

## **Book Review: *Scattering and Localization of Classical Waves in Random Media***

**Scattering and Localization of Classical Waves in Random Media.** Ping Sheng, ed., World Scientific, Singapore, 1990.

This book contains a collection of papers relating to the propagation of classical waves in multiply scattering random media. It is recommended to anyone who wishes to become familiar with the myriad interesting investigations on this subject that were carried out, in rapid succession, during the period between 1983 and 1990.

Although the articles primarily deal with the basic physics of wave propagation, the phenomena discussed in this volume underlie many practical applications. Examples of the latter include the scattering of acoustic waves in disordered solids, the diffusion of thermal waves in random composites, and the transmittance of light through optically opaque suspensions. The articles appearing in this collection deal with many aspects of the subject, and illustrate the richness of both the theoretical and experimental investigations that have been carried out. The book contains 11 chapters, each essentially by a different group of authors. Hence, a number of different points of view and approaches to these problems are covered: several contributions are written as juxtapositions of theory and experiment, others contain rather formal mathematical treatments, others demonstrate the power of phenomenological reasoning and inference. Various chapters contain extensive lists of references, making the book particularly useful to persons seeking to penetrate the literature for the first time.

Each of the contributions is of high quality. The editor deserves compliments on his choice of authors and his diligence in guiding the organization and writing of the chapters. The book is an appropriate addition to the personal library of anyone working in a field involving

propagation of light or acoustic waves through randomly structured condensed matter, and it also should be included in the general physics collections of universities and other serious research institutions.

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