DESCRIPTION

Composites are materials made from two or more constituent materials with significantly different physical or chemical properties. The two materials combine together to give a new material with higher strength, toughness, stiffness, but also a higher resistance to creep, corrosion, wear or fatigue compared to conventional materials. It is composed primarily of a matrix i.e. a continuous phase which is armoured with secondary discontinues reinforcement phase. These materials have been used in a variety of products viz. spacecrafts, sporting goods, catalyst, sensors, actuators, biomedical materials, batteries, cars, furniture, aircraft components, etc.

This book focusses on processing, properties of various types of composite materials, as well as their environmental engineering applications. This book examines the current state of art, new challenges, and opportunities of composites in environmental engineering. The chapters in this book covers nearly every topic related to composites in environmental engineering in four broad perspectives: (i) classification of composites (ii) green/hybrid synthesis and characterization of nano and biocomposites (iii) processing of composite materials (iv) state-of-the-art in fabricating the composites - nano and biocomposites - for environmental applications.
ABOUT THE AUTHOR

Shakeel Ahmed is working as an Assistant Professor in Chemistry at the Higher Education Department, Government of Jammu and Kashmir, India. He obtained his PhD in the area of biopolymers and bionanocomposites from Jamia Millia Islamia in the year 2016 and has published several research publications in the area of green nanomaterials and biopolymers for various applications including biomedical, packaging, sensors, and water treatment. He has 15 books to his credit by international publishers. His work has been cited more than 2000 times and with h-index of 16.

Saif Ali Chaudhry is an inorganic chemist at the Department of Chemistry, Jamia Millia Islamia (A Central University), New Delhi, India, where he also obtained his PhD in Environmental (Water) Chemistry.

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