



## The Mechanical Properties of Fiber Reinforced Composites

Guest Editors:

**Dr. Qian Li**

School of Aerospace Engineering  
and Applied Mechanics, Tongji  
University, Shanghai 200092,  
China

**Dr. Zhen Zhang**

School of Aerospace Engineering  
and Applied Mechanics, Tongji  
University, Shanghai 200092,  
China

Deadline for manuscript  
submissions:

**30 September 2024**

### Message from the Guest Editors

Dear Colleagues,

The mechanical properties of fiber-reinforced composites significantly impact their performance and applications. These composites consist of a matrix and embedded fibers, such as glass, carbon, or aramid. The interaction between the matrix and fibers determines key mechanical properties like strength, stiffness, toughness, fatigue resistance, impact resistance, durability, and dimensional stability. Optimizing these properties is vital for designing and manufacturing fiber-reinforced composites for diverse applications, including automotive, aerospace, sporting goods, and industrial uses. With their high strength, stiffness, and tailored properties, fiber-reinforced composites offer versatility across engineering fields. This Special Issue focuses on recent advancements in mechanical properties for structural applications, welcoming papers covering advanced testing methods, analysis approaches (such as experimental measurement techniques, artificial intelligence, and physics-based modeling), and data-driven methodologies.

Dr. Qian Li

Dr. Zhen Zhang

*Guest Editors*

