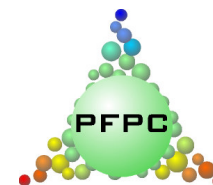


Publications - 2001



Book chapters

K Grieve, F Grieser and D N Furlong

"Formation of nanoparticles in organized amphiphilic films", Chapter 32, Reactions and Synthesis in Surfactant Systems, Surfactant Science Series Volume 100, J Texter ed., Marcel-Dekker, New York, 639-665 (2001)

A J O'Connor

"Investigative project in engineering: the mathematics of plastics recycling", Mathematics in Engineering, The Mathematical Association of Victoria, Melbourne, Australia, Chapter 2, 11-19 (2001)

J S J van Deventer, P G R de Villiers and L Lorenzen

"Recovery of valuable species from dissolving solids using ion exchange", Ion Exchange and Solvent Extraction Volume 14, Editors: JA Marinsky, AK SenGupta and Y Marcus, Published by Marcel Dekker Inc. 37-79 (2001)

Z Zhou, D V Boger, P J Scales and T W Healy

"Shear and compressional rheology principles in ceramic processing", Polymers in Particulate Systems: Properties and Applications, Marcel Dekker, Chapter 6, 157-195 (2001)

Journal articles

N Altmann, P J Halley, J Cooper-White and J Lange

"The effects of silica fillers on the gelation and vitrification of highly filled epoxy-amine thermosets", Macromolecular Symposia, 169:171-177 (2001)

Y Baba, K Hoaki, J M Perera, G W Stevens, T J Cardwell, R W Cattrall, S D Kolev

"Separation of Palladium (II) from Copper (II) acidic solutions using PVC membranes containing D2EHPA", Comptes rendus de l'Academie bulgare des Sciences (Proceedings of the Bulgarian Academy of Sciences) 54: 69-72 (2001)

S A Bagshaw, A R Hayman and P Mulvaney

"Materials research in Australia and New Zealand", Editorial for Advanced Materials 1, 13: 861-863 (2001)

B Boyd, C Drummond, I Krodkiewska, A Weerawardena, D Furlong and F Grieser

"Alkyl chain positional isomers of dodecyl b-D-glucoside", Langmuir, 17: 6100-6107 (2001)

K E Bremmell, N Wissenden and D E Dunstan

"Diffusing probe measurements in polyelectrolyte solutions – Deviations from Stokes-Einstein behaviour" JCIS 89-90:141-154 (2001)

J Canning, K Sommer, M Englund and S Huntington

"Direct evidence of two-types of UV-induced glass changes in silicate-based optical fibers", Advanced Materials, 13: 12-13 (2001)

O C S Cassell, W A Morrison, A Messina, A J Penington, E W Thompson, G W Stevens, J M Perera, H K Kleinman, J V Hurley, R Romeo and K R Knight

"The influence of extracellular matrix on the generation of vascularized, engineered, transplantable tissue", Ann. N.Y. Acad. Sci., 944: 429-442 (2001)

J A Chamberlain, K A Landman, J E Sader and L R White

"Incipient failure of a rectangular block under gravity", International Journal of Mechanical Sciences, 43: 793-815 (2001)

D Y C Chan

"Density functional theory of colloidal systems", Phy. Rev. E. 63: 061806 (2001)

D Y C Chan, R R Dagastine and L R White

"Forces between a rigid probe particle and a liquid interface: I The repulsive case", J. Colloid Interface Science 236: 141-154 (2001)

D Y C Chan, P Linse and S N Petris

"Phase separation in de-ionised colloidal systems: extended Debye-Hückel theory", Langmuir 17: 4202-4210 (2001)

R Chapman and P Mulvaney

"Electro-optical properties of silver nanoparticle thin films", Chem. Phys. Lett. 349: 358-362 (2001)

D Chen, W Fei, H R C Pratt and G W Stevens

"Impacts of packing section on mass transfer to drop swarms", Solvent Extraction and Ion Exchange, 19(1): 167-179 (2001)

Y Chen, M-L Liao, D V Boger and D E Dunstan

"Rheological characterisation of K -carrageenan/locust bean gum mixtures", Carbohydrate Polymers 46: 117-124 (2001)

S A Crawford, M J Higgins, P Mulvaney and R Wetherbee

"Nanostructure of the diatom frustule as revealed by atomic force and scanning electron microscopy", J. Phycology 37: 543 (2001)

R C Crooks, J J Cooper-White and D V Boger

"The role of dynamic surface tension and elasticity in the dynamics of drop impact", Chem. Eng. Science 56: 5575-5592 (2001)

R G de Kretser, S P Usher, P J Scales, K A Landman and D V Boger

"Rapid measurement of dewatering design and optimization parameters", AIChE J. 47: 1758-1769 (2001)

D E Dunstan, K Bremmell and N Wissenden

"Diffusing probe measurements in Newtonian and elastic fluids", Adv. Colloid and Int. Sci. 89: 141-152 (2001)

D E Dunstan, Y Chen, M-L Liao, R Salvatore, D V Boger and M Prica

"Structure and rheology of the K -carrageenan/locust bean gum gels", Food Hydrocolloids 15: 475-484 (2001)

D J Elliot, K Grieve, D N Furlong and F Grieser

"Preparation of Q-state particles in Langmuir-Blodgett films", Advances in Colloid and Interface Sci. 91: 113-158 (2001)

D Feng and J S J van Deventer

"Preg-robbing phenomena in the thiosulphate leaching of gold ores", Minerals Engineering 14(11): 1387-2402 (2001)

G V Franks, S B Johnson and D E Dunstan

"Novel gelforming process for near net shape ceramic component production", J. Australasian Ceramic Soc., 36: 1-5 (2000)

S J Gason, J J Cooper-White, D E Dunstan and D V Boger

"A spectroscopic study of polyelectrolyte solutions under shear", *Polymer* 42:6981-6989 (2001)

S J Gason, T A Smith, D V Boger and D E Dunstan

"Rheo-optics of a conjugated polymer system in shear", *Polymer*, 42: 7755-7764 (2001)

M L Gee, D G Goodall, G W Stevens

"Imaging of droplet profiles during drainage of a film between a droplet and an interface" *J. Oil and Gas Science and Technology. Rev. IFP* 56:1-12 (2001)

D G Goodall, M L Gee and G W Stevens

"Effect of surfactant on the drainage of an aqueous film between an oil droplet approaching a hydrophobic solid surface", *Langmuir*, 17: 3784-3787 (2001)

F Grieser and M Ashokkumar

"The effect of surface active solutes on bubble exposed to ultrasound", *Advances in Colloid and Interface Science*, 89-90: 423-438 (2001)

P J Harrington and G W Stevens

"Steady-state mass transfer and modelling in hollow fibre liquid membranes", *J. Membrane Science*, 192: 83-98 (2001)

G.H. Harrison, N.J. Lawson and D V Boger

"The measurement of the flow around a sphere settling in a rectangular box using 3-dimensional particle image velocimetry", *Chem. Eng. Commun.* 188: 143-178 (2001)

A Ho, L Bromberg, A J O'Connor, J Perera, G W Stevens and T A Hatton

"Solute diffusion in associative copolymer solutions", *Langmuir*, 17(12): 3538-3544 (2001)

B H Hutton, J M Perera, F Grieser and G W Stevens

"AOT reverse microemulsions in scCO₂ – a further investigation", *Colloids and Surfaces A*, 189: 177-181 (2001)

J Hulston and P J Scales

"Dewatering red mud – the effects of flocculation", *Chemical Engineering in Australia* March-May 26:17-21 (2001)

S T Huntington and S A Nespolo

"Precision attachment of (Silica) spheres to AFM cantilever tips", *Microscopy Today* Issue #01-3 April (2001)

S T Huntington, J Canning, K Sommer and A Carter

"Fibre lenses give a neat solution" *FibreSystems Europe*, April (2001)

S T Huntington, J Canning, K Sommer and A Carter

"Fibre lenses give a neat solution", *FibreSystems International*, June (2001)

S T Huntington

"Nanotechnology and our business future", *The Old Unicornian Magazine* Vol.32(3) June (2001)

S E Kentish and G W Stevens

"Innovations in separations technology for recycling and re-use of liquid waste streams", *Chem. Eng. J.*, 84: 149-159 (2001)

J Kisler, A Dähler, G W Stevens and A J O'Connor

"Separation of biological molecules using mesoporous molecular sieves", *Microporous and Mesoporous Materials*, 44-45: 769-774 (2001)

K A Landman, L Pel and E F Kaasschieter

"Analytic modelling of drying of porous materials", *Mathematical Engineering in Industry*, 8: 89-122 (2001)

K A Landman and C Please

"Tumour dynamics and necrosis: surface tension and stability", *IMA Journal of Mathematics Applied in Medicine and Biology*, 18:131-158 (2001)

V A Leão, G C Lukey, J S J van Deventer and V S T Ciminelli

"The dependence of sorbed copper and nickel cyanide speciation on ion exchange resin type", *Hydrometallurgy*, 61:105-119 (2001)

V A Leão, G C Lukey, J S J van Deventer and V S T Ciminelli

"The effect of resin structure on the loading of copper and iron cyano complexes", *Solvent Extraction and Ion Exchange*, 19(3): 507-530 (2001)

L M Liz-Marzan, D J Norris, M G Bawendi, T Betley, H Doyle, P Guyot-Sionnest, V I Klimov, N A Kotov, P Mulvaney, C B Murray, D J Schiffrin, M Shin, S Sun and C Wang

"New aspects of nanocrystal research", *Editorial for MRS Bulletin* 26: 981-984 (2001)

M D Louey, P Mulvaney and P J Stewart

"Characterization of adhesional properties of lactose carriers using AFM", *J. Pharmaceutical and Biomedical Analysis* 25: 559-567 (2001)

G C Lukey, J S J van Deventer and D C Shallcross

"Equilibrium model for the sorption of gold cyanide and copper cyanide on trimethylamine ion exchange resin in saline solutions", *Hydrometallurgy* 59(1):101-113 (2001)

C E McNamee, M Matsumoto, P G Hartley, P Mulvaney, Y Tsujii and M Nakahara

"Interaction forces and zeta potentials of cationic polyelectrolyte coated silica surfaces in water and in ethanol: effects of chain length and concentration of perfluorinated anionic surfactants on their binding to the surface", *Langmuir* 17: 6220 (2001)

C Mangelsdorf and A Tordesillas

"Real world maths in action! I'd like to see that!", *The Australian Mathematical Society Gazette* 28(3): 135-142 (2001)

G Maurdev and M L Gee

"Measurement of weak, short-range attractive forces superimposed on dominant, longer ranged interactions", *Langmuir*, 17:7439 -7441 (2001)

G Maurdev, L Meagher, J Ennis and M L Gee

"Surface forces between adsorbed quaternarized poly(2-vinylpyridine) layers: molecular rearrangements and bridging interactions", *Macromolecules*, 34: 4151-4158 (2001)

L J Michot, J Ghanbaja, V Tirtaatmadja and P J Scales

"Sol-gel transitions in aqueous suspensions of synthetic takovites. The role of hydrations properties and snisotropy" *Langmuir*, 17:2100-2105 (2001)

I L Muir, L Meagher and M L Gee

"Interaction forces between α -alumina fibres with coadsorbed polyelectrolyte and surfactant", *Langmuir*, 17: 4932-4939 (2001)

P Mulvaney

"Not all that is gold does glitter", *Invited Review*, *MRS Bulletin*, 1009-1014 (2001)

S A Nespolo, M A Bevan, D Chan, F Grieser and G. Stevens

"Hydrodynamic and electrokinetic properties of decane droplets in aqueous sodium dodecyl sulfate solutions", *Langmuir*, 17: 7210 – 7218 (2001)

L Pel, E F Kaasschieter and K A Landman

"Analytische beschrijving van vochtprofielen tijdens drogen", *NPT Procestechologie* 8: 20-22 (2001)

F W Petersen and J S J van Deventer

"A probabilistic model for the intrusion of solid fines in activated carbon", *Separation Science & Technology*, 36(4): 527-540 (2001)

J W Phair, JSJ van Deventer and J D Smith

"Interaction of sodium silicate with zirconia and its consequences for polysialation" *Colloids and Surfaces A* 182(1-3):143-159 (2001)

J W Phair and J S J van Deventer

"Effect of silicate activator pH on the leaching and material characteristics of waste-based geopolymers" *Minerals Engineering* 14(3):289-304 (2001)

K L Rees and J S J van Deventer

"Gold process modelling: Part I Batch modelling of the processes of leaching, preg-robbing and adsorption onto activated carbon", *Minerals Engineering*, 14(7): 753-773 (2001)

K L Rees, J S J van Deventer and R C Dunne

"Gold process modelling: Part II The effect of ore type on leaching and adsorption dynamics at Telfer gold mine", *Minerals Engineering*, 14(8): 887-2001 (2001)

A B Rodd, D E Dunstan, S B Ross-Murphy and D V Boger

"Dependence of linear viscoelastic critical strain and stress values on extent of gelation for a thermally activated gelling system", *Rheol. Acta* 40: 23-29 (2001)

A B Rodd, D E Dunstan, D V Boger, J Schmidt and W Burchard

"Heterodyne and non-ergodic approach to dynamic light scattering of polymer gels: aqueous xanthan in the presence of metal ions (A1(III))", *Macromolecules* 34:3339-3352 (2001)

A B Rodd, J J Cooper-White, D E Dunstan and D V Boger

"Gel point studies for chemically modified biopolymer networks using small amplitude oscillatory rheometry" *Polymers* 42:185-198 (2001)

A S Russell and P J Scales

"Insights into sample preparation for dielectric response measurements", *Colloids and Surfaces A*, 194: 271-286 (2001)

J E Sader

"Surface stress induced deflections of cantilever plates with applications to the atomic force microscope: rectangular plates", *J. Applied Physics* 89:2911-2921 (2001)

T Selvan, C Bullen, M Ashokkumar and P Mulvaney

"Highly luminescent glasses from CdSe quantum dots", *Advanced Materials*, 13: 142-146 (2001)

G W Stevens, J M Perera and F Grieser

"Interfacial aspects of metal ion extraction in liquid-liquid systems", *Reviews in Chemical Engineering*, 17(2): 87-110 (2001)

J R Stokes, L J W Graham, N J Lawson and D V Boger

"Swirling flow of viscoelastic fluids. Part I: Interaction between inertia and elasticity", *J. Fluid Mech* 429:67-115 (2001)

J R Stokes, L J W Graham, N J Lawson and D V Boger

"Swirling flow of viscoelastic fluids. Part II: Elastic effects", J. Fluid Mech 429:117-153 (2001)

V Tirtaatmadja, D E Dunstan and D V Boger

"Rheological behaviour of dextran in solution", J. Non-Newtonian Fluid Mech 97:295-301 (2001)

T Ung, L M Liz-Marzan and P Mulvaney

"Optical properties of Au @SiO₂ films", J. Physical Chemistry, 105: 3441-3452 (2001)

S P Usher, R G de Kretser and P J Scales

"Validation of a new filtration technique for dewaterability characterization", AIChE J. 47: 1561-1570 (2001)

S Usui and T W Healy

"Zeta potential of insoluble monolayer of long-chain alcohol at the air-aqueous solution interface", J. Colloid and Interface Science 240: 127-132 (2001)

J S J van Deventer, D Feng and A J Burger

"The use of bubble loads to interpret transport phenomena at the pulp-froth interface in a flotation column", Chem. Eng. Science, 56(21-22): 6313-6319 (2001)

K Vinodgopal, M Ashokkumar and F Grieser

"The ultrasonic degradation of a polydisperse nonylphenol ethoxylate in aqueous solution", J. Physical Chemistry B., 105: 3338-3342 (2001)

L Wangerek, H-H M Dahl, T Senden, J B Carlin, D A Jans, D E Dunstan, P A Ioannou, R Williamson and S M Forrest

"Atomic Force Microscopy imaging of DNA-cationic liposome complexes optimised for gene transfection into neuronal cells", J. Gene Medicine, 3:72-81 (2001)

C P Whitby, P J Scales, F Grieser, T W Healy, S Nishimura and H Tateyama

"The adsorption of DTAB on mica in aqueous solution studied by XRD and AFM", J. Colloid and Interface Science, 235: 350-357 (2001)

A Wood and P Mulvaney

"Fermi level equilibration in metal-quantum dot nanojunctions", J. Phys. Chem. 105: 8810 (2001)

H Xu, J S J van Deventer and G C Lukey

"Effect of alkali metals on the preferential geopolymerisation of stilbite/kaolinite mixtures", Industrial and Engineering Chemistry Research, 40: 3749-3756 (2001)

H Yu, G H Covey and A J O'Connor

"Silvichemicals from pulp mill waste – biosorption of metal ions on ellagic acid", APPITA J. 54(6): 511-517 (2001)

Z Zhou, P J Scales and D V Boger

"Chemical and physical control of the rheology of concentrated metal oxide suspensions" Chem. Eng. Science, 56: 2901-2920 (2001)