

Plastic pollution is a complex environmental problem which totals a staggering 400 million tons annually, with a shocking 11 million tons ending up in our oceans. The use of recycled plastics in the modification of concrete materials has a dominant role to play in the move towards sustainable construction because it can potentially help recycle almost 25 million tonnes of plastic waste per year.

Reuse of Plastic Waste in Eco-efficient Concrete presents the latest research findings on the application and the use of recycled plastic waste in sustainable construction.

Divided into over four parts, the chapters cover various techniques for processing and separation of plastic wastes, use of recycled plastics as aggregates in modified concrete, as well as lightweight reinforced concrete applications. There is also an entire section dedicated to asphalt mixtures. This book provides technological solutions on how recycled plastic wastes can be applied in concrete manufacturing.

It will be a valuable reference source for academic and industrial researchers who are working with waste materials and the use of recycled plastics in concrete, as well as for civil and structural engineers, polymer production technologists, and concrete manufacturers.

Key Features

- Describes the main types of recycled plastics that can be applied in concrete manufacturing
- Presents state-of-the-art knowledge on the properties of conventional concrete with recycled plastics
- Discusses the technological challenges for concrete manufacturers for mass production of recycled concrete from plastic waste
- Covers production challenges and long-term performance analysis

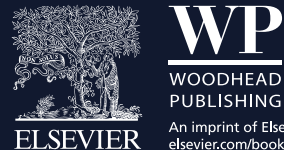
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