

Colin Peter Please

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 Phd 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 B.D. MacArthur	Supervisor of Ph.D. student at Southampton University Mathematical modelling of stresses in tumours. Supported by EPSRC pool award.
2002 - J.R. Healy	Supervisor of Ph.D. student at Southampton University Mathematical modelling of crumpets. Supported by EPSRC CASE award did not complete degree
2002 - 2006 M. Lewis	Supervisor of Ph.D. student at Southampton University Mathematical modelling of tumours. Supported by Faculty award.
2004 - 2011 J Moles	Supervisor of Ph.D. student at Southampton University Mathematical modelling of brain pressure variations. Supported by EPSRC CASE award.
2005 - 2010 D Friedrich	Joint-Supervisor (with T Melvin) of Ph.D. student at Southampton University Microfluidic devices for DNA detection. Supported by Southampton Optical Reseach Centre.
2007 - Z. Ismail	Joint-supervisor (with A D Fitt) at Southampton University Mathematical modelling of flow and deformation in the Human eye.

2007 - 2011 C.J. Catt	Supervisor of Ph.D. student at Southampton University Mathematical models of tumour growth. Supported by EPSRC DTA award.
2007 - 2011 J Foster	Joint-supervisor (with A D Fitt) of Ph.D. student at Southampton University Mathematical modelling of glass production. Supported by EPSRC CASE award.
2010 - R Ramone	Joint-supervisor (with G Richardson) of Ph.D. student at Southampton University Mathematical modelling of lithium batteries

RESEARCH GRANTS

Sept. 1991 - Sept. 1994	SERC ACME grant GR/G60987/01 “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 - Jan. 1995	National Power grant, “Research into Experiments” Co-investigator with Dr S.M. Lewis (Maths, Southampton). Total grant £22,993.
Jan. 1995 - Dec. 1997	EPSRC grant GR/K41588/01 “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 (Dept of Maths). 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 EPSRC Visiting fellowship GR/R56570/01
- March 2002 “Problem-driven Applied Mathematics”
with Dr A.C. Fowler (Oxford) and Prof J.R. King (Nottingham)
Total EPSRC grant £6,860.
for a visit by Dr M. McGuinness.

July 2002 EPSRC grant GR/R93032/01
- July 2004 “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 £46,70

April 2005 EPSRC grant EP/C003497/1
- April 2008 “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 (Nottingham), Dr S. Waters (Nottingham)
and Dr C.J. Breward (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 EPSRC grant EP/F045077/1
- Dec 2012 “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
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)),

Study Groups with Industry

- i) European Study Groups with Industry (Oxford Study Groups with Industry)
 - 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,
 - 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), Australia,
 - University of Melbourne 1995, '96,
 - QUT Brisbane 1997, '98, '99.
 - UniSA Adelaide 2000, '01.
- v) Mathematics in Medicine study group, 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