Kabdrakhimova Gaukhar Danilovna

Associate Professor of the International Department of Nuclear Physics, New Materials and Technologies, Faculty of Physics and Technology, L. N. Gumilyov Eurasian National University

Contact details:
Gkabdrakhimova@yandex.kz

Scientific degree, scientific school:
PhD : 6D060500-Nuclear Physics

Kazakh National Pedagogical University named after Abay;
Institute of Nuclear Physics of the NNC RK;
L. N. Gumilyov Eurasian National University.

Scientific interests:
nuclear physics, nuclear reactions, exotic nuclei, radiation ecology, radiation safety of personnel and the population, nuclear medicine.

Scientific grants:
Participation in scientific projects:
1. MNS of the scientific and technical program of program-targeted financing "Development of hydrogen energy and technology in the Republic of Kazakhstan" (Contract No. 611 of 07.04.15)
2. RBP 006 "Applied scientific research of a technological nature". Event 1 "Implementation of the scientific and technical program" Development of nuclear energy in the Republic of Kazakhstan".
3. Research project O. 0490 for 2009-2011:
Topic 01.03 Assessment of the impact of nuclear installations and radiation-hazardous facilities on the environment.
Topic 01.04 Radiation monitoring systems for nuclear installations and radiation-hazardous facilities. Methods and technologies for reducing radiation risk.
4. RBP "Ensuring radiation safety in the territory of the Republic of Kazakhstan".
5. R & D O. 0518 for 2009: "Study of the impact of the Azgir landfill on the ecological state of underground waters".
6. Programs "Comprehensive survey and monitoring of Lira facilities".
7. "Assessment of possible environmental impact during technological operations", 2007-2009.
8. "Development of measures for gas pressure relief from cavities and assessment of the impact on the OS", "Development of measures for the release of loop pipelines from residual condensate and assessment of the impact on the OS", 2010-2011.
9. RBP "Ensuring radiation safety in the territory of the Republic of Kazakhstan".
10. "Ensuring the safety of the Semipalatinsk test site", 2008-2011.
11. Working project "Chemical and technological mobile complex for cleaning oil and gas equipment", 2008-2011.
12. The standard of the organization "GRK" LLP " Radiation safety of personnel of the enterprises of PSV of uranium. The procedure for ensuring the safety of personnel", 2009
13. Project "Radiation sterilization building with irradiation unit of the radiation technology complex of the Technopark "Nuclear Technology Park in Kurchatov"", 2008
14. EIA for the project "Transportation of spent nuclear fuel", 2008
15. Draft standards for maximum permissible emissions of radioactive substances into the atmosphere of the DGP INP NNC RK, 2008.
16. Project " Technological solution for the organization of temporary storage of closed radionuclide gamma and neutron sources of Baker Hughes Services International, Inc.", 2009.
17. Of the project " Technical solution for the organization of temporary storage of radionuclide sources of gamma radiation of "NDT-Service" LLP, appendix "Calculation of biological protection of temporary storage of radionuclide sources of gamma radiation "TR-16-17,001-2010", 2010.

Professional experience:

Total experience of 16 years, including 5 years of production experience

September 2016-
present- L. N. Gumilyov Eurasian National University
Position: Associate Professor

February 2015-August 2016
Joint Institute for Nuclear Reactions (Dubna, Russia)
Position: Junior Researcher

September 2011 - July 2014
L. N. Gumilyov Eurasian National University
Position: Senior Lecturer

October 2006-August 2011-DGP "Institute of Nuclear Physics" RSE "National Nuclear Center of the Republic of Kazakhstan", Almaty
Position: Engineer

Awards:
-

Teaching courses:
Interaction of light with matter, experimental methods of Nuclear Physics

Author's courses:
Physical bases of applied nuclear physics, fundamentals of dosimetry. nuclear technologies in the industry, accelerator physics, heavy ion physics, exotic nuclei, physical principles of radioisotope diagnostics and therapy

Publications (favorites):

1. Г.Д. Кабдрахимова, К.А., Кутербеков, Ю.Э. Пенионжкевич, и др. Анализ полных сечений реакций взаимодействия ядра 6He с ядрами 9Be, 28Si, 59Co при энергиях 5-25 МэВ/А в рамках полумикроскопической оптической модели. Вестник ЕНУ им. Л.Н. Гумилева. Серия естественно-технических наук. – Астана, 2016. – №6. – С. 23-28.
2. Г.Д. Кабдрахимова, К.А., Кутербеков, Ю.Э. Пенионжкевич, и др. Экспериментальные функции возбуждения из взаимодействия слабосвязанного 6He с ядрами 9 Be, 28 Si, 59 Co, 181 Ta. Вестник ЕНУ им. Л.Н. Гумилева. Серия естественно-технических наук. – Астана, 2016. – №6. – С. 29-34.
3. G.D. Kabdrakhimova, Yu.G. Sobolev, I.N. Kukhtina, K.A. Kuterbekov, K.O. Mendibaev, Yu.E. Penionzhkevich. Investigation of the total cross sections in the interactions of 6He and 4He nuclei with Si nuclei at 5-50 Mev/A. Physics of Atomic Nuclei, №1, 2017.
4. Yu.G. Sobolev, Yu.E. Penionzhkevich, G.D. Kabdrakhimova, A.M. Kabyshav, e.a. Experimental research of the total reaction cross section energy dependence for 6He + natSi and 9Li + natSi . Physics of Particles And Nuclei. – 2017. – Vol. 48. - P. 922-926.
5. Y. Mukhamejanov, G. Alieva, D. Alimov, G.D. Kabdrakhimova e.c., investigation of (p,xp) and (p,xα) reactions of 30-MeV protons with the 103Rh nucleus. Acta Physica Polonica B. - Vol. 51- P. 783-788