

# **RAYMOND PETER MUNDEN BSc MSc PhD CChem CSci FRSC**

## **SUMMARY**

More than 32 years experience covering all aspects of pharmaceutical analysis and pharmaceutical development. Particular expertise in analytical method development and validation, analytical equipment validation, stability testing and storage and experimental design. Excellent communication skills and experience of numerous cross functional and international committees. Skilled presenter who has run many training courses.

## **ACADEMIC AND PROFESSIONAL QUALIFICATIONS**

- Fellow of the Royal Society of Chemistry
- PhD: “A Study of the Stability of Salbutamol”, University of Hertfordshire
- MSc, Analytical Chemistry, North East London Polytechnic
- BSc 2.1, Chemistry, University College, London

## **INDUSTRIAL EXPERIENCE**

**GlaxoSmithKline** **1971 – 2004**

**Head, Analytical Services Europe** **2001 – 2004**

Responsibilities: Analytical development for and release of raw materials for clinical trials manufacture; cleaning verification; management of stability samples and storage facilities; analytical development for and release of comparators; degradation chemistry studies.

**Manager, Chemical Testing Unit** **1995 – 2001**

Responsibilities: Analysis of stability samples; drafting stability sections of regulatory applications; managing the chemometric support and degradation chemistry groups.

**Senior Project Team Leader, Analytical Sciences** **1985 – 1995**  
**Research Leader, Analytical Research** **1981 – 1985**

Responsibilities: Development and validation of analytical methods for new chemical entities and their formulations; formulation and process development; management of laboratory data processing system; drafting regulatory CMC regulatory submissions; project leader for various NCEs.

**Research Leader, Chromatography and Microanalysis** **1979 – 1981**

Responsibilities: Chromatographic and elemental analysis of all novel compounds synthesised in chemical research.

**Analyst and Senior Analyst, Analytical Research** **1971 – 1979**

Duties: analysis of NCEs.

## **OTHER RELEVANT EXPERIENCE**

Lead author for PASG position paper on analytical equipment qualification. Drafted first version of ICH Q1D guidelines on bracketing and matrixing. Committee member for Joint Pharmaceutical Analysis Group, International Pharmaceutical Excipients Council and European Pharmaceutical Aerosol Group working party on reduced inhalation stability testing.

Has presented at numerous conferences and run many training courses. Lectured at several universities and a visiting Fellow at Nottingham Trent University.

### **Publications**

The separation of the diastereoisomers of labetalol (with D Selby)  
Proc Anal Div Chem Soc 14 (10) 296 1977

A study of the stability of salbutamol PhD thesis 1991 University of Hertfordshire

Differential pulse voltammetric determination of sumatriptam succinate (with K Sagar, J Alvarez, C Hua and M Smyth)  
J Pharmaceutical and Biomedical Analysis 10 (1) 17 1992

Voltammetric study of the electrochemical behaviour of salbutamol in determination of a tablet dosage form and dissolution profiles for the dosage form (with K Sagar and M Smyth)  
J Pharmaceutical and Biomedical Analysis 11(7) 533 1993

Position paper on the qualification of analytical equipment (with M Freeman, M Leng and D Morrison)  
Pharmaceutical Technology Europe 7(10) 40 1995

IMS limit test improves cleaning verification (with R Everitt, R Sandor, J Carroll and R DeBono)  
Pharmaceutical Technology Europe 14 (10) 66 2002

Ion Mobility Spectrometry - a new technique in Pharmaceutical Analysis  
European Pharmaceutical Review 9(2) 82 2004

Ion mobility spectrometry, a novel and efficient approach to cleaning verification  
In press with Cleanroom Technology