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Titolo	A Technical Handbook on Bituminized Jute Paving Fabric (BJPF) : a Partial Substitute and Reinforcement of Bitumen Mastic / / by Swapan Kumar Ghosh
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Nota di contenuto	Introducing geotextile -- Introduction -- Historical background -- Man-made geotextiles -- Natural geotextiles -- Methods of manufacturing geotextiles -- Functions of geotextiles -- Jute and jute geotextile (JGT) -- Jute fibre -- Properties of jute fibre -- Chemical composition and structure of jute fibre -- Grading of jute fibre -- Jute yarns -- Jute geotextile -- Development of grey jute paving fabric (GJPF) -- Idea behind designing and engineering of grey jute paving fabric -- Experimental methods -- A comprehensive idea about bitumen -- Introduction -- Bitumen -- General uses of bitumen17 -- Types of bitumen -- Present grading system of bitumen -- Properties of bitumen -- Tests for bitumen -- Failure mechanism of asphalt -- Modified bitumen33 -- Different types and grades of bitumen -- Bitumen requirements for various applications -- Health, safety and environmental aspects -- A comprehensive idea about paving fabric -- Introduction -- Pavements -- Paving fabrics -- Functions of paving geosynthetics -- Design aspects of geosynthetics -- General design considerations -- Development of bituminized jute paving fabric (BJPF) -- Introduction -- Laboratory simulation testing in CRRI, New Delhi, India -- Bituminization of grey jute paving fabric (GJPF) -- Pilot and bulk field trials of bituminized jute paving fabric (BJPF) -- Introduction -- Pilot field trial 141 -- Commercial field trial site 1 -- Commercial

field trial site 2.

Sommario/riassunto

The book states that in the last quarter of the twentieth century, a new class of materials called Geo-synthetics emerged which led to significant revolution in the design of geotechnical and geo-environmental systems. Geotextiles extend the service life of roads, increase their load carrying capacity and reduce rutting and other distresses. The effectiveness of geotextiles in stabilization and separation roles with flexible pavements has been extensively researched. Recognizing the vast potentiality of this developed Bituminized Jute Paving Fabric (BJPF) as overlay on existing pavements to reinforce and partially substitute the bitumen mastic, a strong desire of sharing the findings stimulated by the author to write this comprehensive technical handbook. The author firmly believes that this book will at least partially fulfill the requirements of the interested engineering students and practicing engineers and may prompt them to delve deeper into the subject to explore new avenues for its use and to refine the existing design methodologies.