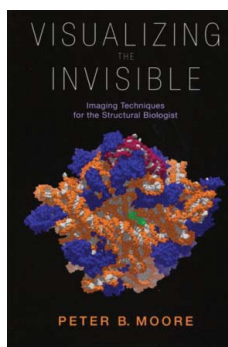


book reviews

Works intended for this column should be sent direct to the Book-Review Editor, whose address appears in this issue. All reviews are also available from **Crystallography Journals Online**, supplemented where possible with direct links to the publisher's information.

books received

The following books have been received by the Editor. Uncritical notices are given under this heading instead of reviews in order to facilitate rapid communication.

**Visualizing the Invisible: Imaging Techniques for the Structural Biologist.**

By Peter B. Moore. Pp. 368. Oxford University Press, 2012. Price £45. ISBN 978-0-19-976709-0.

This textbook introduces the many techniques now available for imaging biological materials at a level that will enable their effective use in research. The reason why a single book can cover all these techniques is that they are all applications of a few physical principles. Readers will be introduced to these principles and will be shown many examples. Since all of these experimental methods are best understood in terms of Fourier transformations, this book first explains the relevant concepts from this branch of mathematics, and subsequently illustrates their elegance and power by applying them to each of the techniques presented.

Derived from a one-term course taught by the author for many years, the book is intended for students whose scientific education includes enough biology and biochemistry to know what cells and proteins are, who have taken a year of chemistry and a year of physics, and who are interested either in doing structural research themselves, or in exploiting structural information produced by others. Scientists interested in entering the structural biology field later in their careers will also find it useful.

Contents: Part one, Fundamentals: 1, On the Scattering of Electromagnetic Radiation by Atoms and Molecules; 2, Molecular Scattering and Fourier Transforms; 3, Scattering by Condensed Phases. Part two, Crystallography: 4, On the Diffraction of X-rays by Crystals; 5, On the Appearance of Crystalline Diffraction Patterns; 6, Solving the Phase Problem; 7, Electron Density Maps and Molecular Structures. Part three, Noncrystallographic Diffraction: 8, Diffraction from Noncrystalline Samples. Part four, Optical Microscopy: 9, Image Formation Using Lenses; 10, The Light Microscope. Part five, Electron Microscopy: 11, Lenses that Focus Electrons; 12, Image Formation in the Electron Microscope; 13, Electron Microscopy in Three Dimensions. Index.