

Book review

Cryptosporidium: The Analytical Challenge

by

M Smith and KC Thompson (ed.)

Royal Society of Chemistry, Cambridge, 2001, 163 pp.

(Cost: ± £60; More information can be obtained from www.rsc.org)

Cryptosporidium: The Analytical Challenge is a collection of papers presented at an international conference held at the University of Warwick, United Kingdom, on 25 – 26 October 1999. Numerous experts in the field contributed to this book and it covers a wide range of topics related to the detection of *Cryptosporidium* in water. The title of the book already alerts one to the fact that detecting this pathogen in water is no easy feat and the various contributions clearly underline this fact.

The primary audience for this book is definitely scientists and analysts who are involved in the development and performance of *Cryptosporidium* detection assays. The text does not only cover all the main issues directly related to the detection and enumeration of *Cryptosporidium* but genotyping, infectivity studies and viability assays are also included. The difficulty in identifying this parasite in environmental samples remains one of the biggest challenges. A number of new approaches for this purpose and which might find wider application in the future such as dielectrophoresis, MALDI-TOF mass spectrometry, *in situ* hybridisation and molecular beacons are addressed.

Various organisations in the United Kingdom, including the Royal Society of Chemistry and the Drinking Water Inspectorate,

organised the conference. Given this fact, it is understandable that some of the chapters strongly focus on the new UK regulations to detect *Cryptosporidium* in drinking water. A chapter describing the findings of the UK based Proficiency Scheme is also included.

The main criticism that can be levelled against the book is that the authors of a few of the chapters focused in too much detail on specific topics (e.g. lecithin binding studies). Thus, someone not working in this specific field may find the technical detail difficult to follow. A summary of the work spelling out the general implications for *Cryptosporidium* research would have made the text more accessible to a wider group of readers.

In general, this book provides a unique and excellent overview of the challenges faced by any laboratory wanting to detect and enumerate *Cryptosporidium* in water. It would be of great value to any researcher or analyst who is confronted with the challenge of providing meaningful and reliable *Cryptosporidium* analyses.

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