

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

This special issue of Technical Physics presents the proceedings of International Conference „Nanocarbon and Diamond“ (N&D 2024) (ncd2024.ioffe.ru/) that was held on July 1–5, 2024, in St. Petersburg. The Conference was organized by the Ioffe Institute of the Russian Academy of Sciences, 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 was attended by 195 people, 40 of whom were Doctors of sciences, 75 were Candidates of sciences, and 20 were representatives of business and industry. Participants from China, Belarus, Kazakhstan, Tajikistan, and more than 20 regions of Russia took part in the Conference. A one-day school for young scientists and a competition of their projects were held as part of the Conference.

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.

The Conference carried on the tradition of periodic international conferences on carbon nanostructure research that were initiated by the Ioffe Institute and held biennially in St. Petersburg: „Fullerenes and Atomic Clusters“ (IWFAC) in 1993–2009 and „Advanced Carbon NanoStructures“ (ACNS) in 2009–2019.

The organizers of N&D 2024 hope that the Conference will start a series of regular scientific meetings held every two years.

Scientific coordinator of the Conference

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