

## Preface

The presented special issue contains articles based on research results in functional materials, special composites and some methods of chemical synthesis using pyrolysis, ultrasound-assisted anthocyanins extraction, etc.

The first two chapters are dedicated to modern issues in the creation and analysis of properties of functional materials, materials of special application and some approaches in materials physics investigations, such as for example thermodynamic features of surface adsorption under external magnetic fields, pressure, temperature, etc.

The next two parts of the publication are related to the analysis properties of composite materials that can be used in various areas of modern machinery and the investigation of pyrolytic methods synthesis of carbon nanotubes and light hydrocarbon processing. Here also has been evaluated the method of ultrasound-assisted anthocyanins extraction from purple cabbage for an optical biosensor of wound healing monitoring.

This special edition will be helpful to many specialists in materials science and chemical synthesis.