



NATIONAL SCIENCE CENTER
KHARKOV INSTITUTE OF PHYSICS AND TECHNOLOGY

EU FRAMEWORK PROGRAMME PIC: 969818320

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FEW WORDS ABOUT KIPT

KIPT is the largest Ukrainian research center for physical sciences established in 1928.

Main objective is to scientific and technological support of nuclear industry of Ukraine.

There are 5 research institutes and 5 R&D entities at the KIPT organizational structure

The most relevant KIPT`s institutes to EURATOM programme:

Institute of Plasma Physics

Institute of Solid-State Physics and Materials Science and Technologies

Institute of Theoretical Physics

Institute of High Energy Physics and Nuclear Physics

S&T Establishment Nuclear Fuel Cycle

KIPT RESEARCH AREAS RELEVANT TO EURATOM

FISSION, SAFETY AND RADIATION PROTECTION:

SAFE SPENT FUEL AND RADIOACTIVE WASTE MANAGEMENT, DECOMMISSIONING
RADIATION MATERIALS SCIENCE
MEDICAL APPLICATIONS
SMR

FUSION RESEARCH AND DEVELOPMENT:

STELLARATORS
PLASMA WALL INTERACTION
PLASMA THEORY

KIPT KEY PERSONS

DR. IGOR GARKUSHA

KIPT DEPUTY DIRECTOR GENERAL IN SCIENCE,
DIRECTOR OF KIPT INSTITUTE OF PLASMA PHYSICS,
MEMBER OF JOINT PROGRAMME COMMITTEE UKRAINE - EURATOM FOR FUSION

DR. SERGII FOMIN

LEADING RESEARCHER,
HEAD OF KIPT RESEARCH LAB,
MEMBER OF JOINT PROGRAMME COMMITTEE UKRAINE - EURATOM FOR FISSION

KIPT FACILITIES FOR FISSION & FUSION RESEARCH

ADS NUCLEAR FACILITY "NEUTRON SOURCE"
ELECTRON LINEAR ACCELERATORS
ION LINEAR ACCELERATORS
PVD AND CVD MACHINES FOR PLASMA SURFACE MODIFICATION
PLASMA ACCELERATORS
STELLARATORS URAGAN - 2M, URAGAN -3

EURATOM RELEVANT PUBLICATIONS

ENHANCED PERFORMANCE IN FUSION PLASMAS THROUGH TURBULENCE SUPPRESSION BY MEGAELECTRONVOLT IONS, NATURE PHYSICS, DOI: 10.1038/S41567-022-01626-8

VACUUM-ARC CHROMIUM-BASED COATINGS FOR PROTECTION OF ZIRCONIUM ALLOYS FROM THE HIGH-TEMPERATURE OXIDATION IN AIR, JOURNAL OF NUCLEAR MATERIALS, DOI.ORG/10.1016/J.JNUCMAT.2015.06.016.

IRRADIATION RESISTANCE OF VACUUM ARC CHROMIUM COATINGS FOR ZIRCONIUM ALLOY FUEL CLADDINGS, JOURNAL OF NUCLEAR MATERIALS, DOI.ORG/10.1016/J.JNUCMAT.2018.07.063.

USE OF DOUBLE AND TRIPLE-ION IRRADIATION TO STUDY THE INFLUENCE OF HIGH LEVELS OF HELIUM AND HYDROGEN ON VOID SWELLING OF 8-12%CR FERRITIC-MARTENSITIC STEELS, JOURNAL OF NUCLEAR MATERIALS, DOI: 10.1016/J.JNUCMAT.2015.07.012

KIPT IN EURATOM (H2020 & HORIZON EUROPE)

EUROPEAN SUPPLY OF SAFE NUCLEAR FUEL, GA#671546, H2020, 2015-2017

EUROPEAN JOINT PROGRAMME ON RADIOACTIVE WASTE MANAGEMENT, GA#847593, H2020, 2019-2024

PRE-DISPOSAL MANAGEMENT OF RADIOACTIVE WASTE, GA#945098, HORIZON EUROPE, 2020-2024

IMPLEMENTATION OF ACTIVITIES DESCRIBED IN THE ROADMAP TO FUSION DURING HORIZON EUROPE THROUGH A JOINT PROGRAMME OF THE MEMBERS OF THE EUROFUSION CONSORTIUM, GA#101052200 HORIZON EUROPE, 2021-2025

INNOVATIVE STRUCTURAL MATERIALS FOR FISSION AND FUSION, GA#101061241, HORIZON EUROPE, 2022-2026

