

Special issue based on the proceedings of International Conference „Nanocarbon and Diamond“ (N&D 2024)

International Conference „Nanocarbon and Diamond“ (N&D 2024) (ncd2024.ioffe.ru/) was held in St. Petersburg on July 1–5, 2024. It was organized by the Ioffe Institute, the Lavrentyev Institute of Hydrodynamics of the Siberian Branch of the Russian Academy of Sciences, the Alferov St. Petersburg Academic University, and the St. Petersburg State Institute of Technology (Technical University).

The Conference brought together specialists in the field of synthesis and research into the structure and properties of diamonds (CVD, HPHT), diamond nanoparticles, carbon nanotubes, graphene (and its derivatives), fullerenes, and other carbon nanostructures. Various aspects of application of carbon nanostructures and diamonds in industry, microelectronics, emerging technologies, composite materials, and medicine were also discussed in the presented reports.

Conference papers are published in two special issues of Technical Physics.

The first special issue (issue No. 2, 2025) contains articles focused on various materials science aspects of micro- and nanosized carbon structures.

The second special issue (issue No. 3, 2025) presents papers on various scientific aspects of production, examination, and application of carbon nanostructures and diamonds.

The organizers of N&D 2024 hope that these two special issues of Technical Physics will appeal to a wide range of researchers interested in production, examination, and application of carbon materials and that the Conference will start a series of regular scientific meetings held biennially in St. Petersburg.

Scientific coordinator of the Conference

A.Ya. Vul'

Chairman of the Program Committee, editor of the special issue

A.T. Dideikin

*Secretary of the Program Committee,
editor of the special issue*

A.D. Trofimuk