

The Fourth National Congress on Physical Sciences in Bulgaria

Mitko Gaidarov*

Main Coordinator of the Congress and

Editor-in-Chief of the Bulgarian Journal of Physics

*Corresponding author Email: gaidarov@inrne.bas.bg

Received: 12 December 2024

doi: <https://doi.org/10.55318/bgjp.2025.52.1.001>

The present First Issue for 2025 of the Bulgarian Journal of Physics contains articles based on presentations given at the Fourth National Congress on Physical Sciences held from 7th to 9th October 2024 in the Inter Expo Center, Sofia, Bulgaria. The Congress aimed to make a current review of the scientific research in the field of the physical sciences represented by Bulgarian physicists, as well as the innovations in the industry coming from their scientific results. During the Congress problems related with the contributions of the Bulgarian science into the innovation process and its popularization in Bulgaria were discussed.

The main goal of the Congress was to encourage the contacts between scientists, who work in different branches of physics, in order to disseminate the newest information of the progress in their particular fields of research, to get visibility of their investigations, and to encourage the young physicists to interact actively with eminent scientists.

The Fourth National Congress on Physical Sciences was a great event on physics. In 12 sections, which have worked as separate symposiums, scientific results on physics obtained by Bulgarian physicists working here and abroad in a strong scientific collaboration with foreign scientists were reported. The sections covered atomic physics, nuclear physics and physics of elementary particles, condensed matter physics and new materials, electronics and plasma physics, photonics, physics of Earth, atmosphere and oceans, astronomy and astrophysics, medical physics and biophysics, physical chemistry, theoretical and mathematical physics, history of physics, innovations in the Bulgarian industry, and education on physics. The scientific program contained totally 182 talks, from which 7 plenary talks, 110 oral talks and 65 poster presentations. The Congress outlined the most important trends of the future research, which will be a part of national and international projects.

2 *The Fourth National Congress on Physical Sciences in Bulgaria*

The Congress was the largest event in 2024 organized by the Union of Physicists in Bulgaria (UPB). It was devoted to the proclaimed on 25 August 2023 by the United Nations General Assembly “International Decade of Sciences for Sustainable Development” (2024-2033). On this line, the UPB as a representative of the International Union of Pure and Applied Physics (IUPAP) for Bulgaria is going to organize a series of events, which pursue the increase of the research level in the field of physics and to trace out the importance of the physics for the community development.

Finally, I would like to thank all the participants of the Fourth National Congress on Physical Sciences for their contribution to the nice scientific atmosphere, as well as the participants who contributed to the present issue.