1. Record Nr. UNINA9910788107503321 Autore Mandal B. N. Titolo Water wave scattering / / B.N. Mandal, Physics and Applied Mathematics Unit, Indian Statistical Institute, Kolkata, India: Soumen De. Department of Applied Mathematics, University of Calcutta, Kolkata, India Boca Raton:,: CRC Press,, [2015] Pubbl/distr/stampa ©2015 **ISBN** 0-429-06775-5 Descrizione fisica 1 online resource (375 p.) Disciplina 531.1133 Scattering (Physics) Soggetti Water waves **Physics Engineering & Applied Sciences** Physical Sciences & Mathematics **Nuclear Physics Applied Mathematics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali A Science Publishers book. Nota di bibliografia Includes bibliographical references (pages 359-364) and indexes. Nota di contenuto Front Cover; Preface; Contents; CHAPTER 1 - Introduction; CHAPTER II -Scattering by Thin Barriers; CHAPTER III - Scattering by Rectangular Trench; CHAPTER IV - Scattering by a Semi-infinite Dock; CHAPTER V -Surface Discontinuities; CHAPTER VI - Long Horizontal Cylinder; CHAPTER VII - Energy Identities; CHAPTER VIII - Two-Layer Fluid; CHAPTER IX - Variable Bottom Topography: References: Back Cover

Sommario/riassunto

The theory of water waves is most varied and is a fascinating topic. It includes a wide range of natural phenomena in oceans, rivers, and lakes. It is mostly concerned with elucidation of some general aspects of wave motion including the prediction of behaviour of waves in the presence of obstacles of some special configurations that are of interest to ocean engineers. Unfortunately, even the apparently simple problems appear to be difficult to tackle mathematically unless some simplified assumptions are made. Fortunately, one can assume water to

be an incompressible, in viscid and homogeneous