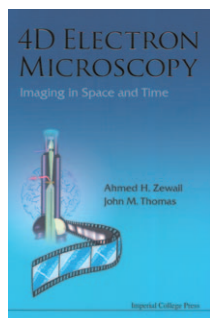


deserves its place on the bookshelves of all who are interested in synthesis. It will surely be a long time before this book, as part of the scientific legacy of a great pioneer of chemical synthesis, begins to gather dust in our libraries.

Hans-Günther Schmalz
Department of Chemistry
University of Cologne (Germany)



4D Electron Microscopy
Imaging in Space and Time.
By Ahmed H. Zewail and
John M. Thomas. Imperial
College Press, 2010. 360 pp.,
softcover, £36.00.—ISBN
978-1848164000

4D Electron Microscopy

The renowned authors of this new appearance on time-resolved 3D electron microscopy have created a fantastic book that will appeal to a broad range of scientists. Its topic and breadth will surely be of interest to those interested in physics, material science, and solid-state chemistry. The attraction of this book stems from the deep knowledge of the authors, who are clearly the leaders in the field. On the one hand, there are currently only a few labs that are experimenting with 4D electron microscopy, but on the other hand, everybody is talking about it. The expertise of the authors and the clear, well-documented nature of the book combine to lend it great potential to set the standard in this field.

Time-resolved spectroscopy and electron microscopy are familiar to many potential readers. This book describes the combination of aspects of both subjects in this completely new and exciting field. While the book and the topic it covers break new scientific ground, the authors take care to make their work accessible to a broad readership. It is well-structured and includes many references with background information for readers outside the field. Different facets of the complex subject matter are well balanced, and aspects likely to be unfamiliar to many readers are explained with care. It is clear that experienced book writers were at work.

To fully understand the content, a degree of background knowledge in optics, solid-state physics, and quantum mechanics is necessary. Nevertheless, I have the feeling that less qualified or experienced readers will also be interested in the book. Its general appeal is attested to by my own experience: As the book was lying on my desk while I prepared this review, nearly every young researcher entering my office, regardless of whether his or her background was in biology, mineralogy, or solid-state physics, had a look at it and showed interest, usually with the remark: “When you finish it, could I have a look?”

Gustaaf Van Tendeloo
EMAT research group
University of Antwerp (Belgium)

DOI: 10.1002/anie.201101049