Colin Peter Please

1. PERSONAL INFORMATION

Email: please@maths.ox.ac.uk

2. PRESENT APPOINTMENT

Sept 2012 -	Professor of Applied Mathematics, OCIAM, University of Oxford University Lecturer in Industrial and Interdisciplinary Mathematics, Tutorial Fellow, Mansfield College, Oxford.

3. PREVIOUS APPOINTMENTS

1977 - 1979	Electrical Machines Group, Hirst Research Centre, General Electric Company, Wembley, England.
1979 - 1982	Mathematics Section, Central Electricity Research Laboratories, CEGB, Leatherhead, England.
1982 - 1983	Environmental Section, QEGB, Brisbane, Queensland, Australia.
July 1983 - Sept. 1983	Freelance consultant for State Electricity Commission, Queensland, Australia.
Aug. 1984 - Dec. 1984	Research assistant, Mathematical Institute, Oxford University, England.
Dec. 1984 - Dec. 1986	Research assistant, Mathematics Department, Reading University, England.
Jan. 1987 - Sept. 1994	Lecturer, Department of Mathematics, University of Southampton
Aug. 1991 - Aug. 1992	Visiting Professor Department of Mathematical Studies, RPI, Troy, NY, USA.
Oct. 1994 - June. 1998	Senior Lecturer, Department of Mathematics, University of Southampton
Aug. 1996 - March. 1997	Queensland University of Technology Visiting Fellow Department of Mathematical Sciences, Brisbane, Australia.
April 1996 - June 1997	Gledden Senior Visiting Fellow, Department of Mathematical Sciences, UWA, Perth, Australia.
July 1998 - June 2000	Reader, Department of Mathematics, University of Southampton
July 2004 - Sept. 2004	Queensland University of Technology Visiting Fellow Department of Mathematical Sciences, Brisbane, Australia.
July 2005 - Sept. 2005	Queensland University of Technology Visiting Fellow Department of Mathematical Sciences, Brisbane, Australia.
Jan. 2006 - Dec. 2011	Queensland University of Technology Adjunct Professor Department of Mathematical Sciences, Brisbane, Australia.
Sept. 2009 - Sept. 2011	OCCAM Visiting Fellow, OCCAM, University of Oxford, Oxford, UK
June 2000 - - Sept. 2012	Professor, University of Southampton, Southampton, UK

4. QUALIFICATIONS

1971 - 1974	B.Sc. in Engineering Mathematics (2nd class, upper division) University of Southampton, England.
1974 - 1975	M.Sc. from St. Catherine's College and Mathematical Institute, University of Oxford, England.
1975 - 1978	D.Phil. from St. Catherine's College and Mathematical Institute, University of Oxford, England.

5. HONOURS AND DISTINCTIONS

1995 - 1997	Elected member of the EPSRC mathematics college
1999 -	Member of Scientific Committee of the Smith Institute
2002 - 2005	Elected member of the EPSRC college
2006 - 2009	Elected member of the EPSRC college
2009 -	Chairman of Scientific Committee of the Smith Institute

6. POSTGRADUATE SUPERVISION (M.Sc., M.Phil and Ph.D.)

1985 - 1988 H. Erhie	Joint supervisor (with Dr. J.R. Ockendon) of D.Phil. at Oxford Mathematical models of rock blasting.
1987 - 1988 D. Browne	Joint supervisor (with Prof. P.T. Landsberg) of Ph.D. at Southampton Polycrystalline transistors. Supported by CASE award from SERC with Plessey
1988 - 1992 A.D. Kelly	Supervisor of Ph.D. student at Southampton University Mathematical modelling of geothermal reservoirs. Supported by CASE award from SERC with Camborne School of Mines Geothermal Energy Project
1988 - 1992 A.S. Paine	Supervisor of Ph.D. student at Southampton University Mathematical modelling of rock blasting. Supported by CASE award from SERC with ICI Explosives Technical Centre
1992 - 1994 D.A. Miles	Supervisor of M.Phil. student at Southampton University Mathematical modelling of amorphous semiconductor devices. Supported by SERC pool award.
1992 - 1996 W. Dunsmore	Co-supervisor with Mechanical Engineering (Dr. G. Pitts) Application of Taguchi methods at the design stage Supported by EPSRC research grant (Transferred to Dr S.M. Lewis) Awarded Ph.D. 1997
1993 - 1998 R.H. Self	Supervisor of Ph.D. student at Southampton University Mathematical Modelling of Polymer Dispersed Liquid Crystals
1995 - 2000 A.T. Miller	Supervisor of Ph.D. student at Southampton University Mathematical modelling of geothermal reservoirs. Supported by EPSRC pool award.
1998 - 2002 M.J. Tindall	Supervisor of Ph.D. student at Southampton University Mathematical modelling of tumour growth. Supported by ORS and Faculty Studentship award.

1999 - 2003	Supervisor of Ph.D. student at Southampton University
B.D. MacArthur	Mathematical modelling of stresses in tumours.
	Supported by EPSRC pool award.
2002 -	Supervisor of Ph.D. student at Southampton University
J.R. Healy	Mathematical modelling of crumpets.
	Supported by EPSRC CASE award did not complete degree
2002 - 2006	Supervisor of Ph.D. student at Southampton University
M. Lewis	Mathematical modelling of tumours.
	Supported by Faculty award.
2004 - 2011	Supervisor of Ph.D. student at Southampton University
J Moles	Mathematical modelling of brain pressure variations.
	Supported by EPSRC CASE award.
2005 - 2010	Joint-Supervisor (with T Melvin) of Ph.D. student at Southampton University
D Friedrich	Microfluidic devices for DNA detection.
	Supported by Southampton Optical Research Centre.
2007 -	Joint-supervisor (with A D Fitt) at Southampton University
Z. Ismail	Mathematical modelling of flow and deformation in the Human eye.
2007 - 2011	Supervisor of Ph.D. student at Southampton University
C.J. Catt	Mathematical models of tumour growth.
	Supported by EPSRC DTA award.
2007 - 2011	Joint-supervisor (with A D Fitt) of Ph.D. student at Southampton University
J Foster	Mathematical modelling of glass production.
	Supported by EPSRC CASE award.
2010 -	Joint-supervisor (with G Richardson) of Ph.D. student at Southampton University
R Ranom	Mathematical modelling of lithium batteries

7. RESEARCH GRANTS

Sept. 1991	SERC ACME grant GR/G60987/01
- Sept. 1994	"Modelling the Effects of Manufacturing Tolerances
	and Environmental Factors at the Design Stage".
	Co-investigator with Dr S.M. Lewis (Maths, Southampton) and
	Dr. G. Pitts (Mech. Eng. Southampton).
	Total grant £160,758.
June 1994	National Power grant, "Research into Experiments"
- Jan. 1995	Co-investigator with Dr S.M. Lewis (Maths, Southampton).
	Total grant £22,993.
Jan. 1995	EPSRC grant GR/K41588/01
- Dec. 1997	"Development of Efficient Taguchi-based Approaches to
	the Design of Products & Manufacturing Processes".
	Co-investigator with Dr S.M. Lewis (Maths, Southampton)
	and Dr. G. Pitts (Mech. Eng. Southampton).
	Total EPSRC grant £213,451.
	Additional cash contribution by Sauer Sundstrand £9,000.

March 1998 - Feb. 1999	EPSRC Technology Transfer Scheme GR/M17495/01 "Development of Efficient Taguchi-based Approaches to the Design of Products & Manufacturing Processes". Co-investigator with Dr S.M. Lewis (Maths, Southampton) Total EPSRC grant £46,227. Additional cash contribution by Sauer Sundstrand £12,000.
Sept. 1999 - March 2000	TRW Aeronautical Systems- Lucas Aerospace grant "Improved Gear Pump Manufacture and Performance using Structured Experiments". Co-investigator with Dr S.M. Lewis (Maths, Southampton) Total grant £19,000.
March 2000	Univ. Southampton Annual Grant "Quantum loudspeakers" with Dr C J Howls (Maths, Southampton). Total grant £19,000.
April 2000 - March 2003	EPSRC grant GR/N16754/01 "Improved product design and manufacturing through economical experimentation" with Prof S.M. Lewis (Maths, Southampton) and Prof A.J. Keane. (Mech Eng, Southampton) Total EPSRC grant £276,252. Additional cash contribution by TRW Aeronautical Systems, Jaguar Cars and Hosidon Besson of £52,000.
Nov 2001 - March 2002	EPSRC Visiting fellowship GR/R56570/01 "Problem-driven Applied Mathematics" for a visit by Dr M. McGuinness with Dr A.C. Fowler (Maths, Oxford) and Prof J.R. King (Maths, Nottingham) Total EPSRC grant £6,860.
July 2002 - July 2004	EPSRC grant GR/R93032/01 "Practical mathematical models of scraped surface heat exchangers" Through the Faraday Partnership in Mathematics and Computations with Prof A.D. Fitt (Maths, Southampton) Prof L. Pyle (Biosci, Reading) and Dr. S.K. Wilson. (Maths, Strathclyde) Total EPSRC grant £101,761. Additional in-kind contribution by ChemTech Intl. and Tetra Pak £46,700
April 2005 - April 2008	EPSRC grant EP/C003497/1 "Mathematical modelling of growth characteristics in hierarchically structured tissue-engineering populations" with Prof R Oreffo (Orthopaedics, Southampton) Dr G Packham (Cancer Sciences, Southampton) and Dr B MacArthur (Orthopaedics, Southampton) Total EPSRC grant £260,132.

Dec 2005	BBSRC grant 300424
- Dec 2008	"Using theoretical simulation to direct bone tissue engineering" with Prof R Oreffo (Orthopaedics, Southampton) Prof M Taylor (Engineering Sciences, Southampton) and Dr B MacArthur (Orthopaedics, Southampton) Total BBSRC grant £252,060.
Jan 2006	EPSRC grant EP/D502365/1
- Dec 2008	"Workshop: UK Mathematics-In-Medicine Study Groups 2005-2007 " with Prof H.R. Byrne (Maths, Nottingham), Dr S. Waters (Maths, Nottingham) and Dr C.J. Breward (Maths, Oxford) Total EPSRC grant £62,060
April 2008	EPSRC grant EP/F032994/1
- March 2011	" SYMBIOSIS: Synergy between Mathematics, Bio- and Nano-engineering at Southampton University" with Prof S.M. Lewis, Prof SM Spearing (Engineering Sciences, Southampton) Prof M Taylor (Engineering Sciences, Southampton) Total EPSRC grant £419,487
Jan 2008 - Dec 2012	EPSRC grant EP/F045077/1 "Workshop: UK Mathematics-in-Industry Study Groups, 2008–2012" Prof A.A. Lacey (Heriot-Watt), Prof A.R. Davies (Cardiff) Dr R. Purvis (UEA), Dr D.A. Wood (Warwick) Total EPSRC grant £183,501
Oct 2011	EPSRC grant EP/I01702X/1P
- March 2014	"Mathematical analysis of nanostructured electrochemical systems for lithium batteries and solar cells" with Dr G. Richardson (Maths, Southampton), Prof J. Owen (Chemistry, Southampton) Total EPSRC grant £239,227 Associated with EPSRC grant EP/I017070/1 £283,483 with Prof S.J. Chapman (OCIAM, Oxford), Prof A. Goriely (OCCAM, Oxford), Dr H. Snaith (Materials, Oxford)
Oct 2011	BBSRC grant BB/I011315/1
- Oct 2014	"Amino acid transport through the placenta: an experimental and modelling investigation" with Dr R.M. Lewis (Medicine, Southampton), Dr B. Sengers (Bio-engineering, Southampton) Total BBSRC grant £427,858 Associated with BBSRC grant BB/I011250/1 £362,106 with Prof C. Sibley (Medicine, Manchester)),

8. RESEARCH

Special research leave:

Study leave Aug. 1991 - Sept 1992. Part sabbatical, part unpaid leave.
Visited; RPI, NY; SUNY Bufffalo; IBM, Yorktown Heights; NIST, Gaithersburg;
Pall, Courtland; Los Alamos Laboratories, NM; IMA, Minnesota.

Study leave Aug. 1996 - Sept 1997. Part sabbatical, part unpaid leave.
Visited; QUT; Univ. Queensland; ADFA, Canberra; Univ Woolongong; Univ. Newcastle;
BHP, Newcastle; AMCL, Newcastle; QCAT, Brisbane; UWA, Perth.

Study leave Aug. 2005 - Jan 2006. Sabbatical.
Visited QUT Australia and Oxford University.

Study leave Feb. 2008 - July 2008. Unpaid leave and invitation.
Visited QUT and Univ Melbourne, Australia

Study leave July. 2008 - Aug 2008. Casual leave
Visited QUT Australia

9. PUBLICATIONS

Please C.P., *"Some mathematical problems of semiconductor devices"*. D.Phil. thesis, Oxford University, 1978.

Please C.P., An analysis of semiconductor p-n junctions, *IMA J. Appl. Math.*, **28**, pp301-318, 1982.

Edwards N.A., Please C.P., Preston R.W., Some observations on boundary conditions for the shallow water equations in two space dimensions, *IMA J. Appl. Math.*, **30**, pp161-172, 1983.

Baines M.J., Please C.P., Sweby P.K., Numerical solution of dopant diffusion equations, *Simulation of Semiconductor Devices and Processes, vol.2*, eds. Board, K., Owen, D.R.J.,Pineridge Press, Swansea, pp271-286, 1986.

Wilmott P., Please C.P., Wheeler A.A., A continuum theory for the mechanics of rock blasting, *Mathematical Scientist*, **11**, pp111-119, 1986.

Please C.P., Wheeler A.A., Wilmott P., A mathematical model of cliff blasting, *SIAM J. Appl. Math.*, **47**, pp117-127, 1987.

Please C.P., King J.R., Diffusion of dopant in crystalline silicon; an asymptotic analysis, *IMA J. Appl. Math.*, **37**, pp185-197, 1987.

Jeppson K.O., Anderson D., Amaratunga G., Please C.P., Analytical modelling of nonlinear diffusion of arsenic in silicon, *J. Electrochem. Soc.*, **134**, pp2316-2319, 1987.

Please C.P., Diffusion of dopant in semiconductor devices, *Proc. Minisymposium on Numerical Methods for Semiconductors and Magnets*, Jyväskyla, Finland, pp89-98, 1988.

Please C.P., Wilmott P., The deposition and resuspension of small radioactive particles in recirculating flow in a reactor, *Math. Engng. Ind.*, **1**, pp21-32, 1988.

Please C.P., King J.R., One- and two-dimensional nonlinear dopant diffusion in crystalline silicon - some analytical results, *Solid State Elect.*, **31**, pp299-305, 1988.

O'Neill A.G., Hill C., King J.R., Please C.P., A new model for the diffusion of arsenic in polycrystalline silicon, *J. Appl. Phys.*, **64**, pp167-178, 1988.

King J.R., Lacey A.A., Please C.P., Wilmott P., Formation of oscillation marks in continuously cast steel, *Proc. 5^{th} European Conf. Maths. in Industry*, Teubner Stuttgart & Kluwer Academic Publ., pp267-270, 1991.

King J.R., Lacey A.A., Please C.P., Wilmott P., Zoryk A., The formation of oscillation marks in continuously cast cteel, *Math. Engng. Ind.*, **4**, pp91-106, 1993.

Paine A.S., Please C.P., The asymptotic analysis of star cracks with a central hole, *Intl. J. Engrg. Science*, **31**, pp893-898, 1993.

Pitts G., Lewis S.M., Sexton C.J., Please C.P., The application of the Taguchi approach at the analytical design modelling stage, *Proc. Intl. Conf. Engng. Design*, The Hague 17-19 Aug 1993, pp943-946.

Dunsmore W., Pitts G., Please C.P., The application of Taguchi type experiments at the design analysis stage, *Proc 1st Newcastle Intl. Conf. Quality and Applications*, Newcastle 1-3 Sept 1993, pp513-518.

Landsberg P.T., Dewynne J.N., Please C.P., Rise and fall, *Nature*, **365**, p384, 1993.

Please C.P., Hagan P.S., Schwendeman D.W., Light-off behavior of catalytic converters, *SIAM J. Appl. Math.*, **54**, pp72-92, 1994.

Fitt A.D., Please C.P., Mathematical modelling and continuum mechanics in the steel industry, *Proc. 14th IMACS World Congress*, Georgia Tech, Atlanta, USA, July 11-15 1994, pp688-691.

Paine A.S., Please C.P., An improved model of fracture propagation by gas during rock blasting - some analytical results, *Int. J. Rock Mech. Min. Sci. & Geomech. Absrt.*, 31, pp699-706, 1994.

Please C.P., Schwendeman D.W, Hagan P.S., Ohmic heating of foods during aseptic processing, *IMA J. Math. Buss. Ind.*, **5**, pp283-301, 1995.

Dobie M.R., Dunsmore W., Lewis S.M., Pitts G., Please C.P., Sexton C.J., Achieving reliable engineering designs through insensitivity to unwanted variabilities, *Proc. ESREL'95*, Bournemouth, England, June. 1995, pp864-872.

Pitts G., Dunsmore W., Please C.P., Addressing quality engineering issues through evolutionary design methods, *Proc. Intl. Conf. Engng. Design*, Prague 22-24 Aug 1995, pp1114-1115.

Brewster M.E., Chapman S.J., Fitt A.D., Please C.P., Asymptotics of slow flow of very small exponent power-law shear-thinning fluids in a wedge, *Euro. J. Appl. Math.*, **6**, pp559-571, 1995.

Fitt A.D., Kelly A.D., Please C.P., Crack propagation models for rock fracture in a geothermal energy reservoir, *SIAM J. Appl. Math.*, **55**, pp1592-1608, 1995.

King J.R., Please C.P., Asymptotic analysis of the growth of cake layers in filters, *IMA J. Appl. Math.*, **57**, pp1-28, 1996.

Please C.P., Paine A.S., Gas propagation in cracks from cylindrical boreholes during blasting in mines, *ZAMM*, **76**, S4, pp265-268, 1996.

Fitt A.D., Please C.P., Crack propagation in a geothermal energy reservoir, *ZAMM*, **76**, S4, pp257-260, 1996.

Woodward D.E., Randall E., Sobehart J.R., Ueda T., Please C.P., Hagan P.S., Electron nonlocality in semiconductors *ZAMM*, **76**, S2, pp265-268, 1996.

Dunsmore W., Pitts G., Please C.P., Lewis S.M., Sexton C.J., Investigating design improvements of an hydraulic pump through planned experiments *Advances in Industrial Engineering Applications I*,Proceedings of the 1st Annual International Conference on Industrial Engineering Applications, pp830-835, 1996.

Pitts G., Dunsmore W., Please C.P., Lewis S.M., Sexton C.J., An application of experimental design to the development of improved hydraulic pumps, *Proc. 1st Intl. Nordicdesign Seminar on Engineering Design*, Finland 1996, pp103-108.

Sykulski J.K., Stoll R.L., Mahdi A.E., Please C.P., Modelling HTc superconductors for AC power loss estimation, *IEEE Trans. Mag.*, **33**, pp1568-1571, 1997.

Chapman S.J., Fitt A.D., Please C.P., Extrusion of power-law shear-thinning fluids with small exponent, *Intl. J. Non-linear Mech.*, **32**, pp187-199, 1997.

Dunsmore W., Pitts G., Lewis S.M., Please C.P., Sexton C.J., Carden P.C., Developing methodologies for robust mechanical engineering design, *Proc. I. Mech. E. series B - J. Engineering Manufacture*, **211**, pp179-188, 1997.

Liu F., McElwain D.L.S., Please C.P., Simulation of combustion waves for two-stage reactions, in *Computational Techniques and Applications: CTAC97*, World Scientific Publishing Co, Singapore. ISBN 981 02 3519 4, 1998.

Please C.P., Pettet G., McElwain D.L.S.,, A new approach to modelling the formation of necrotic regions in tumors, *Appl. Math. Lett.*, **11**, pp89-94, 1998.

McNabb A., Please C.P., McElwain D.S.L., Spontaneous combustion in coal pillars: buoyancy and oxygen starvation, *Mathematical Engineering in Industry*, **7**, pp283-300, 1999.

Stapley A.G.F., Landman K.A., Please C.P., Fryer P.J., Modelling the steaming of whole wheat grains, *Chem. Eng. Sci.*, **54**, pp965-975, 1999.

Self R.H., Please C.P., Sluckin T.J., Traveling-wave relaxation in elongated liquid crystal cells, *Phys. Rev. E*, **60**, ppR5029-R5032, 1999.

Please C.P., Pettet G.J., McElwain D.L.S., Avascular tumour dynamics and necrosis. *Mathematical Models and Methods in Applied Sciences*, **9**, pp569-579, 1999.

Landman K.A., Please C.P., Modelling moisture uptake in a cereal grain, *IMA J. Math. Buss. Ind.*, **10**, pp265-287, 1999.

Sexton C.J., Dunsmore W., Lewis S.M., Please C.P., Pitts G., Semi-controlled experiment plans for improved mechanical engineering designs, *Proc. I. Mech. E. series B - J. Engineering Manufacture*, 214, pp95-105, 2000.

Sexton C.J., Lewis S.M., Please C.P., Experiments for derived factors with an industrial application, Proc. Fifth Iranian Statistics Conference, Isfahan, Iran, pp169-182, 2000.

McGuinness M.J., Please C.P., Fowkes N., McGowan P., Ryder L., Forte D., Modelling the wetting and cooking of a single cereal grain, *IMA J. Math. Buss. Ind.*,**11**, pp49-70, 2000.

Farrell T.W., Please C.P., McElwain D.L.S., Swinkels D.A.J., Primary alkaline battery cathodes: a three scale model, *J. Electrochem. Soc.*, 147, pp4034-4044, 2000.

Please C.P., Paper tensions variations in a printing press, Chapter in "Modeling: Case studies in industry" ed. E. Cumberbach & A.D. Fitt, Cam. Univ. Press., 2001.

Landman K.A., Please C.P., Tumour dynamics and necrosis: surface tension and stability, *IMA J Maths. Appl. Med. Biol*, **18**, pp131-158 2001.

Sexton C.J., Lewis S.M., Please C.P., Experiments for semi-controlled and derived factors with application to hydraulic gear pumps, *J. Roy. Stat. Soc. Series C - App.*, **50**, pp155-170, 2001.

Fitt A.D., Please C.P., Practical Asymptotics for the flow of shear-thinning foodstuffs in annular scraped heat exchangers, *J. Eng. Math.*, **39**, pp345-366, 2001.

Pettet G, Please C.P., Tindall M.J., McElwain D.L.S, The migration of cells in multicell tumour spheroids, *Bull. Math. Biol.*, **63**, pp231-257, 2001.

Sexton C.J., Lewis S.M., Please C.P., Planned experiments for mechanical assemblies, Proc. 2001 ASME Design Engng. Tech. Conf., DFM-21168, New York: ASME., 2001.

Fitt A.D., Furusawa K., Monro T.M., Please C.P., Modelling the fabrication of hollow fibres: capillary drawing, *J. Lightwave Technol.*, **19**, pp1924-1931, 2001.

Fitt A.D., Furusawa K., Monro T.M., Please C.P., Richardson D.J., The mathematical modelling of capillary drawing for holey fibre manufacture, *J. Eng. Math.*, **43** pp201-227, 2001.

Fitt A.D., Howell P.D., King J.R., Please C.P., Schwendeman D.W., Multiphase flow in a roll press nip, *Euro. J. Appl. Math.*, **13**, pp225-259, 2002.

Self R.H., Please C.P., Sluckin T.J., Deformation of nematic liquid crystals in an electric field *Euro. J. Appl. Math.*, **13**, pp1-23, 2002.

Fitt A.D., Please C.P., Furusawa K., Monro T.M., Modelling fibre drawing: capillary manufacture, submitted to the Conference on Lasers and Electro-Optics (CLEO), May 19-24, 2002.

Please C.P., Liu F., McElwain D.L.S., Condensed phase combustion travelling waves with sequential exothermic or endothermic reactions, *Combustion Theory and Modelling*, **7** pp129-143, 2003.

Please C.P., McGuinness M.J., McElwain D.L.S., Approximations to the DAEM for coal pyrolysis, *Combustion and Flame*, **133**, pp107-117, 2003.

Dupplaw D., Brunson D., Vine A.E., Please C.P., Lewis S.M., Dean A.M., Keane A.J., Tindall M.J., Web-based knowledge elicitation and application to planned experiments for product development. Proc. 2003 ASME Design Engng Tech. Conf., New York: ASME, DETC2003/CIE-48275, Chicago, 2003.

Anthony D.K., Sexton C.J., Please C.P., Keane A.J., Charlston W.G., Lewis S.M., An efficient experiment methodology to investigate product design: an acoustic sounder case study. Proc. Intl. Conf. Managing Innovative Manufacturing, (MIM2003), A. Drejer and H. Boer (eds.), pp291-302. Aalborg, Denmark, 2003.

Borucki L.J., Witelski T., Please C.P., Kramer P.R., Schwendeman D.W., A theory of pad conditioning for chemical-mechanical polishing *J. Eng. Math.* **50**, pp1-24, 2004.

Sun K.-H., Pyle D.L., Fitt A.F., Please C.P., Baines M.J., Hall-Taylor N., Numerical study of 2D heat transfer in a scraped surface heat exchanger, Computers & Fluids, 33, pp869-880, 2004.

Fitt A.D., Please C.P., On the separation of coconuts - a modelling week study, *SIAM Rev.*, **46**, pp128-139, 2004.

Fitt A.D., Ockendon J.R., Please C.P., Free boundary problems in the steel industry, *Chinese J. Engng. Math.*, **21**, pp285-306, 2004.

MacArthur B.D., Please C.P., Taylor M., Oreffo R.O.C., , Mathematical modelling of skeletal repair, *Biochemical and Biophysical Research Communications*, 313, pp825-833, 2004.

Gac A., Atkinson J.K., Zhang Z., Sexton C.J., Lewis S.M., Please C.P., Sion R., Investigation of the fabrication parameters of thick film oxide-PVC pH electrodes using experimental designs *Microelectronics International*, **21**(3), pp44-53, 2004.

Dupplaw D., Brunson D., Vine A-J.E., Please C.P., Lewis S.M., Dean A.M., Keane A.J., Tindall, M.J., A web-based elicitation system (GISEL) for planned experiments during product development, *ASME Transactions - Journal Computing and Information Science*, **4**(3), pp218-225, 2004.

MacArthur B.D., Please C.P., Residual stress generation and necrosis formation in multi-cell tumour spheroids, *Journal of Mathematical Biology*, 49(6), pp537-552, 2004.

Macarthur B.D., Please, C.P., Pettet, G.J., A mathematical model of dynamic glioma-host interactions: receptor-mediated invasion and local proteolysis, *Mathematical Medicine and Biology*, **22**(3), pp247-264, 2005.

Lewis M.C., MacArthur B.D., Malda J., Pettet G., Please C.P., Heterogeneous proliferation within engineered cartilaginous tissue: the role of oxygen tension, *Biotechnology and Bioengineering*, **91**, pp607-615, 2005.

Farrell, T.W., Please C.P., Primary alkaline battery cathodes: A simplified model for porous manganese oxide particle discharge *J. Electrochem. Soc.*, **152**(10), A1930-A1941, 2005.

Jones M.B, Please C.P., McElwain D.L.S., Fulford G.R., Roberts A.P., Collins M.J., Dynamics of tear film deposition and draining *Mathematical Medicine and Biology* **22**(3), pp265-288, 2005.

Schley D., Carare-Nnadi R., Please C.P., Perry V.H., Weller, R.O., Mechanisms to explain the reverse perivascular transport of solutes out of the brain, *Journal of Theoretical Biology* **238**(4), pp962-974, 2006.

Johansen J.F., Farrell T.W., Please C.P., Modelling of Primary alkaline battery cathodes: A simplified model *J. Power Sources*, **156**(2), pp645-654, 2006.

Macarthur B.D., Tare R.S., Please C.P., Prescott P., Oreffo R.C., A non-invasive method for in situ quantification of subpopulation behaviour in mixed cell culture, *Journal of the Royal Society Interface*, **3**, pp63-70, 2006

Sexton C.J., Anthony D.K., Lewis S.M., Please C.P., Keane A.J., Design of experiment algorithms for assembled products, *The Journal of Quality Technology.*, **38**(4), pp298-308, 2006.

Muir A.C., Daniell G.J., Please C.P., Wellington I.T., Mailis S., Eason R.W., Modelling of UV laser-induced optical waveguide formation via lithium ion thermal-diffusion in LiNbO_3, *Applied Physics A*, **83**(3), pp389-396, 2006.

Sun K-H., Pyle D.L., Fitt A.F., Please C.P., Heat transfer in lid driven channels with power law fluids in a hydrodynamically fully developed flow field, *Computers and Chemical Engineering*, **31**(1), pp32-40 2006.

Muir A.C., Wellington I.T., Daniell G.J., Eason R.W., Mailis S., Please C.P., Modelling of UV direct-write waveguides in single crystal lithium niobate, *Lasers and Electro-Optics Europe CLEO/Europe*, 12-17 June 2005.

McElwain D.L.S, Jones, M.B., Fulford G., Please C.P., Collins M.J., Effect of tear additives on the shear stress and normal stress acting on the ocular surface, 16th Australasian Fluid Mechanics Conference, 2-7 December 2007, Gold Coast, Australia.

Fitt A.D., Lee M.E.M., Please C.P., Analysis of heat flow and "channelling" in a scraped surface heat exchanger, *J. Eng. Math.*, **57**(4), pp407-422, 2007.

Tindall, M.J., Please, C.P., Modelling the cell cycle and cell movement in multicellular tumour spheroids, *Bulletin of Mathematical Biology*, **69**(4), pp1147-1165, 2007.

Sengers B.G., Taylor M., Please C.P., Oreffo R.O.C. , Computational modelling of cell spreading and tissue regeneration in porous scaffolds, *Biomaterials* **28**(10), pp1926-1940, 2007.

Penny M., Farrell T.W., Please C.P , A mathematical model for the interfacial charge transfer at the semiconductor-dye-electrolyte interface of a dye-sensitised solar cell, *Solar Energy Materials and Solar Cells*, **92**, pp11-23, 2008.

Sengers B.G., Please C.P., Oreffo R.O.C., Experimental characterisation and computational modelling of 2D cell spreading for skeletal regeneration, *J. Roy. Soc. Interface*, **4**(17), pp1107-1117, 2007.

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10. PROFESSIONAL ACTIVITIES OUTSIDE THE UNIVERSITY

Membership of Professional Bodies:

Member of SIAM (Society for Industrial and Applied Mathematics)
Fellow of IAM (Institute of Mathematics and its Applications)

Study Group with Industry Activities:
Invited Participant in:

i) European Study Groups with Industry (Oxford Study Groups with Industry) (ESGI)
University of Oxford 1976, '77, '80, '82, '84, '85, '86, '87, '88, '96, 2004
University of Birmingham 1989
Heriot-Watt University 1990, '94
University of Southampton 1991, '98, 2009
Strathclyde University 1992
University of Nottingham 1993
University of Warwick 1994, 2010
Newton Institute, Cambridge 1995
University of Bath 1997
University of Edinburgh 1999
University of Sheffield 2000
University of Keele 2001
University of Lancaster 2002
University of Bristol 2003
University of Manchester 2005
University of Cardiff 2011
University of of Southern Denmark, Odense, Denmark 2005
University of of Southern Denmark, Lyngby, Denmark 2010

ii) Workshop on Mathematical Problems in Industry (MPI),
Rensselaer Polytechnic Institute, USA, 1986, '87, '88, '89, '90, '91, '92, '93, '94, '96, '98, 2001, '02, '10
University of Delaware, USA, 1999, 2000, '07, '09
Worcester Polytechnic Institute, USA, 2003, '05
Olin College, USA, 2006

iii) United States Study Group with Industry, Albuquerque, New Mexico, USA, 1995.

iv) Mathematics with Industry Study Group (MISG),
University of Melbourne 1995, '96
QUT Brisbane 1997, '98, '99
UniSA Adelaide 2000, '01

v) Mathematics in Medicine study group (MMSG),
Nottingham 2000, '01, '06
Oxford 2005
Southampton 2007
Imperial 2009
Reading 2011

vi) Chinese study groups with Industry, Shanghai 2000, '01

vii) Mathematics in the Geosciences, Borrowdale 2007

viii) Mathematics in Industry Study Group (MISGSA), Johannesburg 2011

Conference organisation:

Organising committee for European Study Group with Industry.
1991, '98, 2009

Organising committee for Mathematics in Medicine Study Group.
2007, '09

Organising committee for 2007 Nanoscale Physics and Technology meeting.

Special Consultant to United States Study Group with Industry 1995

Advisory board of ECMI96

Temporary ECMI representative on CICIAM 1997.

Member of the Scientific Committee for "Free Boundary Problems in Industry",
Isaac Newton Institute, July 2000

Organising committee for Smith Institute Faraday workshops,
Electromagnetic Compatibility, April 2001
Scraped Surface Heat Exchangers, Oct 2001

External Examiner

2000 - 2003	External examiner for MSc in Mathematical Modelling and Scientific Computing at University of Oxford.
2001 - 2003	External examiner for MSc in Applied and Computational Mathematics at University of Oxford.
2004 - 2008	External examiner for MSc in Modern Applications of Mathematics at University of Bath.

Thesis External Examiner

T. Sharpe	Dept. Theoretical Mechanics, University of Nottingham, External examiner - Ph.D. June 1995.
C. Robinson	Mathematics Dept., University of Oxford, External examiner - D.Phil. Oct. 1995.
P.J. Smith	Mathematics Dept., University of Portsmouth, External examiner - Ph.D. by publication May. 1996.
R Norgate	Mathematics Dept., RMCS Cranfield University, External examiner - Ph.D. Jan 1999.
P Bolchover	DAMPT, Cambridge University, External examiner - Ph.D. Jan 2001.
M Lee	Mathematics Dept., University of Oxford, External examiner - D.Phil. Sept. 2001.
C Poole	Mathematics Dept., University of Oxford, External examiner - D.Phil. Sept. 2005.
John Green	Dept. Theoretical Mechanics, University of Nottingham, External examiner - Ph.D. Nov 2006.
Andrew Ellis	Dept. Mathematics, University College London, External examiner - Ph.D. Dec 2006.
Jane Thredgold	Dept. Mathematics, UniSA, Adelaide External examiner - Ph.D. Nov 2007.
Andrew Fletcher	Dept of Mathematics, University of Oxford External examiner - D.Phil Feb 2011.

Refereeing:

Referee for Mathematical Medicine and Biology - A Journal of the IMA
Referee for IMA Journal of Applied Mathematics
Referee for SIAM Journal of Applied Mathematics
Referee for European Journal of Applied Mathematics