

# Preface

This special edition focuses on the latest research findings and practical solutions in the fields of materials engineering, chemical technologies, and functional materials.

The first chapter analyzes the physical and optical properties and thermal stability of tellurite-based glass materials.

The second chapter investigates the physical properties and synthesis techniques of functional and special materials for use in micro- and optoelectronics, energy storage devices, and solar cells.

The next two chapters delve into the analysis of the features of technologies for the chemical synthesis of cellulose-based hydrogels, and carbon catalysts from lignin, as well as the investigation of properties and synthesis methods of various polymer and composite materials.

This special edition will be helpful to a wide range of specialists in materials science and chemical production.