

# Roy Mortier

Chalfont House, Sevenhampton, Swindon, Wiltshire, SN6 7QA

[roy@mortier.co.uk](mailto:roy@mortier.co.uk)

Tel: 01793 762154

## PROFILE:

- Independent technology consultant with an interest in inter-disciplinary activities at the surface chemistry/engineering interface particularly related to automotive and pipe organ engineering and materials.
- A science and technology manager with experience of leading multi-disciplinary R&D teams in chemical, materials and automotive engineering environments.
- Track record of converting ideas into technical successes that have a positive impact on the business.
- Strong people management skills including personal development, career progression and mentoring.
- Innovative thinker with analytical problem solving skills.
- Able to think and operate outside the boundaries of science and technology.
- Broad experience of working with academia and professional institutions.

## EXPERIENCE:

### **2008 - MODULAR PIPE ORGAN SYSTEMS**

Company Secretary and installation technician for Modular Pipe Organ Systems (MPOS) [www.mpos-organs.com](http://www.mpos-organs.com), a company designing, building and installing combination organs for churches and music conservatoires. MPOS combines digital technology with speaking pipes to create an organ that is very close in sound to a traditional pipe organ but with significant savings in space requirements and costs.

### **2005 - TECHNOLOGY ADVISER**

Self-employed as an independent consultant particularly in the areas of automotive engine lubricants, surface engineering and materials. R&D project assessment for government agencies on a wide range of subjects including chemistry, materials, engineering, nanotechnology and manufacturing.

### **1985 - 2005 CASTROL TECHNOLOGY CENTRE, PANGBOURNE** **(part of BP from 2000)**

#### **1996 - 2005 Manager, Technology Development & Rig Test**

I managed a team of engineers and technicians whose role was twofold: to develop new lubricant tests using vehicles, fired engines or non-fired rigs and to provide a range of operational tests using non-fired test rigs. Tests were developed and operated in support of BP's worldwide lubricants business. During this time I significantly increased the diversity of tests available with major new developments each year in addition to modifications to existing tests. The new tests had a direct impact on BP's business both by enabling rapid screening of candidate lubricant formulations and by demonstrating superior performance to support marketing claims. Some tests were developed specifically for marketing requirements.

During this time the effectiveness of Rig Test improved with an increased test throughput year-on-year whilst the hourly cost per test decreased.

#### **1987 - 1996 Manager, Technology Development, Automotive Department**

My main objective was to identify technology needs for the automotive lubricants business over 2-5 years and to then initiate and manage Technology Development projects. Successes included a Bearing Oil Film Thickness test that was used to assess the

performance of novel, low viscosity, fuel efficient lubricants. Other successful projects were of direct relevance to overseas operations: lubricant additive technology for Castrol France and North America, and lubricant recyclability for Germany.

I also managed university relationships and co-ordinated the priorities of the Automotive Analytical team.

**1985 - 1987 Senior Research Scientist, Research Department**

My responsibility was the initiation and management of research projects that would impact on future lubricant technology. Much of the work was done in collaboration with universities. Technically successful projects included research on novel polymeric additives and the use of vegetable oils as lubricant additives.

**1982 - 1985 RAYCHEM CORPORATE R&D, SWINDON**

**Senior Technologist**

I managed multi-disciplinary teams working on long term projects to develop new materials. Technical successes included delaminated vermiculites as high temperature coatings and the use of poly(p-xylylene) in multi-layered electronic devices.

**1971 - 1982 ICI**

**1977 - 1982 Senior Research Chemist, Organics Division, Manchester**

My work was concerned with long term speculative research in speciality polymers. Patent applications for an industrial biocide and a fibre optic sensor were initiated.

**1971 - 1977 Senior Research Scientist, Corporate Laboratory, Runcorn**

I initially did research on polymer synthesis but my major contribution was to lead the establishment of a Joint Laboratory with the Department of Surgery at Liverpool University. Progress was made in the research and in its application to problems of clinical interest.

**1970 - 1971 UNIVERSITY OF ARIZONA, TUCSON, USA**

**Research Fellow**

I worked under contract to the US Air Force synthesising novel thermally stable polymers.

**EDUCATION:**

1964 - 70 University of Manchester: BSc, 2i, Chemistry (1967)  
PhD, Polymer Science, (1970)

**PROFESSIONAL QUALIFICATIONS AND ACTIVITIES:**

Chartered Chemist, Fellow of the Royal Society of Chemistry, 1984  
Chartered Engineer, Fellow of the Institution of Mechanical Engineers, 2002

Committee member, Tribology Group, IMechE, 1997-2008, Chairman 2002-2004  
Committee member, Surface Engineering Committee, IOMMM, 2006  
Member, Editorial Board, Journal of Engineering Tribology, 1998  
Member, Engine and Powertrain Thematic Group, Foresight Vehicle, 2004-2008  
External examiner, Imperial College, London, 2001  
Senior Editor for book "Chemistry and Technology of Lubricants", 1992, 1997, 2009  
RSC-trained mentor, 2003

**PERSONAL:**

Date of birth: 16 April 1946  
Place of birth: Bridlington, East Yorkshire  
Marital status: Married with three children  
Interests: Gardening, food and wine, music, walking