Book Reviews and Reports

MARCO BERETTA: *Imaging a Career in Science: The Iconography of Antoine Laurent Lavoisier.* (Uppsala Studies in History of Science, No. 29), Science History Publications, Canton, MA, 2001, xvii + 126 pp. [ISBN 0-88135-294-2]

How many famous chemists are defined by one image? Certainly few to the extent that our view of Antoine Laurent Lavoisier and Marie Anne Lavoisier has been shaped by the splendid double portrait by Jacques Louis David. Yet at the same time, I cannot think of any other chemist whose experiments have been drawn from the life by an accomplished artist. Stilted photographs taken after the event, certainly, but no other pictures that capture science in making in the same way that Marie Anne Lavoisier recorded her husband's experiments on respiration. So Marco Beretta's concept of writing a book on the "iconography of Antoine Laurent Lavoisier" is much to be welcomed. It is clear that he has put an enormous amount of work into this book. Evidently, he researched the topic in great depth and has taken considerable pains to assemble a wide range of illustrations, many in color (including the David portrait). He discusses the iconography of Lavoisier before David, the David painting itself, Madame Lavoisier's drawings and finally, but no means least, the iconography of Lavoisier following his tragic end. Beretta presents many interesting details and destroys the myth that the David portrait is the only authentic representation we have of the great chemist. The publisher is to be congratulated on the excellent standard of the final product, which is very good value at less than $30.

At this point, I would be wise to stop and everyone (especially the author and the publisher) would be happy. Yet, I cannot hide my misgivings about this book. Perhaps the sweeping title beguiled me into hoping that this would be a more remarkable book that would break new ground, but I found *Imaging a Career* rather limited. Much of the material it contains could have been presented in a short but worthwhile paper, perhaps about the unknown portraits of Lavoisier, but it makes for a thin book, both literally and intellectually. As someone who took up the history of chemistry a decade after James R. Partington died in 1965, I had hoped that the subject had developed beyond this type of scholarly disquisition. To be sure, Beretta ranges across the topic more widely, provides more context and analyses the topic more acutely than a historian of chemistry would have done fifty years ago. To that extent, at least, this book reflects the advances we have made in our field. Yet, I feel Beretta could have made much more of all this. He could have used the various images to explore in greater depth the chemical revolution and Lavoisier's role in it, the creation of the Lavoisier myth and the concept of chemistry as a French invention, and the extent to which the Lavoisier iconography defined the image of chemistry over the next two centuries. For example, Beretta mentions the bizarre destruction of the statue of Lavoisier in front of the Madeleine church in Paris by the Nazis in 1943, on the grounds he had opposed the theories of the German chemist Georg Ernst Stahl, but he does not seek to explore this interesting episode nor even makes clear how it stemmed from the remarkable French celebration of the bicentenary of Lavoisier's birth in that year. This would

have been an intellectually challenging project, but if it had been successful, it would have demonstrated the value of iconographic studies for our field beyond any doubt. As it stands, this book can only reinforce the view that the concept of a detailed iconography is essentially antiquated. I feel that it has been a sadly missed opportunity. Images doubtlessly have a story to tell us, even more than instruments, as they are usually constructed with the aim of conveying a message, but that story has to be presented in imaginative and striking ways that demonstrate that they deserve to be taken seriously. This demands an original approach which is linked to broad issues in our field, such as the deconstruction of the classical view of the chemical revolution or the promotion of 'founder myths'.

Despite my misgivings, I have found much of value here and it is an important contribution to Lavoisier studies, presenting "a cultural biography" (to quote from Roald Hoffmann's foreword) of the Lavoisiers and an overview of the various French attempts to honor his memory. It is worth the price for the reproduction of the many Lavoisier images alone.

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Instruments and Experimentation in the History of Chemistry, ed. by FREDERIC L. HOLMES and TREVOR H. LEVERE, MIT Press, Cambridge MA, 2000, xxi + 415 pp. [ISBN 0-262-08282-9]

Instruments and Experimentation in the History of Chemistry is a compilation of 14 articles presented at a Dibner Institute workshop of the same name held in Cambridge, MA on April 12-13, 1996. The papers are divided into three sections, "The Practice of Alchemy" (3 papers), "From Hales to the Chemical Revolution" (6 papers), and "The Nineteenth and Early Twentieth Centuries" (5 papers). The editors state in their introduction that, "The aim of this volume is simply to move the instruments and experiments into the foreground of our concern." This collection of essays certainly succeeds in showing that a global approach to the study of the history of chemistry is desirable, and necessary, for a thorough understanding of the subject to develop.

Contributions to the first section include "The Archaeology of Chemistry" by ROBERT ANDERSON, "Alchemy, Assaying, and Experiment" by WILLIAM NEWMAN, and "Apparatus and Reproducibility in Alchemy" by LAWRENCE PRINCIPE. A highlight of this section is Anderson's work on chemistry prior to 1750 and difficulties regarding the availability, and accuracy, of historical/archaeological records. The practitioners of early chemistry often treated their knowledge as proprietary and, thus, were less than forthcoming in their written descriptions. Likewise, scenes presented in woodcuts were often idealistic and poor reflections of actual laboratory practice. The poor quality of data is exacerbated by the very small sample size available for study. While the fragile nature of chemical ware certainly contributes to this issue, Anderson contends that advances will only be possible when field archaeologists become familiar with early chemi-