

BASOV READINGS

Joint meeting (scientific session) of the Physical Sciences Division, the Nanotechnology Division of the Russian Academy of Sciences (RAS) and the Scientific Councils of the P N Lebedev Physical Institute of the RAS and the A M Prokhorov General Physics Institute of the RAS Academy of Sciences (LPI, November 28, 2022)

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A solemn meeting (scientific session) of the Physical Sciences Division (PSD) and the Nanotechnology Division of the Russian Academy of Sciences (RAS), as well as the Scientific Councils of the P N Lebedev Physical Institute (LPI) RAS and the A M Prokhorov General Physics Institute (GPI) RAS, On the 100th Anniversary of the Birth of N G Basov: the ‘BASOV READINGS,’ was held in the Assembly Hall of the P N Lebedev Physical Institute on November 28, 2022.

Opening remarks were made by:

Kolachevsky N N (LPI), **Kveder V V** (PSD RAS), **Garnov S V** (GPI RAS)

The scientific program of the joint meeting, published on the website of the PSD RAS (www.gpad.ac.ru), included the following reports and speeches:

Session 1. Chair: Academician **G A Mesyats**

1. **Zubarev I G** (LPI, National Research Nuclear University (NRNU) Moscow Engineering Physics Institute (MEPhI), Moscow). *N G Basov: a pioneer and organizer of laser research in the USSR.*

2. **Kolachevsky N N** (LPI, Moscow). *From the first masers to optical frequency standards.*

3. **Pikhtin N A** (A F Ioffe Physico-Technical Institute (PTI) RAS, St. Petersburg). *High-power near-IR laser diodes: history, state of the art, and development prospects.*

4. **Konov V I** (Natural Science Research Center, GPI RAS, Moscow). *Modern micro- and nanotechnologies of laser material processing.*

Session 2. Chair: Academician **I A Shcherbakov**

5. **Gus'kov S Yu** (LPI, Moscow). *N G Basov: laser thermonuclear fusion and high energy density physics.*

6. **Mikaelyan G T** (LASSARD LLC, NPP Inzhekt LLC, Moscow). *One- and two-D diode laser arrays. Technology of production and application.*

7. **Starodubtsev M V** (FRC Institute of Applied Physics RAS, Nizhny Novgorod). *Research in the field of plasma physics and particle acceleration on the PEARL petawatt laser.*

8. **Evtikhiev N N** (STA IRE Polyus, NRNU MEPhI, Moscow). *On the application of laser technologies in industry and medicine.*



At the solemn meeting dedicated to the 100th anniversary of the birth of Nikolai Gennadievich Basov. (Assembly Hall of the Lebedev Physical Institute RAS, November 28, 2022.)

9. **El'tsov K N** (GPI RAS). *Surface physics for heterogeneous catalysis, quantum computing, and two-dimensional materials.*

10. **Zvorykin V D** (LPI, Moscow). *The role of N G Basov in work on excimer laser research: a half-century history from the launch of the first Xe₂ laser at the LPI to modern laser systems.*

Articles written on the basis of the presented reports will be published in a special issue of the journal *Physics–Uspekhi* (*Uspekhi Fizicheskikh Nauk* (UFN)).

At the meeting, a fragment from the film “Prometheus of the Laser Era” (author of the film: L E Ioffe), prepared for the G N Basov anniversary, as well as the presentation of the books *N G Basov i Issledovaniya po Kvantovoi Radiofizike v FIAN* (*N G Basov and Research on Quantum Radiophysics at LPI*) and the photo album *Nikolai Gennadievich Basov. K 100-letiyu so Dnya Rozhdeniya* (*Nikolai Gennadievich Basov. On the 100th Anniversary of His Birth*).

For more details on the books, see *Phys. Usp.* **65** (12) 1321–1322 (2022) (*Usp. Fiz. Nauk* **191** 1415 (2022)).