



**Professor Peter Fielden BSc, PhD, FRSC, CChem.**

Professor of Analytical Science

+44 (0)161 306 4889

peter.fielden@manchester.ac.uk

**Professional biography**

BSc. (Hons), Chemistry, Imperial College, London, 1979

PhD, Analytical Science, UMIST, 1992

Professor of Analytical Science in School of Chemical Engineering and Analytical Science, and Manchester Interdisciplinary Biocentre (MIB).

MIMIT Site Miner

Member of UK Home Office Science Advisory Group

Member of EPSRC Peer Review College

Chair UK Home Office CBRN Advisory Group

Vice Chair Royal Society of Chemistry Electroanalytical Chemistry Committee

Director Process Instruments (UK) Ltd.

**Research Interests**

Analytical Science principles and philosophy in chemical and biochemical measurements

Electroanalysis (especially voltammetric/amperometric systems, and conductimetry)

Chemical Sensors

Biosensors

Optical sensors (with Prof. Nick Goddard)

Ultrasound in analytical measurements (with Dr. Jeremy Hawkes)

Miniaturisation of analysis instruments (Lab-on-a-Chip)

Analytical Measurement microfluidics

Microfabrication (especially in polymers)

Micro-electrokinetic separations (especially Isotachopheresis)

Nanofluidic multiphase assay platforms

High Throughput Experimentation platforms

Measurement Instrumentation

Stem Cell research and cellular assemblies (with Dr. Anne-Marie Buckle)

Water Quality monitoring systems (including on-line analysis)

**Research Facilities**

Within the MIB, my research group has extensive rapid prototyping and fabrication facilities for polymer microfabrication and the development of lab-on-a-chip devices.