Metal ([²H₈]BEDT-TTF)₄Cl₂.6D₂O, M.J. Rosseinsky, M. Kurmoo, F.L. Pratt, W. Hayes, I.R. Marsden, R.H. Friend, D. Chasseau, P. Guionneau, G. Bravic, L. Ducasse and P. Day, *J. Mater. Chem.*, 3(8), 801-810 (1993)
- (360) Structural Phase Transformations in C₇₀, M.A. Green, M. Kurmoo, P. Day and K. Kikuchi, *J. Chem. Soc., Chem. Commun.*, 1676-1677 (1992)
- (361) Interaction between Free Carriers of Organic Conductors and Localized Moment on Magnetic Anions, M. Kurmoo, P. Day, M. Allan and R.H. Friend, *Mol. Cryst. Liq. Cryst.*, Vol. 234, 199-204 (1993)
- (362) The Royal Institution: A Showcase of British Science, P. Day, Materials Science and Development, Sultan Qaboos University, Oman, 13-28 (1993)
- (363) Weak Ferromagnetic Behavior of the Manganese Alkylphosphonate Hydrates MnC_nH_{2n+1}PO₃.H₂O, n = 1-4, S.G. Carling, P. Day and D. Visser, *J. Sol. St. Chem.*, 106, 111-119 (1993)

- (364) Ferro- and Antiferromagnetic Interactions and Crystal Structures of Some Organic Radicals Based on Nitronyl Nitroxide, T. Sugano, M. Tamura, T. Goto, R. Kato, M. Kiroshita, Y. Sakai, Y. Ohashi, M. Kurmoo and P. Day, *Mol. Cryst. Liq. Cryst.*, 232, 61-68 (1993)
- (365) Charge Transfer Salts, P. Day, *Encyclopedia of Advanced Materials*, ed. D. Bloor, R.J. Brook, M.C. Flemings, S. Mahajan, Pergamon Press, Oxford, 417-421 (1994)
- (366) Raman and Infrared Studies of Single Crystal C₆₀ and its Derivatives, P. Bowmar, M. Kurmoo, M.A. Green, F.L. Pratt, W. Hayes, P. Day and K. Kikuchi, *J. Phys.: Condens. Matter.*, 5, 2739-2748 (1993)
- (367) Exotic Properties, P. Day, *Times Higher Education Supplement*, 9 April 1993.
- (368) Crystal Structures and Properties of Two Modifications of the Molecular Charge-Transfer Salt (BEDT)₂Ag(CN)₂[BEDT-TTF=bis(ethylenedithio)tetrathiafulvalene], M. Kurmoo, P. Day, A.M. Stringer, J.K. Howard, L. Ducasse, F.L. Pratt, J. Singleton and W. Hayes, *J. Mater. Chem.*, 3(11), 1161-1170 (1993)
- (369) High Pressure and Low Temperature X-Ray Crystallography: the Crystal Structure of the Molecular Charge Transfer Salt α' -(bis(ethylenedithio)-tetrathiafulvalene)₂AuBr₂, D. Chasseau, J. Gaultier, L. Bravic, L. Ducasse, M. Kurmoo and P. Day, *Proc. Roy. Soc. A*, 442, 207-219 (1993).
- (370) Lower Dimensional Systems and Molecular Electronics, R.M. Metzger, P. Day and G. Papavassiliou (eds.), New York, Plenum Press (1990)
- (371) Solid State Chemistry: Compounds, A.K. Cheetham and P. Day (eds.), Oxford, Clarendon Press (1992)
- (372) Proceedings of the Royal Institution of Great Britain, Vol. 64, P. Day and C.R.A. Catlow (eds.), London, Science Reviews Ltd (1993)
- (373) John Stuart Anderson 1908-1990, B.G Hyde and P. Day, *Historical Records of Australian Sci.*, 9, 127-149 (1992)
- (374) The Bragg Special Issue, P. Day and J.B. Pendry (convenors), *Proc. Roy. Soc. A*442 (1993)
- (375) Superconductors, Metals and Magnets: Structure-Property Relations in Molecular Charge Transfer Salts, P. Day, *Phys. Scripta*, T49, 726-730 (1993)
- (376) High Magnetic Field Studies of Two-Dimensional Organic Metals Based on ET, J. Singleton, J.M. Caulfield, S.U. Hill, P.T.J. Hendriks, F.L. Pratt, M. Doporto, I. Deckers, G. Pitsi, F. Hirlach, W. Hayes, T.B.J.M. Janssen, J.A.A.J. Perenboom, M. Kurmoo and P. Day, *Proc. Conf. on High Field Magnetism*, Toulouse, 1993
- (377) Structure-Property Relations in Superconducting Charge Transfer Salts, P. Day, *Proceedings of International Symposium on High T_C Superconductivity and its Applications*, ed. M.A. Abdel-Raouf et al, 116-127 (1994)
- (378) Magnets Without Metals, P. Day, *Nature*, 363, 113-114 (1993)

- (379) Organic Ferromagnetism in the Nitronyl Nitroxides p-NPNN and 3-QNNN: MUSR, EPR and AC Susceptibility Studies, F.L. Pratt, R. Valladares, J. Caulfield, I. Deckers, J. Singleton, A.J. Fisher, W. Hayes, M. Kurmoo and P. Day, *Synth. Met.*, 61, 171-175 (1993)
- (380) The Effects of Open Sections of the Fermi Surface on the Physical Properties of 2D Organic Molecular Metals, J. Caulfield, J. Singleton, F.L. Pratt, M. Doporto, W. Lobczynski, W. Hayes, M. Kurmoo, P. Day, P.T.J. Hendriks and J.A.A.J. Perenboom, *Synth. Met.*, 61, 63-67 (1993)
- (381) The Influence of Magnetic Order in Quasi-2d Organic Conductors, M. Doporto, J. Caulfield, S. Hill, J. Singleton, F.L. Pratt, P.J.T. Hendriks, J.A.A.J. Perenboom, W. Hayes and P. Day, *Surf. Sci.*, 305, 187-193 (1994)
- (382) J.S. Anderson, P. Day, *Dictionary of National Biography (1986-1990)* Oxford University Press, 1996, pp 7-8
- (383) Dimensionality Crossovers in the Magnetization of the Canted Antiferromagnets NH₄MnPO₄.H₂O and ND₄MnPO₄.D₂O, S. G. Carling, P. Day and D. Visser, *J. Solid State Commun.*, Vol. 88, No. 2, 135-138 (1993)
- (384) The Chemistry of Magnets, P. Day, *Science*, 261, 431-432 (1993)
- (385) Superconductors: Past, Present and Future, P. Day, *Proc. Roy. Inst.*, 65, 29-46 (1994)
- (386) Solid State Properties of Fullerenes: Comments from a Round Table Discussion, P. Day, ch. in 'The Chemistry and Physics of Fullerenes and Fullerides', ed. K. Prassides, Kluwer Academic Publishers, 335-338 (1994)
- (387) Luminescence Study of C₆₀, P. Bowmar, M. Kurmoo, M.A. Green, W. Hayes, P. Day and K. Kikuchi, *J. Luminescence*, 60 & 61, 827-829 (1993)
- (388) Magnetotransport and Fermi-Surface Topology of β''-(BEDT-TTF)₂AuBr₂; the Effects of Spin-Density-Wave Formation, M. Doporto, J. Singleton, F.L. Pratt, J. Caulfield, W. Hayes, J.A.A.J. Perenboom, I. Deckers, G. Pitsi, M. Kurmoo and P. Day, *Phys. Rev. B*, 49, 3934-3943 (1994)
- (389) Isothermal Compressibility and Pressure Dependence of the Crystal Structure of the Superconducting Charge Transfer Salt κ-(BEDT-TTF)₂Cu(NCS)₂ {BEDT-TTF=bis(ethylenedithio)-tetrathiafulvalene}, M. Rahal, D. Chasseau, J. Gaultier, L. Ducasse, M. Kurmoo and P. Day, *Acta Cryst. B.*, 53, 159-167 (1997)
- (390) Effects of Defects on the Luminescence of C₆₀ crystals, P. Bowmar, W. Hayes, M.A. Green, M. Kurmoo, P. Day and K. Kikuchi, *J. Phys. Cond. Matt.* (1993) submitted
- (391) Structure of (BEDT-TTF)₃CuCl₂Br₂, S. Hebrard, G. Bravic, J. Gaultier, D. Chasseau, M. Kurmoo, D. Kanazawa and P. Day, *Acta Cryst. C* 50, 1892-1894 (1994)
- (392) Structure of (BEDT-TTF)₃CuBr₄, P. Guionneau, G. Bravic, J. Gaultier, D. Chasseau, M. Kurmoo, D. Kanazawa and P. Day, *Acta Cryst. C* 50, 1894-1896 (1994)

- (393) Raman and Infrared Determination of Vibrational Fundamentals of Single Crystal C₆₀ and Derivatives and of C₇₀, P. Bowmar, W. Hayes, M. Kurmoo, P.A. Pattenden, M.A. Green, P. Day and K. Kukuchi, *J. Phys. Cond. Matt.*, 6, 3161-3170 (1994)
- (394) Crystal and Electronic Structures; Electrical, Magnetic and Optical Properties of Two Copper Tetrahalide Salts of Bis(ethylenedithio)-tetrathiafulvalene, I.R. Marsden, M.L. Allan, R.H. Friend, M. Kurmoo, D. Kanazawa, P. Day, G. Bravic, D. Chasseau, L. Ducasse and W. Hayes, *Phys. Rev. B*, 50, 2118-2127 (1994)
- (395) Magnetotransport Studies of the Organic Superconductor K(BEDT-TTF)₂Cu(NCS)₂ Under Pressure: The Relationship Between Carrier Effective Mass and Critical Temperature, J. Caulfield, W. Lubczynski, F.L. Pratt, J. Singleton, D.Y.K. Ko, W. Hayes, M. Kurmoo and P. Day, *J. Phys.: Cond. Matt.*, 6, 2911-2924 (1994)
- (396) Magnetoresistance Oscillations and Field-induced Fermi Surface Changes in α -ET₂KHg(NCS)₄, J. Singleton, J. Caulfield, P.T.J. Hendriks, J.A.A.J. Perenboom, M.V. Kartsovnik, A.E. Kovalev, W. Hayes, M. Kurmoo and P. Day, *PRL* (1993) submitted
- (397) The Magnetic Structure of KNiAsO₄: A Two-Dimensional Honeycomb Lattice, S.T. Bramwell, A.M. Buckley and P. Day, *Journal of Solid State Chemistry*, 111, 48-51 (1994)
- (398) Two-dimensional magnetism in the organic-inorganic composite phenyl-MnPO₄.H₂O, D. Visser, R.K. Kremer, S.G. Carling, P. Day and M. Gabás, *J. Appl. Phys.* 73 (10), 1993
- (399) Neutron Powder Diffraction Study of the Crystal Structure of the Layered Mineral Krautite, DMnAsO₄.D₂O, S.T. Bramwell, A.M. Buckley, M.J. Rosseinsky and P. Day, *New J. Chem.*, 18, 1209-1214 (1994)
- (400) 'Hidden Attraction: The Mystery and History of Magnetism', *Physics Today*, 47, 64-65 (1994)
- (401) The Royal Institution's Christmas Lectures: A British Export to Japan, P. Day, *Science in Parliament*, 51, 34 (1994)
- (402) An Organization for Science: The Royal Institution of Great Britain, P. Day, 3rd Foundation Day Lecture, National Chemical Laboratory, Pune, 1-10 (1994)
- (403) Large Magnetic Field Induced Fermi Surface Changes in α -ET₂KHg(SCN)₄, J. Caulfield, J. Singleton, P.T.J. Hendricks, J.A.A.J. Perenboom, F.L. Pratt, M. Doporto, W. Hayes, M. Kurmoo and P. Day, *J. Phys.: Cond. Matt. Phys.*, 6, L155-L162 (1994)
- (404) Proceedings of the Royal Institution, Vol. 65, ed. C.R.A. Catlow and P. Day, Oxford University Press, 1994
- (405) Higher Critical Temperatures for Organic Superconductors, M. Kurmoo and P. Day, *Mol. Electronics News*, Issue 15, p. 3 (1993)
- (406) Molecular Materials as Metals and Superconductors, P. Day, *Chem. and Ind.*(1994) in press

- (407) Creating and Communicating Science: The Experience of the Royal Institution, P. Day, Proc. Ind. Nat. Sci. Acad., **60** A, 607-617 (1994)
- (408) Molecular-based Mixed Valency Ferrimagnets $(XR_4)Fe^{II}Fe^{III}(C_2O_4)_3$ ($X=N,P$; $R=n\text{-propyl}$, $n\text{-butyl}$, $phenyl$): Anomalous Negative Magnetisation in the tetra- n -butylammonium Derivative, C. Mathoni  re, S.G. Carling, Dou Yusheng and P. Day, J.C.S. Chem. Commun., 1551-1552 (1994)
- (409) Creating and Communicating Science at the Royal Institution, P. Day, Physics World, **7**, 59-60 (1994)
- (410) The Magnetic Properties and Structures of the Transition Metal Pyroarsenates $M_2As_2O_7$ ($M=Ni, Co, Mn$), A.M. Buckley, S.T. Bramwell, P. Day and D. Visser, J. Sol. St. Chem., **115**, 229-235 (1995)
- (411) Crystal Structure and Magnetic Properties of $CuGeO_3$: a Possible Spin-Peierls Compound, M.A. Green, M. Kurmoo, J. Stalick and P. Day, J.C.S. Chem. Comm., 1995 (1994)
- (412) Relationship Between Effective Mass and Superconducting Critical Temperature in the Organic Superconductor κ -(BEDT-TTF) $_2Cu(NCS)_2$, J. Caulfield, W. Lubczynski, J. Singleton, F.L. Pratt, A. House, W. Hayes, M. Kurmoo and P. Day, Physica C, **235-240**, 2457-2458 (1994)
- (413) Quantum Oscillations near B_{c2} in the Organic Superconductor κ -(BEDT-TTF) $_2Cu(NCS)_2$, P.J. van der Wel, J. Caulfield, R. Corcoran, P. Day, S.M. Hayden, W. Hayes, M. Kurmoo, P. Meeson, J. Singleton and M. Springford, Physica C, **235-240**, 2453-2454 (1994)
- (414) Layered Perovskite Halides, C. Bellitto and P. Day, ch. in Comprehensive Supramolecular Chemistry, Vol. 7, ed. G. Alberti and T. Bein, Oxford: Pergamon, 1996, 293-314
- (415) La ‘Royal Institution’, crisol de la ciencia britanica, P. Day, Revista Espa  ola de Fisica, **8**, 60-64 (1994)
- (416) The Candle Revisited, ed. P. Day and C.R.A. Catlow, Oxford University Press, 1994
- (417) Creating and Communicating Science: The Experience of the Royal Institution, P. Day, INSA News, No. 119 (1994)
- (418) Creating and Communicating Science: The Experience of the Royal Institution, P. Day, Current Science, **67**, 434-440 (1994)
- (419) New BEDT-TTF Salts with Transition-Metal Containing Anions, P. Day, A.W. Graham, C.J. Kepert and M. Kurmoo, Synthetic Metals, **70**, 767-770 (1995)
- (420) EPR of BEDT-TTF Salts with the Magnetic Cluster $[PMo_{12}O_{40}]^{4-}$ and the Non Magnetic $[SiW_{12}O_{40}]^{4-}$, M. Kurmoo, P. Day and C. Bellitto, Synthetic Metals, **70**, 963 (1995)
- (421) Tuning the Carrier Concentration in Organic Conductors: Synthesis and Physical Properties of BEDT-TTF Salts with $H_2PO_4^{2-}$ and HPO_4^{2-} , M. Kurmoo, D. Kanazawa, C.J. Kepert and P. Day, Synthetic Metals, **70**, 795-796 (1995)

- (422) Neutron Diffraction Studies on GeCuO_3 , M.A. Green, M. Kurmoo, J.K. Stalick and P. Day, Synthetic Metals, **71**, 1927-1928 (1995)
- (423) Lattice Dynamics of $\text{Ba}_{1-x}\text{K}_x\text{BiO}_3$, M.A. Green, K. Prassides, P. Day and D.A. Neumann, Synthetic Metals, **71**, 1619-1620 (1995)
- (424) Structure and Conductivity of Layered Oxides $(\text{Ba}, \text{Sr})_{n+1}(\text{Sn}, \text{Sb})_b\text{O}_{3n+1}$, M.A. Green, K. Prassides, P. Day and J.K. Stalick, Synthetic Metals, **71**, 1617-1618 (1995)
- (425) Angle-dependent Magnetoresistance Oscillations and Fermi Surface Reordering at High Magnetic Fields in $\alpha\text{-}(\text{ET})_2\text{KHg}(\text{SCN})_4$, J. Caulfield, S.J. Blundell, J. Singleton, A. House, L. du Croo de Jongh, P.T.J. Hendriks, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, Synthetic Metals, **70**, 825-826 (1995)
- (426) De Haas-van Alphen Oscillations near B_{c2} in the Organic Superconductor $\kappa\text{-}(\text{ET})_2\text{Cu}(\text{NCS})_2$, P.J. van der Wel, J. Caulfield, S.M. Hayden, J. Singleton, M. Springford, P. Meeson, W. Hayes, M. Kurmoo and P. Day, Synthetic Metals, **70**, 831-832 (1995)
- (427) Fermi Surface Studies of the Pressure Induced Organic Superconductor $(\text{BEDT-TTF})_3\text{Cl}_2\cdot 2\text{H}_2\text{O}$, J. Caulfield, W. Lubczynski, J. Singleton, W. Hayes, M. Kurmoo and P. Day, Synthetic Metals, **70**, 833-834 (1995)
- (428) Novel BEDT-TTF Salts with Magnetic Anions $[\text{MoOCl}_4(\text{H}_2\text{O})]^-$ and $[\text{Re}_2(\text{NCS})_{10}]^{3-}$, C.J. Kepert, M.R. Truter, M. Kurmoo and P. Day, Synthetic Metals, **70**, 781-782 (1995)
- (429) Temperature Dependence (300 to 10K) of the Structural and Electronic Properties of the Molecular Charge-transfer Salt $(\text{BEDT-TTF})_3\text{Cl}_2\cdot 2\text{H}_2\text{O}$, D. Chasseau, S. Hébrard, V. Hays, G. Bravic, J. Gaultier, L. Ducasse, M. Kurmoo and P. Day, Synthetic Metals, **70**, 947-948 (1995)
- (430) Pressure and Temperature Dependence of the Structural Properties of the Molecular Semiconducting Salt: $\alpha'\text{-}(\text{BEDT-TTF})_2\text{Ag}(\text{CN})_2$, D. Chasseau, P. Guionneau, M. Rahal, G. Bravic, J. Gaultier, L. Ducasse, M. Kurmoo and P. Day, Synthetic Metals, **70**, 945-946 (1995)
- (431) Relationship Between Effective Mass and Superconducting Critical Temperature in the Organic Superconductor $\kappa\text{-}(\text{BEDT-TTF})_2\text{Cu}(\text{NCS})_2$, J. Caulfield, W. Lubczynski, W. Lee, J. Singleton, F.L. Pratt, W. Hayes, M. Kurmoo and P. Day, Synthetic Metals, **70**, 815-818 (1995)
- (432) Cyclotron Resonance Studies of Electron Dynamics in ET Charge Transfer Salts, S. Hill, A. Wittlin, J. van Bentum, J. Singleton, W. Hayes, J.A.A.J. Perenboom, M. Kurmoo and P. Day, Synthetic Metals, **70**, 821-822 (1995)
- (433) Magnetic Ordering in Some Organic Molecular Magnets, T. Sugano, F.L. Pratt, M. Kurmoo, N. Takeda, M. Ishikawa, S.J. Blundell, P.A. Pattenden, R.M. Valladares, W. Hayes and P. Day, Synthetic Metals, **71**, 1827-1828 (1995)

- (434) Magnetics for Chemists, P. Day, *Science*, **266**, 146 (1994)
- (435) Prologue: Friday Nights at the Royal Institution, P. Day, *Proc. Roy. Inst.*, **66**, v-vi (1995)
- (436) High Field Magnetoresistance Oscillations in α (bis(ethylenedithio) tetrathio-fulvalene)₂KHg(NCS)₄: the effects of magnetic breakdown, exchange interactions and Fermi surface reordering, J. Caulfield, S.J. Blundell, M.S.L. du Croo de Jongh, P.J.T. Hendricks, J. Singleton, M. Doporto, A. House, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, *Phys. Rev. B*, **51**, 8325-8336 (1995)
- (437) The Root of All Research, P. Day, *Chem. in Brit.*, **31**, 471-473 (1995)
- (438) Crystal and Magnetic Structures of Layer Transition Metal Phosphate Hydrates, S.G. Carling, P. Day and D. Visser, *Inorg. Chem.*, **34**, 3917-3927 (1995)
- (439) Dimensionality Crossovers in the Magnetization of the Weakly Ferromagnetic Two-dimensional Manganese Alkylphosphonate Hydrates MnC_nH_{2n+1}PO₃·H₂O, n = 2-4, S.G. Carling, P. Day and D. Visser, *J. Phys. C: Cond. Matt. Phys.*, **7**, L109-L113 (1995)
- (440) BEDT-TTF Salts with α -Keggin Polyoxometallates: Electrical, Magnetic and Optical Properties of (BEDT-TTF)₈(OMo₁₂O₄₀) and (BEDT-TTF)₈(SiW₁₂O₄₀) and X-ray Crystal Structure of (BEDT-TTF)₈[PMo₁₂O₄₀]·{(CH₃CN·H₂O)₂}, C. Bellitto, M. Bonamico, V. Fares, F. Federici, G. Riglini, M. Kurmoo and P. Day, *Chem. of Mater.*, **7**, 1475-1484 (1995)
- (441) "Mr Secretary Colonel, Admiral, Philosopher Thompson": The European Odyssey of Count Rumford, P. Day, *The European Review*, **3**, 103-111 (1995)
- (442) Lattice Dynamics of Ba_{1-x}K_xBiO₃ Studied by Inelastic Neutron Scattering, M.A. Green, K. Prassides, D.A. Neumann and P. Day, *Chem. of Mat.*, **7**, 888-893 (1995)
- (443) High Field Magnotransport of the Organic Superconductor κ -(BEDT-TTF)₂Cu(NCS)₂ under Pressure, W. Lubczynski, J. Caufield, F.L. Pratt, J. Singleton, W. Hayes, M. Kurmoo and P. Day, *Physica B*, **201**, 483-436 (1994)
- (444) Synthesis, Structure and Physical Properties of The Molecular Magnetic Semiconductor (BEDT-TTF)₄KFe(C₂O₄)₃.C₆H₅CN (BEDT-TTF=Bis(ethylenedithio)tetrathia-fulvalene), A.W. Graham, M. Kurmoo, P. Day, S.J. Coles, M.B. Hursthause, A.T. Coomber and R.H. Friend, *Mol. Cryst. Liq. Cryst.*, **273**, 35-40 (1995)
- (445) Single Crystal Magnetic Measurements of the Molecular Magnet NH₄Ni(mnt)₂.H₂O, A.T. Coomber, R.H. Friend, A. Charlton, A.E. Underhill, M. Kurmoo and P. Day, *Mol. Cryst. Liq. Cryst.*, **273**, 41-48 (1995)
- (446) Ferrimagnetic Mixed Valency and Mixed Metal Tris(oxalato)Fe^{III}Compounds: Synthesis, Structure and Magnetism, C. Mathonière, C.J. Nuttal, S.G. Carling and P. Day, *Inorg. Chem.*, **35**, 1201-1206 (1996)
- (447) Ferromagnetic Intermolecular Interactions and Magnetically Ordered States in Some Organic Radical Crystals, T. Sugano, M. Kurmoo, P. Day, F.L. Pratt, S.J. Blundell, W.

Hayes, M. Ishikawa, M. Kinoshita and Y. Ohashi, Mol. Cryst. Liq. Cryst., **271**, 107–114 (1995)

- (448) The Crystal Structure of the Spin-Peierls Compound α' -(BEDT-TTF)₂Ag(CN)₂ (BEDT-TTF=bisethylenedithiotetrathiafulvalene) at High Pressure and Low Temperature, P. Guionneau, M. Rahal, G. Bravic, J. Gaultier, J.M. Mellado, D. Chasseau, L. Ducasse, M. Kurmoo and P. Day, J. Mater. Chem., **5**, 1639–1645 (1995)
- (449) Synthesis and Magnetism of Mixed Valency ACr^{II}Cr^{III}(C₂O₄)₃ (A=N(n-C₄H₉)₄, P(C₆H₅)₄₀, C.J. Nuttall, C. Bellitto and P. Day, J.C.S. Chem. Commun., 1513–1514 (1995)
- (450) β'' -(BEDT-TTF)₄[(H₂O)Fe(C₂O₄)₃]·C₆H₅CN: The First Molecular Superconductor Containing Paramagnetic Metal Ions, A.W. Graham, M. Kurmoo and P. Day, J.C.S., Chem. Commun., 2061–2062 (1995)
- (451) Superconducting and Semiconducting Magnetic Charge Transfer Salts: (BEDT-TTF)₄AFe(C₂O₄)₃·C₆H₅CN (A = H₂O, K, NH₄), M. Kurmoo, A.W. Graham, P. Day, S.J. Coles, M.B. Hursthouse, J.L. Caulfield, J. Singleton, F.L. Pratt, W. Hayes, L. Ducasse and P. Guionneau, J. Am. Chem. Soc., **117**, 12209–12217 (1995)
- (452) Crystal Structure and Magnetic Properties of the Layer Ferrimagnet N(n-C₅H₁₁)₄Mn^{II}Fe^{III}(C₂O₄)₃, S.G. Carling, C. Mathonière, P. Day, K.M.A. Malik, S.J. Coles and M.B. Hursthouse, J.C.S., Dalton Trans., 1839–1843 (1996)
- (453) A de Haas-van Alphen Study of the Charge Transfer Salt α -(BEDT-TTF)₂KHg(SCN)₄ in Pulsed Magnetic Fields up to 55 T, N. Harrison, A. House, I. Deckers, J. Caulfield, J. Singleton, F. Herlach, W. Hayes, M. Kurmoo and P. Day, Phys. Rev. B., **52**, 5584–5591 (1995)
- (454) Michael Faraday as a Materials Scientist, P. Day, Mat. World, August 1995, 374–376 (1995)
- (455) Intermolecular Interactions in the Molecular Ferromagnetic NH₄Ni(mnt)₂·H₂O, A.T. Coomber, D. Beljonne, R.H. Friend, J.L. Brédas, A. Charlton, N. Robertson, A.E. Underhill, M. Kurmoo and P. Day, Nature, **380**, 144–146 (1996)
- (456) Fermi Surface Studies of Low-Dimensional Organic Conductors Based on BEDT-TTF, J. Singleton, J. Caulfield, S.O. Hill, S. Blundell, W. Lubczynski, A.A. House, W. Hayes, J.A.A.J. Perenboom, M. Kurmoo and P. Day, Physica B, **211**, 275–281 (1995)
- (457) Proceedings of the Royal Institution, ed. P. Day and C.R.A. Catlow, Oxford University Press, Vol. 66, (1995)
- (458) Molecular Magnets: What's Special? P. Day, Magnews, Summer 1995, 9–10
- (459) Low-Dimensional Magnetic Behaviour of the New Radical Anion Salts (BEDT-TTF)₂Au(i-mnt)₂ and (BEDT-TTF)₂BiBr₄, C. Bellitto, V. Fares, F. Federici, P. Day and M. Kurmoo, Synth. Met., **79**, 33–36 (1996)

- (460) Crystal Structure and Magnetism of $(BEDT-TTF)_2MCl_4$ ($BEDT-TTF =$ Bis(ethylenedithio)tetrathiafulvalene; $M = Ga, Fe$), M. Kurmoo, P. Day, P. Guionneau, G. Bravic, D. Chasseau, L. Ducasse, M.L. Allan, I.D. Marsden, and R.H. Friend, Inorg. Chem., **35**, 4719-4726 (1996)
- (461) Bicycling to Utopia, ed. P. Day and C.R.A. Catlow, Oxford University Press, 1995
- (462) Candles, Bicycles, Energy and Genetics: Science from The Royal Institution, P. Day, Science in Parliament, **52**, 22 (1995)
- (463) Crystal Structure and Physical Properties of $\{Bis(ethylenedithio)tetrathiafulvalene\}_2$ dicyano-Silver and -Gold, M. Kurmoo, P. Day, T. Mitani, H. Kitagawa, H. Shinoda, D. Yoshida, P. Guionneau, Y. Barrans, D. Chasseau and L. Ducasse, Bull. Chem. Soc. Jpn., **69**, 1233-1240 (1996)
- (464) What is a Material?, P. Day, in 'New Trends in Materials Chemistry', C.R.A. Catlow (ed.), Kluwer, Dordrecht, 1-17 (1997)
- (465) What is Special About Molecular Magnets ?, P. Day, in 'Magnetism: A Supramolecular Function', O. Kahn (ed.), Kluwer, Dordrecht, 467-486 (1996)
- (466) Structural Properties of A_2SnO_4 ($A = Ba, Sr$): a Neutron Diffraction Study, M.A. Green, K. Prassides and P. Day, J.C.S., Faraday Trans, **92**, 2155-2159 (1996)
- (467) On the Role of Charge Distribution in the Crystal Packing of Molecular Charge Transfer Salts, A. Talamo, C.R.A. Catlow and P. Day, J.C.S., Chem. Commun., 1701-1702 (1996)
- (468) Phase Boundary in the Dimensionality of Angle-Dependent Magno-resistance Oscillations in the Charge Transfer Salt a- $(BEDT-TTF)_2KHg(SCN)_4$, A.A. House, S.J. Blundell, M.M. Honold, J. Singleton, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, J. Phys., Cond. Matt., **8**, 8829-8845 (1996)
- (469) Concentration Dependent Critical Behaviour in Dilute Ferromagnetic $Fe_{1-x}As_x[S_2CN(C_2H_5)_2]_2Cl$, G.C. DeFotis, G.A. Coffey, G.S. Coker, J.L. Marmorino, K.L. Beers, S. Chandrarapthy, W.W. Brubaker, V.J. Pugh, S.G. Carling and P. Day, J. Appl. Phys., **79**, 4644-4646 (1996)
- (470) A Molecular Charge Transfer Salt of BEDT-TTF with $Cr(C_2O_4)_3^{3-}$: Synthesis and Physical Properties, M. Kurmoo, H. Kitagawa, T. Mitani, K. Mori and P. Day, Mol. Cryst. Liq. Cryst., **284**, 49-59 (1996)
- (471) Lattice Vibrations of the Superconducting Oxide Spinels $(Li, Mg)_{1+x}Ti_{2-x}O_4$, M.A. Green, M. Dalton, K. Prassides, P. Day and D. A. Newmann, J. Phys.: Condens. Matter, **9**, 10855-10865 (1997)
- (472) A Study of the Magnetoresistance of the Charge Transfer Salt $(BEDT-TTF)_3Cl_2 \cdot 2H_2O$ at Hydrostatic Pressures up to 20 kbar: Pressure Induced Suppression of a Probable Charge Density Wave, W. Lubczynski, S.V. Demishev, J. Singleton, J.M. Caulfield, M.S.L. du Croo de Jongh, N.E. Sluchanko, C.J. Kepert, S.J. Blundell, W. Hayes, N.A. Samarin, M.V. Kondrin, M. Kurmoo and P. Day, J. Phys. C.: Cond. Matter, **8**, 6005-6017 (1996)

- (473) Room at the Bottom, P. Day, Chem. In. Brit., **32**, 29-31 (1996)
- (474) Molecular Magnetic Semiconductors, Metals and Superconductors: BEDT-TTF Salts with Magnetic Anions, P. Day and M. Kurmoo, J. Mater. Chem., **7**, 1291-1295 (1997)
- (475) Metal–Organic Layers in Molecular Magnets and Superconductors, P. Day, Mol. Cryst. Liq. Cryst., **285**, 1-9 (1996)
- (476) Electrodynamic Response of Single Crystals of the Quasi–Two–Dimensional Organic Metal α -(BEDT-TTF)₂NH₄Hg(SCN)₄ between 50 and 100 GHz: Observation of Cyclotron Resonance and Quantum Oscillations, A. Polisskii, J. Singleton, W. Hayes, P. Goy, M. Kurmoo and P. Day, J. Phys. C.: Cond. Matt Phys., **8**, L195–201 (1996)
- (477) Magneto–Structural Correlation in Two Isomeric Series of Nitronyl Nitroxide Molecular Magnets: Intermolecular Interactions Relevant to Ferromagnetic Exchange in Naphthyl and Quinolyl Derivatives, T. Sugano, M. Kurmoo, H. Uekusa, Y. Ohashi and P. Day, J. Sol. State Chem., **145**, 427-442 (1999)
- (478) Temperature and Pressure Dependence of the Crystal Structure of the Magnetic Molecular Conductor: (BEDT-TTF)₃CuBr₄, P. Guionneau, J. Gaultier, D. Chasseau, G. Bravic, Y. Barrans, L. Ducasse, D. Kanazawa, P. Day and M. Kurmoo, J. Physique I (France), **6**, 1581-1595 (1996)
- (479) Determining the Charge Distribution in BEDT-TTF Salts, P. Guionneau, C.J. Kepert, D. Chasseau, M.R. Truter and P. Day, Synth. Met., **86**, 1973-1974 (1997)
- (480) Crystal Structures of (BEDT-TTF)₃CuBr₄ at 10 K and 10 kbar, D. Chasseau, P. Guionneau, J. Gaultier, Y. Barrans, L. Ducasse, C.J. Kepert, P. Day, and M. Kurmoo, Synth. Met., **86**, 2045-2046 (1997)
- (481) Magnetic Molecular Semiconductors and Superconductors: BEDT-TTF Tris-oxalato-metallate(III) Salts, P. Day and M. Kurmoo, Synth. Met., **85**, 1445-1450 (1997)
- (482) Crystal Structures and Physical Properties of BEDT-TTF Charge Transfer Salts with (Mo₆Cl₈)X₆²⁻ Anions (BEDT-TTF = bis(ethylenedithio)tetrathiafulvalene; X = Cl, Br), C.J. Kepert, M. Kurmoo and P. Day, Proc. Roy. Soc., **454**, 487-518 (1998)
- (483) Bis(ethylenedithio)tetrathiafulvalene (BEDT-TTF) Charge Transfer Salts of Re₂(NCS)10ⁿ⁻ (n = 2, 3), C.J. Kepert, M. Kurmoo and P. Day, Inorg. Chem., **36**, 6, 1128-1135 (1997)
- (484) Quasi-One-Dimensional bis(ethylenedithio)tetrathiafulvalene Charge-Transfer Salts with Paramagnetic Group 6 Anions, C.J. Kepert, M. Kurmoo, M.R. Truter and P. Day, J.C.S., Dalton Trans., 607-613 (1997)
- (485) Semiconducting Charge-Transfer Salts of BEDT-TTF [bis(ethylenedithio)tetrathiafulvalene] with Hexachlorometallate (IV) Anions, C.J. Kepert, M. Kurmoo and P. Day, J. Mat. Chem., **7**, 2, 221-228 (1997)

- (486) Metal-Organic Layer Magnets with and without Metallic Conduction, P. Day, Mol. Cryst. Liq. Cryst., **305**, 533-542 (1997)
- (487) Magnetism in Nitronyl Nitroxide Radicals and their Ion Radical Salts, T. Sugano, S.J. Blundell, F.L. Pratt, W. Hayes, H. Uekusa, Y. Ohashi, M. Kurmoo and P. Day, Mol. Cryst. Liq. Cryst., **305**, 435-444 (1997)
- (488) Magnetism in Organic Ion Radicals: Carboxyaryl, Sulfoaryl and Imidazoyl Derivatives of Nitronyl Nitroxide, T. Sugano, M. Kurmoo and P. Day, Synth. Met., **85**, 1729-1730 (1997)
- (489) Angle Dependent Magnetoconductance Oscillation Study of the Fermi Surface of β'' -(BEDT-TTF)₂AuBr₂, A.A. House, S.J. Blundell, M.M. Honold, J. Singleton, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, Synth. Met., **86**, 1977-1978 (1997)
- (490) Pressure and Angle-Dependent Shubnikov-de Haas Studies of the Spin-Density-Wave State of α -(BEDT-TTF)₂KHg(SCN)₄, W. Hayes, A.A. House, W. Lubczynski, S.J. Blundell, J. Singleton, M. Kurmoo and P. Day, Synth. Met., **86**, 1949-1950 (1997)
- (491) Temperature Dependence of the Angle-Dependent Magnetoresistance Oscillations in α -(BEDT-TTF)₂KHg(SCN)₄, M.M. Honold, A.A. House, S.J. Blundell, J. Singleton, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, Synth. Met., **86**, 2055-2056 (1997)
- (492) Millimetre Wave Response of α -(BEDT-TTF)₂NH₄Hg(SCN)₄, A. Ardavan, J. Singleton, W. Hayes, A. Polisskii, P. Goy, M. Kurmoo and P. Day, Synth. Met., **85**, 1501-1502 (1997)
- (493) Magnetoresistance Studies on (BEDT-TTF)₄(Mo₆Cl₈)Cl₆.xCH₂Cl₂ under pressure, A-K. Klehe, A.A. House, J. Singleton, W. Hayes, C.J. Kepert and P. Day, Synth. Met., **86**, 2003-2004 (1997)
- (494) Fermiology of the Magnetic Superconductor β'' -(BEDT-TTF)₄[$(\text{H}_2\text{O})\text{Fe}(\text{C}_2\text{O}_4)_3$] C₆H₅CN, S.J. Blundell, A.A. House, J. Singleton, M. Kurmoo, F.L. Pratt, P.A. Pattenden, W. Hayes, A.W. Graham, P. Day and J.A.A.J. Perenboom, Synth. Met., **85**, 1569-1570 (1997)
- (495) Muon Spin Rotation Studies of the Flux Lattice in κ -(BEDT-TTF)₂Cu(SCN)₂, S.L. Lee, S.J. Blundell, F.L. Pratt, P.A. Pattenden, E.M. Forgan, T. Sasaki, C.M. Aegerter, M. Hunt, K.H. Chow, W. Hayes, J. Singleton, H. Keller and I.M. Savic, Synth. Met., **85**, 1495-1496 (1997), M. Kurmoo and P. Day, Synth. Met., **86**, 2055-2056 (1997)
- (496) Evidence for Ideal Conductivity in the High Field Phase of the Charge Transfer Salt α -(BEDT-TTF)₂TlHg(SCN)₄, P.J. Gee, N. Harrison, M.V. Kartsovnic, A. House, A. Polisski, J. Singleton, F. Herlach, W. Hayes, M. Kurmoo and P. Day, Conf. on Synth. Metals, 116 (1997)
- (497) Magnetic Breakdown and Quantum Interference in the Quasi-Two-Dimensional Superconductor κ -(BEDT-TTF)₂Cu(NCS)₂ in High Magnetic Fields, N. Harrison, J. Caulfield, J. Singleton, P.H.P. Reinders, F. Herlach, W. Hayes, M. Kurmoo and P. Day, J. Phys. Cond. Matt., **8**, 5415-5435 (1996)

- (498) Oscillatory Magnetoresistance in the Charge-Transfer Salt β'' -(BEDT-TTF)₂AuBr₂ in Magnetic Fields up to 60 T: Evidence for Field-Induced Fermi Surface Reconstruction, A.A. House, N. Harrison, S.J. Blundell, I. Deckers, J. Singleton, F. Herlach, W. Hayes, J.A.A.J. Perenboom, M. Kurmoo and P. Day, Phys. Rev. B, **53**, 9127-9136 (1996)
- (499) Magnetic-Field Dependent Fermi Surfaces in Quasi-2D Organic Conductors, J. Singleton, A.A. House, N. Harrison, I. Deckers, S.J. Blundell, J.A.A.J. Perenboom, A. Polisskii, W. Hayes, F. Herlach, M. Kurmoo and P. Day, Surf. Sci., **361/362**, 894-900 (1996)
- (500) High Field Magnetotransport of the Pressure Induced Organic Superconductor (BEDT-TTF)₃Cl₂.2H₂O, W. Lubczynski, J. Caulfield, J. Singleton, W. Hayes, M. Kurmoo and P. Day, Acta Physica Polonica A, **87**, 777-779 (1995)
- (501) Resonant Magnetoabsorption of Millimetre-Wave Radiation in the Quasi-Two-Dimensional Organic Metals α -(BEDT-TTF)₂MHg(SCN)₄ (M = K, Tl), S.V. Demishev, A.V. Semeno, N.E. Sluchanko, N.A. Samarin, I.B. Vosboinikov, V.V. Glushkov, J. Singleton, S.J. Blundell, S.O. Hill, W. Hayes, M.V. Kartsovnik, A.E. Kovalev, M. Kurmoo, P. Day and N.D. Kushch, Phys. Rev. B, **53**, 19, 12794-12803 (1996)
- (502) Chaotic Dynamics of Charge Density Wave in (BEDT-TTF)₃Cl₂.2H₂O, S.V. Demishev, N.E. Sluchanko, N.A. Samarin, M.V. Kondrin, J. Singleton, M.S.L. du Croo de Jongh, W. Hayes, M. Kurmoo and P. Day, Ferroelectrics, **176**, 329-334 (1996)
- (503) Phase Boundary in the Dimensionality of the Angle-Dependent Magnetoresistance Oscillations in the Charge-Transfer Salt α -(BEDT-TTF)₂KHg(SCN)₄, A.A. House, S.J. Blundell, M.M. Honold, J. Singleton, J.A.A.J. Perenboom, W. Hayes, M. Kurmoo and P. Day, J. Phys. C.: Cond. Matt., **8**, 8829-8845 (1996)
M.S.L. du Croo de Jongh, W. Hayes, M. Kurmoo and P. Day, Ferroelectrics, **176** 329-334 (1996)
- (504) The Low Temperature Phase of α -(BEDT-TTF)₂KHg(SCN)₄ : I. Angle and Temperature Dependence of the Shubnikov-de Haas and de Haas-van Alphen Oscillations, A.A. House, C.J. Haworth, J.M. Caulfield, S.J. Blundell, M.M. Honold, J. Singleton, W. Hayes, S.M. Hayden, P. Meeson, M. Springford, M. Kurmoo and P. Day, J. Phys. Condens. Matter., **8**, 10361-10376 (1996)
- (505) The Low Temperature Phase of α -(BEDT-TTF)₂KHg(SCN)₄: II. Pressure Dependence of the Shubnikov-de Haas Oscillations, A.A. House, W. Lubczynski, S.J. Blundell, J. Singleton, W. Hayes, M. Kurmoo and P. Day, J. Phys. Condens. Matter., **8**, 10377-10392 (1996)
- (506) Coordination Complexes as Organic-Inorganic Layer Magnets: P. Day, J.C.S. Dalton Trans., 701-705 (1997)
- (507) Proceedings of the Royal Institution, Vol 67 ed. P. Day, Oxford University Press, 1996
- (508) Unveiling the Microcosmos, ed. P. Day, Oxford University Press, 1996

- (509) Neutron and Optical Spectra of Magnetically Ordered Crystals, P. Day, ch. in Inorganic Electronic Structure and Spectroscopy, Vol. II, Applications and Case Studies, ed. A.B.P. Lever and E.I. Solomon, New York: John Wiley, 623-650 (1999)
- (510) New Molecular Superconductor Containing Paramagnetic Chromium(III) Ions, L. Martin, S.S. Turner, P. Day, F.E. Mabbs and E.J.L. McInnes, J.C.S., Chem. Commun. 1367-1368 (1997)
- (511) Synthesis, Structure and Physical Properties of the Organic-Inorganic Hybrid Salt (BEDT-TTF)₆[PMo₁₂O₄₀].(4CH₃CN.6H₂O), M. Kurmoo, M. Bonamico, C. Bellitto, V. Fares, F. Federici, P. Guionneau, L. Ducasse, H. Kitagawa and P. Day, Adv. Mater., **10**, 7, 545-550 (1998)
- (512) Low Temperature Crystal Structure of the Organic Metal ([²H₈]BEDT-TTF)4Cl₂.6D₂O [BEDT-TTF = bis(ethylenedithio)tetrathiafulvalene], P. Guionneau, C.J. Kepert, M. Rosseinsky, D. Chasseau, J. Gaultier, M. Kurmoo, M.B. Hursthouse and P. Day, J. Mater. Chem., **8**, 2, 367-371 (1998)
- (513) Molecular Information Processing: Will it Happen?, P. Day, Proc. Roy. Inst. G.B., **69**, 85-106 (1998)
- (514) Magnetic Breakdown and Quantum Interference in the Quasi-two-dimensional Superconductor κ -(BEDT-TTF)₂Cu(NCS)₂, N. Harrison, J. Caulfield, J. Singleton, P.H.P. Reinders, I. Deckers, F. Herlach, W. Hayes, M. Kurmoo and P. Day, Synth. Met., **86**, 1961-1962 (1997)
- (515) Proceedings of the Royal Institution, Vol. 68, ed. P. Day, Oxford University Press, 1997
- (516) Exploring the Universe, ed. P. Day, Oxford University Press, 1997
- (517) GEM - General Materials Diffractometer at ISIS, W.G. Williams, R.M. Ibberson, P. Day and J.E. Enderby, Physica B Condensed Matter, **241-243**, 234-236 (1998)
- (518) A New Kind of Magnetic Resonance Observed in the Molecular Metal α -ET₂KHg(SCN)₄, A. Ardavan, J.M. Schrama, A. Semeno, J. Singleton, W. Hayes, M. Kurmoo and P. Day, Physica B 258, 649-653 (1998)
- (519) The Importance of Edge States in the Quantum Hall Regime of the Organic Conductor α -(BEDT-TTF)₂KHg(SCN)₄, M. M. Honold, N. Harrison, J. Singleton, H. Yaguchi, C. Mielke, D. Rickel, I. Deckers, P. H. P. Reinders, F. Herlach, M. Kurmoo and P. Day, J. Phys., Condens. Matter **9**, L533-L541 (1997)
- (520) Making Magnets from Molecules, P. Day, Science Spectra, **13**, 2-7 (1998)
- (521) New Kind of Magneto-Optical Resonance in the Organic Metal α -(BEDT-TTF)₂KHg(SCN)₄, A. Ardavan, J.M. Schrama, S.J. Blundell, J. Singleton, W. Hayes, M. Kurmoo, P. Day and P. Goy, Phys. Rev. Lett., **81**, 3, 713-716 (1998)
- (522) The Quantum Hall Effect and chiral Fermi liquids in a quasi-two-dimensional organic conductor at very high magnetic fields, H. Yaguchi, N. Harrison, M. M. Honold, C. Mielke,

J. Singleton, P. J. Gee, D. Rickel, I. Deckers, P. H. P. Reinders, F. Herlach, M. Kurmoo and P. Day, *Physica B Cond. Matt.*, **249-251**, 75-78, 1998

- (523) Chiral Fermi liquids and a new version of the Quantum Hall Effect observed in organic conductors at very high magnetic fields, J. Singleton, N. Harrison, M.M. Honold, H. Yaguchi, C. Mielke, D. Rickel, I. Deckers, P.H.P. Reinders, F. Herlach, M. Kirmoo and P. Day, *Physica B Cond. Matt.*, **246-247**, 6-11 (1998)
- (524) Lord Dainton FRS: an Obituary, P. Day, *St John's College Notes*, 60-63 (1998)
- (525) Connectivity, Chirality and Conductivity in Layer Molecular Magnets, P. Day, Ch. In *Supramolecular Engineering of Synthetic Metallic Materials: Conductors and Magnets*, ed. J. Veciana, Kluwer Academic Publishers, Dordrecht, 253-270 (1999)
- (526) The Magnetic Structures of the Layer Ferrimagnets $P(C_6D_5)_4MFe(C_2O_4)_3$ ($M^{II} = Mn, Fe$), C. J. Nuttall and P. Day, *Inorg. Chem.*, **37**, 15, 3885-3888 (1998)
- (527) Magnetization of the Layer Compounds $AFe^{II}Fe^{III}(C_2O_4)_3$ ($A =$ Organic Cation), in Low and High Magnetic Feilds: Manifestation of Néel N and Q Type Ferrimagnetism in a Molecular Lattice, C.J. Nuttall and P. Day, *Chemistry of Materials*, **10**, 10, 3050-3057 (1998)
- (528) Molecular Conductors and Magnets: Structure-Magnetic Property Relationships, M. Kurmoo, P. Day and C.J. Kepert , in *Supramolecular Engineering of Synthetic Metallic Materials: Conductors and Magnets*, ed. J. Veciana, Kluwer Academic Publishers, Dordrecht, 271-290 (1998)
- (529) Muon Spin Rotation in the Molecular-based Layer Ferrimagnets $AFe(II)Fe(III)(C_2O_4)_3$ ($A = N(n-C_4H_9)_4, P(C_6H_5)_4$), C.J. Nuttall, S.G. Carling and P. Day, *Sol. St. Commun.*, **110**, 39-43 (1999)
- (530) Effect of Template Molecule on the Conductivity of the Molecular Metals β -(BEDT-TTF)₄[$(H_2O)Fe(C_2O_4)_3$. template] (template = benzonitrile, pyridine), S. Turner, P. Day, K.M.A. Malik and M.B. Hursthouse. *Inorg. Chem.*, **38**, 3543-3549 (1999)
- (531) Modelling Stacking Faults in the Layered Molecular Based Magnets $AM^{II}Fe(C_2O_4)_3$ { $M^{II} = Mn, Fe; A =$ Organic Cation}, C.J. Nuttall and P. Day, *J. Sol. St. Chem.*, **147**, 3-10 (1999)
- (532) Magnets from Molecules, P. Day, *Sci. In Parliament* **55**, 11-12 (1998)
- (533) Proceedings of the Royal Institution, Vol. 69. ed. P. Day, Oxford University Press, 1998
- (534) Fermi Surface Traversal Resonances in $\alpha - (ET)_2KHg(SCN)_4$ A. Ardavan, J.M. Schrama, S.J. Blundell, W. Hayes, J. Singleton, M. Kurmoo and P. Day. *Synth. Met.*, **103**, 2038-2039 (1999)
- (535) Quantum Oscillations in α -(BEDT-TTF)₂KHg(SCN)₄ above the Neel Temperature, M.M. Hanold, N. Harrison, C.H. Mielke, J. Singleton, M.C. Bennett, M. Kurmoo and P. Day, *Synth. Met.*, **103**, 2048-2049 (1999)

- (536) Magnetic Breakdown in the High-Field Phase of the Organic Conductor α -(BEDT-TTF)₂KHg(SCN)₄, M.M. Honold, N. Harrison, M.-S. Nam, J. Singleton, C.H. Mielke, M. Kurmoo and P. Day, *Synth Met.*, **103**, 2093-2094 (1999)
- (537) Anion-Cation Interdependency in BEDT-TTF Tris-oxalato-metallate(III) Charge Transfer Salts, S.S. Turner, P. Day, L. Martin and S. Rashid, *Synth. Met.*, **108**, 1638-1641 (1999)
- (538) One- and Two- Dimensional Angle-Dependent Magnetoresistance Oscillations (AMROs) in κ - (BEDT – TTF)₂Cu(SCN)₂ in Fields of up to 33T, M.-S. Nam, M.M. Honold, C. Proust, N. Harrison, C.H. Mielke, S.J. Blundell, J. Singleton, W. Hayes, M. Kurnoo and P. Day, *Synth. Met.*, **103**, 1905-1906 (1999)
- (539) Magnetism in Organic Ion Radical Salts and Complexes Based on Nitronyl Nitroxide, T. Sugano and P. Day, *Synth. Met.*, **103**, 2335-2336 (1999)
- (540) Millimetre-Wave Response of the Organic Superconductor κ – (BEDT – TTF)₂Cu(SCN)₂ , J.M. Schrama, A. Ardavan, J. Singleton, S.J. Blundell, W. Hayes, M. Kurmoo and P. Day, *Synth. Met.*, **103**, 1947-1948 (1999)
- (541) Angle Dependence of Upper Critical Field in the layered Organic Superconductor ?-(BEDT-TTF)₂Cu(NCS)₂, M.S. Nan, J.A. Symington, J. Singleton, S.J. Blundell, A. Ardavan, J.A.A.J. Perenboom, M. Kurmoo and P. Day, *J. Phys. Cond. Matt.*, **11**, L477-L488 (1999)
- (542) Chemistry and the Synthesis of Novel Materials, P. Day, *Pure and Appl. Chem.*, **71**, 6, 931-937 (1999)
- (543) Coordination Complexes in Two-Dimensional Magnets and Superconductors, P. Day, *Coord. Chem. Rev.*, **190-192**, 827-839 (1999)
- (544) Several Kinds of Aminoxy Radical and their Metal Complexes, T. Sugano, S.J. Blundell, F.L. Pratt, T. Jestat, B.W. Lovett, W. Hayes and P. Day, *Mol. Cryst. Liq. Cryst.*, **334**, 477-496 (1999)
- (545) Magnetic Breakdown in the Organic Conductor α -(BEDT-TTF)₂KHg(SCN)₄ in Magnetic Fields of up to 60 T, M.M. Honold, N. Harrison, M.-S. Nam, J. Singleton, C.H. Mielke, M. Kurmoo and P. Day, *Phys. Rv. B*, **58**, 11, 1-5 (1998)
- (546) Effect of Organic Cation A in the Crystal Structure and Magnetisation of the layer Molecular Ferrimagnets AFe^{II}Fe^{III}(C₂O₄)₃, C.J. Nuttall, S.G. Carling and P. Day, *Mol. Cryst., Liq. Cryst.*, **334**, 615-630 (1999)
- (547) Tuned-Circuit Differential Susceptometer for High-Pressure and Low-Temperature Studies of Small Organic Crystals: A New Way of Increasing Quantum Oscillations, M.S. Nam, J. Singleton, A.-K Kleche, W. Hayes, M. Kurmoo and P. Day, *Synth. Met.*, **103**, 2259-2260 (1999)
- (548) The Search for Extraterrestrial Life, P. Day (ed.), *Oxford University Press*, 1998

- (549) Cyclotron Resonance Study of α -Et₂Me₂N[Ni(dmit)₂]₂, M. Inokuchi, A. Ardavan, J. Singleton, P. Day, A. Sato, T. Naito, H. Kobayashi and A. Kobayashi, *Synth. Met.*, **103**, 1835-1836 (1999)
- (550) Millimetre Wave Magneto-optical Detection of Anisotropy of the Superconducting Order Parameter in the Molecular Superconducor ?-(BEDT-TTF)₂Cu(NCS)₂, J.M. Schrama, E. Rzerniewski, R.S. Edwards, . Singleton, A. Ardavan, M. Kurmoo and P. Day, *Phys. Rev. Lett.*, **83**, 3041-3044 (1999)
- (551) 3D-Long Range Magnetic Ordering up to 50K in Triangular Metal Hydroxide Layered Lattices 24Å Apart, M. Kurmoo, P. Day, C. Estournes, M Drillon, A. Derrory, R. Poinsot and C.J. Kepert, *J. Solid State Chem.*, **145**, 452-459 (1999)
- (552) Many Happy Returns at the RI, P. Day, *Chem. in Brit.*, 30-35 (April 1999)
- (553) Polymorphism based on molecular stereoisomerism in tris(oxalato) Cr(III) salts of bedt-ttf (bis(ethylenedithio)tetrathiafulvalene), L. Martin, S.S. Turner, P. Day, K.M.A. Malik, S.J. Coles, and M.B. Hursthouse *J.C.S. Chem. Commun.*, 513-514 (1999)
- (554) Proc. Roy. Inst. G.B., Vol. 70, P. Day (ed.), Oxford University Press, 1999
- (555) Killers in the Brain, P. Day (ed.), Oxford University Press (1999)
- (556) Faraday Today at the Royal Institution, P. Day, *Proc. Roy. Inst. G.B.*, **70**, 1-20 (1999)
- (557) Molecular Chemistry of Magnets and Superconductors, P. Day, *Phil. Trans. Roy. Soc. A*, **357**, 3163-3184 (1999)
- (558) Metal-Organic and Organic Molecular Magnets, P. Day and A.E. Underhill (eds.), *Phil. Trans. Roy. Soc. A.*, **357**, 1762, 2849-3184 (1999)
- (559) Molecular Based Magnets: Setting the Scene, P. Day and A.E. Underhill, *Phil. Trans. Roy. Soc. A.*, **357**, 2851-2853 (1999)
- (560) Polarised Neutron Diffraction Study of the Extended Honeycomb Molecular Network d₂₀-P(C₆D₅)₄MnFe(C₂O₄)₃, D. Visser, S.G. Carling, I.D. Watts, P. Day and K.H. Anderson, *J. Appl. Phys.*, **85**, 5378-5380 (1999)
- (561) Structural Properties of the Superconducting Salt (BEDT-TTF)₃Cl₂(H₂O)₃ at Low Temperatures, J. Gaultier, S. Gebrand-Brachetti, P. Guionneau, C.J. Kepert, D. Chaseau, L. Ducasse, Y. Burrans, M. Kurmoo and P. Day, *J. Sol. State Chem.*, **145**, 496-502 (1999)
- (562) ESR Investigation of the Low Temperature State in α -(BEDT-TTF)₂KHg(SCN)₄, A. Semeno, J. Singleton, A. Ardevan, M. Schrama, M. Kurmoo and P. Day, *Synth. Mat.*, **103**, 1949-1950 (1999)
- (563) Jean Rouxel: Gentil homme de la science, P. Day, *Actualité Chimique*, Janvier 2000, p.31
- (564) John Stuart Anderson, P. Day, *New Dictionary of National Biography*, Oxford University Press, 7-8 (1996)

- (565) A Periodic Density Functional Study of BEDT-TTF Salts, S.A. French, P. Day and C.R.A. Catlow, Chem. Commun., 2015-2016 (1999)
- (566) The use of Experimental Data in Constraining the Tight-Binding Band Parameters of Quasi-Two-Dimensional Organic Molecular Metals: Application to α -(BEDT-TTF)₂KHg(SCN)₄, N. Harrison, E. Rzepniewski, J. Singleton, P.J. Gee, M.M. Honold, P. Day and M. Kurmoo, J. Phys. Condens. Matter., **11**, 7227-7242 (1999)
- (567) Structures et Propriétés Physiques de Complexes de Coordination Organisées dans l'Etat Solide, P. Day, Comptes Rendus Acad. Sci. (Paris),t2, Série IIc, 675 - 684 (1999)
- (568) Mapping of the Anomalous Transport Regime in the a-(BEDT-TTF)₂MHg(SCN)₄ (M = K, Tl) Organic Conductors, M.M. Honold, N. Harrison, M.V. Kartsovnik, H. Yagushi, J. Singleton, C.H. Mielke, N.D. Kusch, M. Kurmoo and P. Day, Phys. Rev. B, **62**, 7908-7919 (2000)
- (569) Crystal Chemistry and Physical Properties of Superconducting and Semiconducting Charge Transfer Salts (BEDT-TTF)₄[A^IM^{III}(C₂O₄)₃]C₆H₅CN (A^I = H₃O, NH₄, K; M = Ti, Cr, Fe, Co, Gd, Al; BEDT-TTF = bisethylenedithiotetrathiafulvalene), L. Martin, S.S. Turner, P. Day, P. Guionneau, J.A.K. Howard, K.M.A. Malik, M.B. Hursthouse, M. Uruichi and K. Yakushi, Inorg. Chem., **40**, 1363-1371 (2001)
- (570) A Monte Carlo Study of Honeycomb Lattice Ferrimagnets, S.G. Carling and P. Day, Polyhedron, **20**, 1525-1528 (2001)
- (571) Neutron Polarisation Analysis of the Magnetic Ordering of the Quasi-two-dimensional Honeycomb Network d₂₀-P(C₆D₅)₄Fe^{II}Fe^{III}(C₂O₄)₃, D. Visser, S.G. Carling, I.D. Watts, P. Day and K.H. Anderson, Physica B, **267-268**, 266-269 (1999)
- (572) Synthesis, Crystal Structure and Properties of the Semiconducting Molecular Charge Transfer Salt (BEDT-TTF)₂Ge(C₂O₄)₃.C₆H₅CN, L. Martin, S.S. Turner, P. Day, P. Guionneau, J.A.K. Howard, M. Uruichi, K. Yakushi, J. Mater. Chem., **9**, 2731-2736 (1999)
- (573) Structure of the n = 2 and n = 8, Members of the Ruddlesden - Popper Series Sr_{n+1}Sn_nO_{3n+1} M. A. Green, K. Prassides, P. Day and D. A. Neumann, Int. J. Inorg. Mater. **2**, 35-41 (2000)
- (574) Olivier Kahn, magneto chemist (1943 - 1999) P. Day, Nature , **403** 498 (2000)
- (575) Hybrid Organic-Inorganic molecular Compounds: A Crystal Structure - Electronic Property Relationship for α , Θ and y phases of (BEDT-TTF)₂X, M. Kurmoo and P. Day, J Physique IV, **10**, 153-159 (2000)
- (576) X-ray Emission Spectra and Electronic Structure of Molecular-Superconductors containing Paramagnetic 3d Ions, E.Z. Kurmoev, V.R. Galakhov, A. Moewes, S Shimada, K. Endo, S.S. Turner, P. Day, R.N. Lyubovskaya, D.L. Ederer and M. Iwami, Phys. Rev. B, **62**, 11380-11383 (2000)

- (577) TTF Based Charge Transfer Salts of $[M(NCS)_4(C_9H_7N_2)]^-$ where M = Cr, Fe and $C_9H_7N_2$ = isoquinoline: Observation of Bulk Ferrimagnetic Order, S.S. Turner, C. Michaut, S. Durot, P. Day, T. Gellbrich and M.B. Hursthouse, J. Chem. Soc., Dalton Trans., 905-909 (2000)
- (578) A Molecular Charge Transfer Salt of BEDT-TTF (bisethylenedithiotetrathiafulvalene) with the oxalate-bridged dimeric anion $[Fe_2(C_2O_4)_5]^{4-}$, S. Rashid, S.S. Turner, P. Day, M.E. Light and M.B. Hursthouse, Inorg. Chem., **39**, 2426-2428 (2000)
- (579) TTF-based charge transfer salts of $[Cr(NCS)_4(phen)]^-$: Bulk magnetic order and crystal structures of the TTF, TMTTF and TMTSF derivatives, S.S. Turner, D. Le Pevelin, P. Day and C.K. Prout, J. Chem. Soc. Dalton Trans., 2739-2744 (2000)
- (580) Solid State Chemistry at the Millennium: Where Have we Come From, Where Are we Going? P. Day, J. Chem. Soc., Dalton Trans., 3483-3488 (2000)
- (581) Lustrous GEM, P. Day, Chem. In Britain, **36**, [8], 24 (2000)
- (582) TTF Based Molecular Magnets: Structural and Physical Properties of New Salts with $[Cr(NCS)_4(phen)]^-$ Anion, D. Le Pevelin, S.S. Turner, P. Day and C.K. Prout, Synth. Met., **120**, 1842-1843 (2001)
- (583) A New Family of Conducting and Magnetic Charge Transfer Salts from BMDF-TTF, M. Mas Torrent, S.S. Turner, K. Wurst, J. Vidal-Gaucedo, J. Veciana, C. Rovira and P. Day, Synth. Met., **120**, 799-800 (2001)

- (584) Molecules and Magnets: Joining Chemistry with Physics. The Legacy of Olivier Kahn, P. Day, Comptes Rendus Acad. Sci. (Paris) Chimie, **4**, 1-4 (2001)
- (585) Magnetism in Organic Radical Ion Salts and Complexes Based on Nitronyl Nitroxide, T. Sugano, S.J. Blundell, W. Hayes and P. Day, Synth. Met., **120**, 1812-1813 (2001)
- (586) Observation of Fulde-Ferrell-Larkin-Ovchinnikov State in κ -(BEDT-TTF)₂Cu(NCS)₂, J. Symington, J. Singleton, M.-S. Nam, A. Ardavan, W. Hayes, M. Kurmoo, P. Day, J. Schlueter, Synth. Met., **120**, 711-712 (2001)
- (587) Interplane Corrugations in the Quasi-One-Dimensional Fermi Surface Sections of κ -(BEDT-TTF)₂Cu(NCS)₂, R.S. Edwards, J.M. Schrama, E. Rzepniewski, A. Ardavan, J. Singleton, M. Kurmoo and P. Day, Synth. Met., **120**, 953-954 (2001)
- (588) Novel Charge Transfer Salts of BEDT-TTF with Tris-Oxalatometallate Anions, S. Rashid, P. Day, S.S. Turner, M.E. Light, M.B. Hursthouse and P. Guionneau, Synth. Met., **120**, 985-986 (2001)
- (589) Comprehensive Delineation of the Anomalous Magneto-transport Regime in (BEDT-TTF)₂MHg(SCN)₄ (M=Tl, K), M. Honold, J. Singleton, N. Harrison, M. Kartsovnik, N.D. Kushch, P. Day and M. Kurmoo, Synth. Met., **120**, 1025-1026 (2001)
- (590) Setting the GEM, P. Day, Mater. World, **8**, 25 (2000)
- (591) Muon Spin Relaxation Studies of Magnetic Ordering in the Molecular-Based Ferrimagnets PPh₄Mn^{II}Fe^{III}(C₂O₄)₃ and (n-C₄H₉)₄NFe^{II}Fe^{III}(C₂O₄)₃, I.D. Watts, S.G. Carling, P. Day and D. Visser, J. Phys.: Cond. Matt., **13**, 2225-2233 (2001)
- (592) Learning the Rules of the Game: Research in the University Environment, P. Day, in 'Role of a Research University in the Early Twenty Hundreds', Proc. JAIST 10th Anniversary Conf., JAIST Kanazawa, 24-28 (2001)
- (593) Crystal and Magnetic Structures of AFe^{II}Fe^{III}(C₂O₄)₃ (A = organic cation): Two Dimensional Honeycomb Ferrimagnets, S.G. Carling, P. Day and C.J. Nuttall, Spectrochim. Acta, **A57**, 1971-1979 (2001)
- (594) New Superconducting Charge Transfer Salts β'' -(BEDT-TTF)₄[A.M(C₂O₄)₃]_nC₆H₅NO₂; A = H₃O or NH₄; M = Cr or Fe; BEDT-TTF = bisethylenedithio-tetrathiafulvalene, S. Rashid, S.S. Turner, P. Day, J.A.K. Howard, P. Guionneau, E.J.L. McInnes, F.E. Mabbs, R.J.H. Clark, S. Firth and T. Biggs, J. Mater. Chem., **11**, 2095-2101 (2001)
- (595) Batir les Aimants Moléculaires et Rapprocher Chimie et Physique, P. Day, Actualités Chimiques, **no. 6**, 19-20 (2001)
- (596) New Molecular Charge Transfer Salts of BEDT-TTF (bisethylenedithiotetrathia-fulvalene) with Thiocyanato-Anions: (BEDT-TTF)₄[Fe(NCS)₆]_n·CH₂Cl₂ and (BEDT-TTF)₂[Cr(NCS)₄...bipym] 0.15H₂O, S.S. Turner, P. Day, T. Gelbrich and M.B. Hursthouse, J. Sol. St. Chem., **159**, 385-390 (2001)

- (597) Neutral bis(ethylenedithio)tetrathiafulvalene at 100K, P. Guionneau, D. Chasseau, J.A.K. Howard and P. Day, *Acta Cryst., C*, **56**, 453-454 (2000)
- (598) Synthesis, Structure and Magnetic Properties of Organic-Intercalated Bimetallic Molecular-Based Ferrimagnets ($n\text{-C}_n\text{H}_{2n+1}\text{PPh}_3\text{M}^{\text{II}}\text{Fe}^{\text{III}}(\text{C}_2\text{O}_4)_3$ ($\text{M}^{\text{II}} = \text{Mn, Fe}$; $n = 3\text{-}7$), I.D. Watts, S.G. Carling and P. Day, *J.C.S. Dalton Trans.*, 1429-1434 (2002)
- (599) A Model for the Magnetic Properties of $(\text{BEDT-TTF})_3\text{CuX}_2\text{Br}_2$ ($\text{X} = \text{Cl, Br}$), M. Kurmoo and P. Day, *Mol. Cryst. Liq. Cryst.*, **380**, 101-107 (2002)
- (600) The First Molecular Charge Transfer Salt Containing Proton Channels, S. Rashid, S.S. Turner, P. Day, M.E. Light, M.B. Hursthouse, S. Firth and R.J.H. Clark, *Chem. Commun.*, 1462-1463 (2001)
- (601) $\text{f}^{\text{u}}\text{-(BEDT-TTF)}_4[(\text{H}_3\text{O})\text{Cr}(\text{C}_2\text{O}_4)_3]\text{CH}_2\text{Cl}_2$: Effect of Included Solvent on Structure and Properties of a Conducting Molecular Charge Transfer Salt, S. Rashid, S.S. Turner, D. Le Pevelen, P. Day, M.E. Light, M.B. Hursthouse, S. Firth and R.J.H. Clark, *Inorg. Chem.*, **40**, 5304-5306 (2001)
- (602) Evidence for the Fulde-Ferrell-Larkin-Ovchinnikov State in the Organic Superconductor $\text{f}^{\text{u}}\text{-(BEDT-TTF)}_2\text{Cu}(\text{NCS})_2$, J.A. Symington, J. Singleton, M.-S. Nan, A. Ardavan, M. Kurmoo and P. Day, *Physica B*, **294-295**, 418-423 (2001)
- (603) Unexpected Additional Damping of Magnetic Quantum Oscillations in Layered Organic Conductors in Tilted Magnetic Fields, J.A. Symington, J. Singleton, N. Clayton, J. Schleuter, M. Kurmoo and P. Day, *Physica B*, **294-295**, 439-441 (2001)
- (604) Site Dilution of Two-Dimensional Honeycomb Molecular Ferrimagnets $\text{AFe}^{\text{II}}\text{Fe}^{\text{III}}(\text{C}_2\text{O}_4)_3$ ($\text{A} = (\text{n-C}_4\text{H}_9)_4\text{N;P(C}_6\text{H}_5)_4$), I.D. Watts, S.G. Carling and P. Day, *Phys. Chem. Chem. Phys.*, 4418-4422 (2001)
- (605) Count Rumford Lights His Stove, P. Day, *Country Life*, 21 May 2001
- (606) Interplane Transport Effects in Layered Organic Conductors, J.A. Symington, J. Singleton, N. Harrison, N. Clayton, J. Schleuter, M. Kurmoo and P. Day, *Synth. Met.*, **120**, 1842-1843 (2001)
- (607) Functionalised Organo-Sulphur Donor Molecules: Synthesis of Racemic Hydroxymethyl-, Alkoxyethyl- and Dialkyloxyethyl-bis(ethylene-dithio)tetrathiafulvalenes, N. Suggili, R.J. Brown, P. Day, R. Hoctzed, P. Kathirgormanathan, E.R. Magecau, T. Ozturk, M. Pilkington, M.M.B. Qayijum, S.S. Turner, L. Vorweg and J.D. Wallis, *Tetrahedron*, **57**, 5015-5026 (2001)
- (608) An Unusual Phase Transition in the Crystal Structure and Physical Properties of $(\text{TTF})_9[\text{Mo}(\text{CN})_8]_2\cdot 4\text{H}_2\text{O}$ ($\text{TTF} = \text{tetrathiafulvalene}$), G. Rombaut, S.S. Turner, D. Le Pevelen, C. Mathonière, P. Day and C.K. Prout, *J.C.S. Dalton Trans.*, 3244-3249 (2001)

- (609) Crystal Structures and Physical Properties of Ferromagnetic Tris-dithio-oxalato-salts $AM^{II}Cr^{III}(C_2S_2O_2)_3$ ($A = n\text{-}C_nH_{2n+1}$) $_4N$; $n = 3\text{--}5$, P(C_6H_5) $_4$; $M^{II} = Mn, Fe, Co, Ni$), J. Bradley, S.G. Carling, D. Visser, P. Day, D. Hautot and G.J. Long, Inorg. Chem., **42**, 986-996 (2003)

- (610) Local Order and Structural Transitions in the Molecular-Based Layer Ferrimagnets $AM^{II}Fe^{III}(C_2O_4)_3$ (A = $(N-C_4H_9)_4N$; P(C_6H_5)₄; M = Mn, Fe), I.D. Watts, S.G. Carling and P. Day, *J. Phys. Chem. Solids*, **66**, 932-935 (2005).
- (611) Molecular Materials Combining Magnetic and Conducting Properties, P. Day and E. Coronado, ch. in Magnetoscience: Molecules to Materials, ed. J.S. Miller and M. Drillon, Wiley-VCH, Weinheim, **Vol 5**, pp105-159 (2004)
- (612) Interaction Between Cation and Anion Sublattices in Molecular Charge Transfer Salts: Structural Conditions for Ferrimagnetism, S.S. Turner, D. Le Pevelen and P. Day, *Synth. Met.*, **133-134**, 497-500 (2003)
- (613) Molecular Magnets: The Prehistory, P. Day, *Notes Rec. Roy. Soc.*, **56**, 1, 95-103 (2002)
- (614) Mössbauer Spectral Study of Two Layered Honeycomb Molecular Magnets: $PPh_4Fe^{II}Fe^{III}(ox)_3$ and $NBu_4Fe^{II}Fe^{III}(ox)_3$, D. Hautot, P. Day, G.J. Long, F. Grandjean, J. Ensling and P. Gütlich, *Hyperfine Interactions (C)*, **5**, 371 (2002)
- (615) A Polarized Neutron Diffraction and Mössbauer Spectral Study of Short Range Magnetic Correlations in the Ferrimagnetic Layered Compounds $(PPh_4)[Fe^{II}Fe^{III}(ox)_3]$ and $(NBu_4)[Fe^{II}Fe^{III}(ox)_3]$, S.G. Carling, D. Visser, D. Hautot, I.D. Watts, P. Day, J. Ensling, P. Gütlich, G.J. Long and F. Grandjean, *Phys. Rev. B*, **66**, 104407.1-104407.12 (2002)
- (616) Christian Klixbull Jørgensen (1931-2001): Inorganic Spectroscopist Extraordinaire, P. Day, *Coord. Chem. Rev.*, **1**, 238-239, 3-8 (2003)
- (617) Valence Band Spectra of BEDT-TTF and TTF Based Magnetic Charge Transfer Salts, E.Z. Kurmaev, A. Moewes, S.G. Chiuzbian, L.D. Finkelstein, M. Neumann, S.S. Turner and P. Day, *Phys. Rev. B*, **65**, 235106.1 – 235106.5 (2002)
- (618) Synthesis, Structure and Physical Properties of TTF-Based Conducting Charge Transfer Salts with Anions Containing Selenocyanate Ligands, S.S. Turner, D. Le Pevelen, C.K. Prout and P. Day, *J. Sol. State Chem.*, **168**, 573-581 (2002)
- (619) Observation of the Fulde-Ferrell-Larkhin-Ovchinnikov State in the Quasi two-dimensional Organic Superconductor $\kappa-(BEDT-TTF)_2Cu(NCS)_2$, J. Singleton, J.A. Symington, M.S. Nam, A. Ardavan, M. Kurmoo and P. Day, *J. Phys. Cond. Matt.*, **12**, L641-L648 (2000)
- (620) Whereof Man Cannot Speak: Some Scientific Vocabulary of Klixbull Jørgensen, P. Day, *Structure and Bonding*, Springer-Verlag, Vol. **106**, 7-18 (2004)

- (621) Millimetre-Wave Measurements of the Bulk Magnetoconductivity of Anisotropic Metals: Application to the Organic Superconductors β'' -(BEDT-TTF)₂Cu(NCS)₂ and β'' -(BEDT-TTF)₂SF₅CH₂CF₂SO₃, J.M. Schrama, J. Singleton, R.S. Edwards, A. Ardevan, E. Rzepniewski, R. Harris, P. Goy, M. Gross, J. Schlueter, M. Kurmoo and P. Day, *J. Phys. Cond. Matter.*, **13**, 2235-2262 (2001)
- (622) Preparation, X-ray crystal structures and properties of α -(BEDT-TTF)₂Fe[(phen)(NCS)₄].2CH₂Cl₂ and (BEDT-TTF)[Cr(isoq)₂(NCS)₄]; phen= 1,10-phenanthroline and isoq= isoquinoline, F. Setifi , S. Golhen , L. Ouahab , S.S. Turner and P. Day, *Cryst. Eng. Comm.*, **4**, 1-6 (2002)
- (623) Effect of Included Guest Molecules on the Normal State Conductivity and Superconductivity of β'' -(ET)₄[(H₃O)Ga(C₂O₄)₃].G (G = pyridine, nitrobenzene), H. Akutsu, A. Akutsu-Sato, S.S. Turner, D. Le Pevelen, P. Day, V. Laukhin, A.-K. Klehe, J. Singleton, D.A. Tocher, M.R. Probert and J.A.K. Howard, *J. Am. Chem. Soc.*, **124**, 12430-12431 (2002)
- (624) Structures and properties of new superconductors, β'' -(ET)₄[(H₃O)Ga-(C₂O₄)₃]Sol [Sol = nitrobenzene and pyridine], H. Akutsu, A Akutsu-Sato, S.S. Turner, P. Day,* D.A. Tocher, M.R. Probert, J.A.K. Howard, D. Le Pevelen, A-K. Klehe, J. Singleton, V.N. Laukhin, *Synth. Met.*, **137/1-3**, 1239-1240 (2003)
- (625) Structures and Physical Properties of BEDT-TTF Salts Containing Channels of Protons, A. Akutsu-Sato, H. Akutsu, S.S. Turner, D. Le Pevelen, P. Day, M.E. Light, M.B. Hursthouse, T. Akutagawa and T. Nakamura, *Synth. Met.*, **135-136**, 597-598 (2003)
- (626) Magnetotransport measurements on β'' -(BEDT-TTF)₄ [(H₃O)Ga(C₂O₄)₃]. C₆H₅NO₂, A.F. Bangura, A.I. Coldea, J. Singleton, A. Ardavan, A.-K. Klehe, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *Synth. Met.*, **137**, 1313-1314 (2003)
- (627) The Philosopher's Tree : Michael Faraday's Life in his own Words, P. Day (ed.), Bristol, IOP Publishing, 1999.
- (628) Fermi Surface Traversal Resonance in Molecular Metals: Two Theories and an Experiment, A. Ardavan, J.M. Schrama, S.J. Blundell, J. Singeton, A. Semeno, P. Goy, M. Kurmoo and P. Day, *Proc Soc Photo-optical Instrument Engineers (SPIE)*, **3828**, 366-377 (1999)
- (629) Magnetotransport Measurements under Pressure on β'' -(BEDT-TTF)₄ [(H₃O)Ga(C₂O₄)₃]. C₅H₅N, A.-K. Klehe, A. Akutsu-Sato, H. Akutsu, S.S. Turner, V.N. Laukhin and P. Day, *Synth. Met.*, in press
- (630) New Molecular Charge Transfer Salts of TMTTF and BMDT-TTF with Thiocyanato and Selenocyanato-Complex Anions (TMTTF = tetramethyl-tetrathiafulvalene; BMDT-TTF = bis (methylenedithio) tetrathiafulvalene), M. Mas Torrent, S.S. Turner, K. Wurst, J. Vidal-Gaucedo, J. Veciana, P. Day and C. Rovira, *Eur. J. Inorg. Chem.*, 720-725 (2003)

- (631) Contradictory Reports on Magnetic Properties of Layered Molecule-Based Material $N(n-C_3H_7)_4[Fe^{II}Fe^{III}(C_2O_4)_3]$: a Commentary, P. Day, *Chem. of Mat.*, **15**, 2288 (2002)
- (632) Crystal Structures and Physical Properties of the Layered Molecular Ferromagnets $AM^{II}Fe^{III}(C_2S_2O_2)_3$ ($M = Mn, Co, Ni$), S.G. Carling, D. Hautot and P. Day, *Polyhedron*, **22**, 2317-2324 (2003)
- (633) Charge Transfer Salts: New Structures, New Functionalities, P. Day, *Compt. Rendu. Acad. Sci. (Paris), Chimie*, **6**, 301-308 (2003)
- (634) Magnetism in Organic Radical Ion Salts Based on Nitronyl Nitroxides Substituted with Heterocyclic Aromatic Hydrocarbons, T. Sugano, S.J. Blundell, W. Hayes and P. Day, *Polyhedron*, **22**, 2343-2348 (2003)
- (635) Synthesis of Bis(ethylenedithio)tetrathiafulvalene Derivatives with Metal Ion Ligating Centres, J.P. Griffiths, R.J. Brown, P. Day, B. Vital and J.D. Wallis, *Tetrahedron*, **44**, 3127-3131 (2003)
- (636) Porous Materials and Intercalation, P. Day, *J. Mater. Chem.*, **12**, ix (2002)
- (637) Superlattices of Donor Stacking in the Molecular Charge Transfer Salts (BEDT-TTF)₄[$(NH_4)M(C_2O_4)_3\cdot G$] ($M = Fe, Ga$; $G = phenylacetonitrile, acetophenone, phenylmethylformamide$). H. Akutsu, A. Akutsu-Sato, S.S. Turner and P. Day, *Chem. Commun.* 18-19 (2004)
- (638) Bulk Spontaneous Magnetisation in the Radical Cation Salt TMTTF[Cr(NCS)₄(isoquinoline)₂], M. Mas Torrent, S.S. Turner, K. Wurst, J. Vidal-Ganeedo, X. Ribas, J. Veciana, P. Day and C. Rovira, *Inorg. Chem.* **42**, 7544-7549 (2003)
- (639) Spring Changes, P. Day, *J. Mater. Chem.*, **13**, i (2003)
- (640) Millimetre-Wave Response of the Novel Organic Superconductors $\beta''-ET_4[(H_3O)M(C_2O_4)_3].S$ ($M = Fe^{3+}$, $S = C_6H_5CN$ and $C_6H_5NO_2$), A. Narduzzo, A. Ardavan, A.I. Coldea, J. Singleton, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *Synth. Met.* **137**, 1225-1226 (2003)
- (641) The Role of Magnetic Ions on the Magneto-Transport Properties of the Charge Transfer Salts $\beta''-(BEDT-TTF)_4[(H_3O)M(C_2O_4)_3]C_5H_5N$ ($M = Ga, Cr, Fe$), A.I. Coldea, A.F. Bangura, J. Singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *J. Mag. Mag. Mat.* **272-276**, 1062-1064 (2004)
- (642) Organic-Inorganic Hybrids: The Best of Both Worlds? P. Day, ch. in *Organic Conductors, Superconductors and Magnets*, ed. L. Ouahab and E. Yagubskii, Dordrecht, Kluwer Academic Publishers, 68-80 (2004)
- (643) Fermi Surface Topology and the Effects of Intrinsic Disorder in Charge Transfer Salts Containing Magnetic Ions, A.I. Coldea, A.F. Bangura, J. Singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *Phys. Rev. B*, **64**, 085112/1-11 (2004)
- (644) Apologia: 40 Years of Solid State Chemistry and Physics, P. Day, *J. Phys. Chem. Solids* **65**, 3-10 (2004)
- (645) New Year at JMC, P. Day, *J. Mater. Chem.*, **13**, xi-xii (2003)

- (646) Neutrons and Muons Probe Molecule-Based Metal-Organic Magnets, P. Day, S.G. Carling, S.S. Turner, J. Bradley, D. Hautot and D. Visser, ISIS Annual Report (Science Highlights) p8, (2003)
- (647) Magnetic Studies on the π -d Ferrimagnet TTF[Cr(NCS)₄(1,10-phenanthroline)], TTF = tetrathiafulvalene, S.S. Turner, S.G. Carling, P. Day, C.J. Gomez-Garcia and E. Coronado, *J. Physique IV (Paris)* **114**, 585-587 (2004)
- (648) Effect of Magnetic Ions and Disorder on Superconducting β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{M}(\text{C}_2\text{O}_4)_3\text{C}_6\text{H}_5\text{NO}_2$] Salts, A. Bangura, A. Coldea, J. Singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu and P. Day, *J Physique IV (Paris)* **114**, 285-287 (2004)
- (649) Fermiology of the New Charge Transfer Salts β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{M}(\text{C}_2\text{O}_4)_3$](Solvent) where M = Cr, Fe, Ga, A. Coldea, A. Bangura, J. Singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *J. Physique IV (Paris)* **114**, 205-209 (2004)
- (650) Electron Spin Resonance Studies of the Organic Superconductor β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{Fe}(\text{C}_2\text{O}_4)_3\text{C}_6\text{H}_5\text{CN}$, A. Narduzzo, A. Ardavan, J. Singleton, L. Pardi, V. Berou, A. Akutsu-Sato, H. Akutsu, S.S. Turner and P. Day, *J. Physique IV (Paris)*, **114**, 347-349 (2004)
- (651) Magnetism in Organic Radical Ion Salts Based on Imidazolyl and Benzimidazolyl Nitronyl Nitroxide, T. Sugano, S.J. Blundell, W. Hayes and P. Day, *J. Physique IV (Paris)* **114**, 651-653 (2004)
- (652) Magnetic Molecular Conductors, E. Coronado and P. Day, *Chem. Rev.* **104**, 5419-5448 (2004).
- (653) Synthesis of BEDT-TTF Derivations for Preparation of Chiral Electrically Conducting Materials, J.P. Griffiths, R.J. Brown, P. Day and J.D. Wallis, *Chem. Commun.* submitted
- (654) Synthesis of BEDT-TTF Derivations with Carboxylic Ester and Amide Functionalities, R.J. Brown, G. Calnarasa, J.P. Griffiths, P. Day and J.D. Wallis, *Tetrahedron Lett.* **45**, 5103-5107 (2004)
- (655) Synthesis, Structure and Physical Properties of BEDT-TTF Charge Transfer Salts of Paramagnetic Anions Containing Substituted Phenanthroline Ligands, S.S. Turner, D. Le Pevelen, P. Day, P.N. Horton, M.E. Light, C.K. Prout and M.B. Hursthouse, *JCS Dalton Trans.*, in preparation
- (656) GEM: The General Materials Diffractometer at ISIS – Multibank Capabilities for Studying Crystalline and Disordered Materials, P. Day, J.E. Enderby, W.G. Williams, L.C. Chapon, A.C. Hannon, P.G. Radaelli and A.K. Soper, *Neutron News*, **15**, 19-23 (2004)
- (657) Structures and Physical Properties of β'' -BEDT-TTF Tris-oxalate Metallic Salts containing Chlorobenzene and Halomethane Guest Molecules, A. Akutsu-Sato, T. Mori, A. Kobayashi, H. Akutsu, J. Yamada, S. Nikatsuji, S.S. Turner, P. Day, D. Tocher, M.E. Light and M.B. Hursthouse, *Synth. Met.*, **152**, 373-376 (2005).

- (658) The First Proton Conducting Metallic Ion Radical Salts, A. Akutsu-Sato, H. Akutsu, S.S. Turner, P. Day, M.R. Probert, J.A.K. Howard, T. Akutagawa, S. Takeda and T. Nakamura, *Angew. Chem.*, **44**, 292-295 (2004)
- (658) Ion-radical Salts: a new kind of Ferrimagnet, S S Turner and P Day, *J.Mater.Chem.*, **15**, 23-25 (2005).
- (659) Pressure-induced Magnetic Transition in a Molecule-based π -d Ferrimagnet, S. G. Carling, S. S. Turner, M. Ellaby, S. S. Saxena and P. Day, *J. Mat. Chem.*, submitted.
- (660) The Robust Superconducting State in the Low-quasiparticle-density Organic Metals β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{M}(\text{C}_2\text{O}_4)_3$]Y; Superconductivity due to Proximity to a Charge-ordered State, A.I. Coldea, A.F. Bangura, J. Singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu, S.S. Turner, P. Day, T. Yamamoto and K. Yakushi, *Phys. Rev. B*, **72**, 014543.1-13 (2005).
- (661) Synthetic Strategies to Chiral Organo-sulphur Donors Related to Bis(ethylenedithio)tetrathiafulvalene, J-P. Griffiths, H. Nie, R. J. Brown, P. Day and J. D. Wallis, *Org. Biol. Chem.*, 1-12 (2005).
- (662) The First Molecular Charge Transfer Salt Containing Layers of an Alkali Metal, L. Martin, P. Day, P. Horton, A. Bingham and M. B. Hursthouse, *J. Low Temp. Phys.*, **142**, 417-420 (2006).
- (663) Nature Not Mocked: Places, People and Science, P. Day, London, Imperial College Press, ISBN 1-86094-576-7, 2005.
- (664) The Crystal and Magnetic Structures of the Organic-Inorganic Layer Compound Phenylphosphonato-Mn(II) Hydrate: a Synchrotron X-ray and Neutron Powder Diffraction Study, S. G. Carling, D. H. Talham, D. Visser and P. Day, *Solid State Sciences*, **8**, 321-325 (2006).
- (665) Synthesis, Crystal Structures and Magnetic Properties of TTF-type Charge Transfer Salts with Schiff-base Anions, S. Wang, P. Day, J. D. Wallis, M. Holden and M. B. Hursthouse, *Polyhedron*, **25**, 2583-2592 (2006).
- (666) A Spin Resonance Investigation of Magnetism and Dynamics in the Charge Transfer Salts β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{M}(\text{C}_2\text{O}_4)_3$].S, A Narduzzo, A I. Coldea, A. Ardavan, J. Singleton, L. Pardi, V. Bercu, A. Akutsu-Sato, H. Akutsu, S. S. Turner and P. Day, *J. Low Temp. Phys.*, **142**, 581-584 (2006).
- (667) TTF Charge Transfer Salts of Cyanometallate Anions $[\text{M}(\text{phen})(\text{CN})_4]^-$ ($\text{M}=\text{Cr}, \text{Fe}$; phen=1,10-phenanthroline), S. Wang, P. Day, M. Julve and J. D. Wallis, *Inorg. Chim. Acta*, **359**, 3283-3290 (2006).
- (668) Tuning Electronic Ground-states by using Chemical Pressure in Quasi-two dimensional β'' -(BEDT-TTF)₄[$(\text{H}_3\text{O})\text{M}(\text{C}_2\text{O}_4)_3$].Y, A. I. Coldea, A. F. Bangura, J. singleton, A. Ardavan, A. Akutsu-Sato, H. Akutsu and P. Day, *J. Low Temp. Phys.*, **142**, 253-256 (2006).
- (669) Inhomogeneous Site Charge Distribution around the Insulator-Superconductor Transitions of the β'' -type ET Salts, T. Yamamoto, M. Uriuchi, K. Yakushi, A. Kawamoto, H. Akutsu, A. Akutsu-Sato and P. Day, *J. Low Temp. Phys.*, in press.

- (670) Organic-Inorganic Layer Compounds as Molecular Functional Materials, P. Day, Mol. Cryst. Liq. Cryst. **455**, 15-28 (2006).
- (671) Magnetic Order in the Organic-Inorganic Layer Compound $(CD_3PO_3)Mn.D_2O$: a Neutron and Synchrotron X-ray Powder Diffraction Study, S. G. Carling, D. Visser and P. Day, J. Mater. Chem., **16**, 2698-2701 (2006).
- (672) Molecules to Materials: Case Studies in Materials Chemistry – Spectra, Magnetism and Superconductivity, P. Day, World Scientific, Singapore, 2007. (ISBN 13978-981-270-038-4).
- (673) First example of a single enantiomer of tris-oxalato-Fe(III), L. Martin, P. Day, A. Bingham and M. B. Hursthouse, Dalton Comm., submitted.
- (674) Synthetic strategies for preparing BEDT-TTF derivatives functionalised with metal-binding sites, Q. Wang, P. Day, J-P. Griffith, H. Nie and J. D. Wallis, New J. Chem., **30**, 1790-1800 (2006).
- (675) Suppression of superconductivity in a molecular charge transfer salt by changing guest molecule: $\beta''-(BEDT-TTF)_4[(H_3O)Fe(C_2O_4)_3](C_6H_5CN)_{1-x}(C_5H_5N)_x$, A. Akutsu-Sato, H. Akutsu, J. Yamada, S. Nakatsuji, S. S. Turner and P. Day, J. Mat. Chem., **17**, 2497-2499 (2007).
- (676) Multi-layered molecular Charge Transfer Salts Containing Alkali Metal Ions, L. Martin, P. Day, W. Clegg, R. Harrington, P. Horton, A. Bingham, M. B. Hursthouse, P. McMillan and S. Firth, J. Mat. Chem., **17**, 3324-3329 (2007).
- (678) Mixed Valence: Origins and Developments, P. Day, N. S. Hush and R. J. H. Clark, Phil. Trans. Roy. Soc. A, **366**, 5-14 (2007).
- (679) Synthesis of Bis(ethylenedithio)tetrathiafulvalene (BEDT-TTF) Derivatives Functionalised with Two, Four or Eight Hydroxyl Groups.R. J. Brown, A. C. Brooks, J-P. Griffiths, B. Vital, P. Day, J. D. Wallis , Org. Biomol. Chem., **5**, 3172-3182 (2007).
- (680) Metallic Molecular Crystals containing Chiral or Racemic Guest Molecules, L. Martin, P. Day, H. Akutsu, S. Nakatsuji, J. Yamada, W. Clegg, R. W. Harrington, P. N. Horton, M. B. Hursthouse, P. McMillan and S. Firth, CrystEngComm, **9**, 865-867 (2007).
- (681) Magnetic Molecular Charge-Transfer Salts containing Layers of Water and *tris*(oxalato)ferrate(III) Anions, L. Martin, P. Day, S. A. Barnett, D. A. Tocher, P. N. Horton and M. B. Hursthouse, CrystEngComm, **10**, 192-196 (2008).
- (682) Technique for Anisotropic Extension of Organic Crystals: Application to Temperature Dependence of Electrical Resistance, T. Yamamoto, R. Kato, H. M. Yamamoto, A. Fukaya, H. Akutsu, A. Akutsu-Sato and P. Day, Rev. Sci. Instr. **78**, 083906:1-11 (2007).
- (683) Neutron Powder Diffraction in Molecule-based Magnetic Materials: Long- and Short-range Magnetic Order, P. Day, Inorg. Chim. Acta, **361**, 3365-3370 (2008).

- (684) BEDT-TTF[Cr(NCSe)₄(1,10-phenanthroline)]: a Semiconducting π -d Ferrimagnet, A. Haywood, P. N. Horton, P. Day and S. S. Turner, Chem. Comm., to be submitted.
- (685) Inhomogeneous site charges at the boundary between the Insulating, superconducting and metallic phases of β'' -type bis-ethylenedithio-tetrathiafulvalene molecular charge transfer salts, T. Yamamoto, H. M. Yamamoto, R. Kato, M. Uriuchi, K. Yakushi, H. Akutsu, A. Akutsu-Sato, A. Kawamoto, S. S. Turner and P. Day, Phys. Rev. B **77**, 205120(1-14) (2008).
- (686) What is 'Materials Chemistry'?, P. Day, L. Interrante and A. West, Chemistry International **31**, 4-8 (2009).
- (687) 3,4-[2,2-Bis(methoxyethoxymethoxymethyl)propylenedithio]-3',4'-ethylenedithio)tetrathiafulvalene: a spiro-substituted BEDT-TTF analogue, A. C. Brooks, P. Day and J. D. Wallis, Acta Cryst. C **64**, 245-247 (2008).
- (688) Towards Defining Materials Chemistry, P. Day, L.V. Interrante and A.R.West, Pure & Applied Chemistry, **81**, 1707-1717 (2009).
- (689) Pyridine-functionalised (Vinylenedithio)tetrathiafulvalene (VDT-TTF) Derivatives and their Dithiolene Analogues, A. C. Brooks, P. Day, S.I.G. Dias, S. Rabaca, I.C. Santos, R.T. Henriques, J.D. Wallis and M. Almeida, Eur. J. Inorg. Chem. 3084-3093 (2009).
- (690) Novel Enantiopure Bis(pyrrolo)tetrathiafulvalene Donors Exhibiting Chiral Crystal Packing Arrangements, S. Yang, A. C. Brooks, L. Martin, P. Day, H. Li, P. Horton, L. Male, and J. D. Wallis, CrystEngComm **11**, 993-996 (2009).
- (691) Have We Been Here Before? Inorganic Precursors for Collective Electronic Behaviour of Molecular Crystals, P. Day, Physica B doi: 10.1016/j (2009).
- (692) A Molecular Charge Transfer Salt of BEDT-TTF Containing a Single Enantiomer of *tris*-oxalato-chromium(III) Crystallised from a Chiral Solvent, L. Martin, P. Day, S. Nakatsuji, J. Yamada and H. Akutsu, CrystEngComm 2010, DOI:10.1639/b916136h.
- (693) A spin-resonance study of the paramagnetic superconducting charge transfer salts b''-(BEDT-TTF)4[Fe(C₂O₄)₃].S (S=guest molecule), A. Narduzzo, A. I. Coldea, A. Ardavan, J. Singleton, L. Pardi, V. Bercu, A. Akutsu-Sato, H. Akutsu, S. S. Turner and P. Day, Phys. Rev. B, to be submitted (draft manuscript available).
- (694) Chiral Conductors from BEDT-TTF and Related Chiral Donor Molecules, L. Martin, J. D. Wallis, P. Day, S. Nakatsuji, J. Yamada and H. Akutsu, Physica B, DOI:10.1016/j.physb.2009.10.052 (2009).

(695) Chiral Conducting Salts of BEDT-TTF Containing a Single Enantiomer of tris-oxalato-chromium(III) Crystallised from a Chiral Solvent, L. Martin, P. Day, S. Nakatsuji, J. Yamada, H. Akutsu and P. Horton, *J. Mat. Chem.*, in press.