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Carbon-Based Nanomaterials for Bioimaging, Sensor, Catalytic, and Photoelectronic Applications

Guest Editors:

Prof. Dr. Kaushik Pal

University Centre for Research
and Development (UCRD),
Chandigarh University, Punjab,
India

**Dr. Fernando Gomes de Souza
Junior**

Biopolymers & Sensors Lab.,
Macromolecules Institute,
Universidade Federal do Rio de
Janeiro, Rio de Janeiro, Brazil

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Message from the Guest Editors

Novel trending smart carbon-based nanomaterials, carbon dots (CDs), carbon-based 0-dimensional fluorescent materials, and graphene-based hybrid composites with a cost-effective fabrication mechanism, as well as a wide range of raw materials with excellent physical, chemical, optical, and electrical properties, have attracted the attention of many researchers in recent years because of their stable and adjustable photoluminescence behaviors, good biocompatibility, and abundant surface defects. Hybrid carbon-based nanocomposites with suitable physical properties can expand the application scope of CDs, make up for the limitations of single-component CDs in applications, improve the application performance of inorganic nanomaterials, and enhance the versatility of inorganic nanomaterials.

In this Special Issue, we will focus on brand-new assessment techniques to elucidate the unique functions of CDs in composition regulation, structural fabrication, surface modification, and host-guest interactions in electrocatalysis and ultimately to establish the relationships among structure, composition, and activity.



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Special Issue



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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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