

Ministry of Science and Higher Education of the Russian
Federation
Federal State Autonomous Educational Institution of Higher
Education
NATIONAL RESEARCH NUCLEAR UNIVERSITY
(NRNU) MEPhI
OBNINSK INSTITUTE FOR NUCLEAR POWER
ENGINEERING (OINPE) -
branch of the Federal State Autonomous Educational
Institution of Higher Education MEPhI
"NATIONAL RESEARCH NUCLEAR UNIVERSITY
(NRNU MEPhI)
249040, Obninsk, Kaluga region, Studgorodok, 1. OINPE.
Phone: +7 (484) 397-94-90 ext. 111, fax: +7 (484) 397-08-22
E-mail: info@iate.obninsk.ru

To the Director of the Frank
neutron physics Laboratory of the
Joint Institute for nuclear research
V.N. Shvetsov

26/11/2020 № исх / 06 - 1709

to _____ / from _____.

Dear Valery Nikolaevich!

We inform you that researchers in the field of practical materials science and, in particular, OBNINSK INSTITUTE FOR NUCLEAR POWER ENGINEERING (OINPE) - branch of the Federal State Autonomous Educational Institution of Higher Education MEPhI "NATIONAL RESEARCH NUCLEAR UNIVERSITY" are very interested in the implementation of the "Modernization of the EG-5 accelerator and its experimental infrastructure" program. This is due to the necessity of using of electrostatic accelerators (energy up to 5 MeV, currents up to 100 μ A with a resolution of up to 1 μ m) in the beam technologies of materials:

- in micro- and nano-electronics technologies, where micron-resolution beam technologies allow to obtain various systems from metal semiconductor and dielectric materials;

- in tests of construction materials, radiation resistance of electronics components protective coatings of spacecrafts;

- in testing of materials directly under conditions of powerful radiation loads with energies exceeding 10 MeV and dose rate exceeding 10^3 Gy/s for future power plants, nuclear, thermonuclear, plasma;

- in technologies for determining the elements composition and elements-concentration profiles of the solid body by the method of nuclear reactions, in the development of nuclear scanning microprobe techniques, as well as methods for determining the content of microelements in animal and human tissues;

- in the staff - training for 22, "Materials Science and Materials Technologies," and 28, "Nanomaterials", with practical skills in beam technologies based on electrostatic accelerators, as modern materials technologies.

It is important that at present there is practically no training and laboratory base, and thus a future lag behind technologically developed countries is laid.

Acting Director
Head of the Department of Laser and Plasma
Technologies
Professor V. A. Stepanov



T.A. Ocipova