



**Professor Markys Cain, Knowledge Leader (Materials) & Principal Research Scientist,
National Physical Laboratory, UK**

Markys Cain graduated with his PhD from Warwick University in 1990 and spent the next 2 years in the Materials Department of the University of California, Santa Barbara studying thin film epitaxial science. Subsequent research in ceramic composite materials technology in the UK utilised many of the principles learnt at Santa Barbara in the deployment of new interfacial fibre coatings for advanced high temperature ceramic matrix composites for gas turbine applications. Research with an Oxford based company led to the development of a prototype SEM based instrumented indentation system and he joined NPL in 1997 to lead the Functional Materials Research group. Research activity includes the development of measurement methods to elucidate materials behaviour in ferroelectric and piezoelectric ceramics and thin film materials, and more recently in multiferroic materials and materials metrology for Spintronics and Energy Harvesting. The focus of the research is materials metrology and he has published over 80 peer reviewed scientific papers in the field. He chairs the IOM3 Smart Materials and Systems Committee. He is Knowledge Leader for the Materials Division at NPL and Principal Research Scientist for the Multifunctional Materials technical area and also a member of the Institute of Physics. In 2009 he was awarded the Institute of Materials' Verulam medal for outstanding contributions to ceramic science, and is visiting Professor at Queen Mary, University of London