

## *Book Review*

**Laboratory Information Management Systems.** Edited by R. D. McDowall. 383 pp. ISBN 1-85058-083-9 (Sigma Press), ISBN 0-470-20947-X (Halsted Press).

Interest in LIMS is increasing steadily as analytical laboratories strive to improve efficiency, productivity and compliance with regulatory requirements. It is therefore surprising that this book should be the only published text that addresses these issues. In five sections this book provides a comprehensive guide to LIMS, from concepts and technology through to evaluation and implementation. Dr R. McDowall has drawn on his own extensive experience and included contributions from some 20 authors working in industrial, educational and commercial environments, encompassing a wide variety of LIMS experience and perspectives.

The first section answers the question "what is a LIMS?", and considers the management, benefits, justification and resource issues associated with a LIMS implementation and the consequences for the laboratory. These chapters should serve to emphasize to the newcomer that LIMS is not an off-the-shelf purchase, and to give an indication of the probable complexity and magnitude of a LIMS project.

The next section provides a series of tutorial chapters outlining the technology underlying LIMS, including hardware, database management software, communications and interfacing. Included also is a chapter devoted to the user interface, emphasizing the importance of user acceptance of LIMS for a successful implementation. It is appropriate that user issues should be included in a comprehensive text on LIMS.

The third, and largest, section will mostly interest readers who are at the pre-implementation stage of a LIMS project, since it discusses the specification and evaluation processes. Here again, the reader will come to appreciate the magnitude of such a project. This section also includes a series of reviews of individual vendor and in-house products. Although these systems may have developed or changed since the time of publication, these overviews will continue to serve as an illustration of the wide variety of products and implementations that exist.

The three chapters of the fourth section introduce aspects of validation: this includes validation of the LIMS itself, as well as consideration of the functionality attributes required of the system to protect the integrity of data in a regulatory environment. The section ends with a review of the procedures and documentation associated with a validated system.

The book ends with a final section providing one author's perspective of the trends in LIMS technology. Overall, the book offers an excellent introduction to the subject, providing a practical guide and insight into LIMS, and is highly recommended reading for anyone contemplating or involved in, such an installation.

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