



BD&E's VNIR-20 illustrated a single shot hyperspectral imager in a book titled *Hyperspectral Imaging for Food Quality Analysis and Control*.



DETAILS:

Hyperspectral Imaging for Food Quality Analysis and Control

Editor: Professor Da-Wen Sun, Director
Food Refrigeration and Computerised Food Technology
National University of Ireland, Dublin (University College Dublin)
Agriculture & Food Science Centre, Belfield, Dublin 4, Ireland

Synopsis: Based on the integration of image processing and spectroscopy techniques, hyperspectral imaging is a novel technology for obtaining both spatial and spectral information from an object. In recent years, hyperspectral imaging has rapidly emerged as and matured into one of the most powerful and fastest growing nondestructive tools for food quality analysis and control. Using hyperspectral imaging technique, the spectrum associated with each pixel in a food image can be used as a fingerprint to characterise the biochemical composition of the pixel, thus enabling the visualisation of the constituents of the food sample at pixel level. As a result, hyperspectral imagery provides the potential for more accurate and detailed information extraction than possible with any other type of technology for the food industry.

In order to reflect the rapid developing trend of the technology, it is timing to publish *Hyperspectral Imaging for Food Quality Analysis and Control*. The book is divided into two parts. Part I deals with principles and instruments including theory, image data treatment techniques and hyperspectral imaging instruments. Part II covers its applications in quality analysis and control for various foods and agricultural products. As the first book in the subject area, *Hyperspectral Imaging for Food Quality Analysis and Control* is written by the most active peers in the subject area with both academic and professional credentials, highlighting the truly international nature of the work. The book is intended to provide the engineer and technologist working in research, development, and operations in the food industry with critical and readily accessible information on the art and science of the hyperspectral imaging technology.

The book should also serve as an essential reference source to undergraduate and postgraduate students and researchers in universities and research institutions.

For more information on *Hyperspectral Imaging for Food Quality Analysis and Control*, please visit www.elsevier.com.

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