

CURRICULUM VITAE

Name: Dr Peter Rhys Lewis

Date of birth: 25 February 1945

Tertiary Education:

1. Department of Chemistry, Manchester University, 1963-1966 BSc (Hons) Class I
2. Department of Chemistry, Manchester University, 1966-1970 PhD (Phys Chem)

Professional Qualifications

1. Fellow of the Institute of Materials, FIMMM (1985-)
2. Chartered Engineer, CEng (1988-)
3. Member of the Forensic Science Society (1990-)
4. Member of the Society of Plastics Engineers (2000-)

Appointments and Experience

1. 1968 Research Associate, EI DuPont de Nemours Inc, Wilmington, USA
2. 1969-70 ICI Research Fellow, Dept of Physics, Manchester University
3. 1970-75 Lecturer in Metallurgy, Manchester University (Forensic work started)
4. 1975-77 Honorary Fellow (Mech and Aero Eng Dept) , University of Salford
5. 1975-1984 Lecturer in Materials, Open University
6. 1976-1992 Consultant to Oldham Batteries, Denton, Lancs
7. 1978-86 Joint holder of SERC Grant for Post-grad education
8. 1984- Senior Lecturer, Open University
9. 1988-94 Joint holder of Teaching Company grant from EPSRC
10. 1988-94 Joint holder with Consumer Research Labs of World Bank grant
11. 1988-90 External Examiner, University of North London (School of Polymers)
12. 1998- Joint holder of IGDS grant from EPSRC for new courses
13. 2000-03 External Examiner, Cranfield University (Forensic Eng and Science)
14. 2003- Member of Industrial Liaison Board, Cranfield University
15. 2003 PhD Examiner, Cranfield University
16. 2007 Member of Course Review Board, Cranfield University

Consultancy

1. Failure investigations of consumer, industrial and medical products where failure has resulted in injury, loss of product or confidence in either the product, the process or the material.
2. Design work including evaluation of intellectual property issues, such as patents, copyright, trade marks or design right.
3. Investigations include the following products or product areas:

- a) Miner's backpack lamps, battery cases (SLI, traction, storage etc), accessories such as methanometers, gas detectors, gas release valves etc; mining equipment (lights and conveyor belts etc)
- b) boats, sailboards, composite hulls (eg sculls)
- c) office products such as staplers, tackers, and electronic/electrical products such as label makers and residual current safety devices (RCD's). Plastic film products such as files, folders in p-PVC and PP), analysis of thin films for UV degradation , quality etc; shrink wrap film for packaging etc. Office chairs. Injection moulding tools and design.
- d) pressurized water supplies, including pumps and fittings, handpumps, rainwater supplies, septic tanks, storage tanks in polymers and composites
- e) consumer products such as buckets, domestic baths, vacuum cleaners, lawnmowers, ladders (extension, step and loft), luggage, latches, knives, coat hangers, packaging, batteries, exercise equipment, fishing rods, power tools, etc
- f) industrial products like rubber gloves, car components (fuel hose, tyres, etc), furniture and fittings, road cones, mancabs, beer barrels, sewage and storage tanks, industrial waste bins, wheelie bins, vehicle door latches etc
- g) adhesives for joining parts
- h) medical/ethical products such as catheters, condoms, breast implants, catheter fittings, balloon catheters and stents, wound sutures, intraocular lenses (IOL's) etc

Publications and Reports

I am the author or co-author of over 60 papers in academic journals such as *Engineering Failure Analysis*, and over 300 technical reports My books include *Dictionary of Materials Science and Technology* (Chambers) 1994
Structural Materials (Butterworth) 1992
Forensic Materials Engineering (CRC Press) 2004
Beautiful Railway Bridge of the Silvery Tay: re-investigating the Tay Bridge Disaster of 1879 (Tempus) 2004
Disaster on the Dee: Robert Stephenson's Nemesis of 1847 (Tempus) 2007
I chair two post-graduate courses, T838, Design and Manufacture with Polymers and T839 Forensic Engineering, and am a writing member of T357 Structural Integrity.