The book provides an up-to-date account of inductively coupled plasmas and their use in atomic emission spectroscopy and mass spectrometry. Specific applications of the use of these techniques are highlighted including applications in environmental, food and industrial analysis. It is written in a distance learning/open learning style; suitable for self study applications. It contains contain self-assessment and discussion questions, worked examples and case studies that allow the reader to test their understanding of the presented material.

**ABOUT THE AUTHOR**

John R. Dean took his first degree in Chemistry at UMIST, followed by an M.Sc. in Analytical Chemistry and Instrumentation at Loughborough University of Technology and finally a Ph.D. and D.I.C. in Physical Chemistry at Imperial College. He then spent 2 years as a postdoctoral research fellow at the Food Science Laboratory of the Ministry of Agriculture, Fisheries and Food in Norwich in conjunction with Polytechnic South West in Plymouth. The work was focused on the development of directly coupled high performance liquid chromatography inductively coupled plasma mass spectrometry methods for trace element speciation in foodstuffs. This was followed by a temporary lectureship in Inorganic Chemistry at Huddersfield Polytechnic. In 1988 he was appointed to a lectureship in Inorganic/Analytical Chemistry at Newcastle Polytechnic (now Northumbria University). This was
followed by promotion to Senior Lecturer (1990), Reader (1994) and Principal Lecturer (1998). In 1998 he was awarded a D.Sc. (London) in Analytical and Environmental Science and was the recipient of the 23rd SAC Silver Medal in 1995. He has published extensively in analytical and environmental science. He is an active member of the Royal Society of Chemistry Analytical Division having served as a member of the atomic spectroscopy group for 15 years (10 as honorary secretary) as well as a past chairman (1997-99). He has served on Analytical Division council for three terms and is currently its vice-president (2002-04) as well as chairman of the North East Region (2001-03).

FEATURES

- Self-assessment questions and worked examples.
- Selected case studies
- Specific focus on inductively coupled plasmas and their use in atomic emission spectroscopy and mass spectrometry.
- Methods of sample introduction to inductively coupled plasma covered.
- Methods of sample preparation.
- Selected applications in environmental, food, and industrial analysis.

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