Record Nr. UNINA9910484749203321 Autore Kvocak Vincent Titolo Research and development of deck bridges / / Vincent Kvocak, Daniel Dubecky Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2021] ©2021 **ISBN** 3-030-66925-4 Edizione [1st edition 2021.] Descrizione fisica 1 online resource (xiv, 101 pages): illustrations (chiefly color) Springerbriefs in Applied Sciences and Technology Collana Disciplina 624.253 Soggetti Bridges - Floors Bridges - Design and construction Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. 1. The current situation in bridge construction -- 2. Proposed designs Nota di contenuto of deck bridges -- 3. The tests of deck bridges with encased steel beams -- 4. Measurement of material properties of concrete and steel -- 5. Static loading tests of composite beams. Sommario/riassunto This book focuses on deck bridges with encased steel beams. The chapters discuss the design process in deck bridges in the past and some current issues regarding the design and construction of this type of bridges, particularly in Slovakia. The theoretical part covers the latest achievements of international endeavours in composite bridge research. The authors provide results on research into structures with encased steel beams, based on experiments carried out solely by the Department of Structural Engineering of the Faculty of Civil Engineering at the Technical University in Kosice. The results obtained are compared with numerical simulations and analytical calculations. The book also contains some information on testing the materials of steel and concrete and their characteristics. Finally, a variety of types of composite action between steel and concrete have been examined and

are discussed.