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# **Current and Future Trends in Carbon-Based Materials**

Guest Editor:

## Message from the Guest Editor

**Prof. Dr. Julia A. Baimova** Institute for Metals Superplasticity Problems of RAS, Ufa, Russia

Deadline for manuscript submissions: closed (20 November 2023) Dear Colleagues,

Currently, carbon-based materials represent one of the most interesting classes of structures due to their unique properties and wide potential for application in electronic devices, superstrength coatings, as well as for hydrogen energetics. There is a great variety of such structures of different morphology, for example, composites, carbon structures doped with other atoms, and new carbon phases with complex architecture, to name a few. All of these carbon-based materials have their special features and benefits, which can be based on structural peculiarities or on modification by other atoms or by external treatment. One of the important issues is the search for new structures and the development of new synthesis methods to obtain carbon-based materials with improved properties.

This Special Issue focuses on the recent development of new advanced carbon materials and their design, preparation, applications, and future trends in carbonbased materials. Both experimental works and numerical simulations on these new and unique structures are very welcome. Full papers, short communications, and reviews are all welcome.









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### Message from the Editor-in-Chief

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