



**Sayabek Sakhiyev**

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

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**Scientific degree, title, scientific school:**

1987-1995 - Al-Farabi Kazakh National university, Physics department.  
2009 - Doctor of Physico-Mathematical Sciences

**Scientific interests:**

Cluster model of light nuclei, quantum theory of scattering, theoretical nuclear physics

**Research Grants :**

1. Project on the topic: "Study of photodisintegration and radiation capture reactions with the participation of light nuclei with a pronounced cluster structure. Astrophysical and thermonuclear applications ". Code - "Fundamental Research" 12.1 / 2009-2011, position – Senior Researcher.
2. Project on the topic: "Investigation of nuclear reactions at sub-barrier energies for astrophysical and thermonuclear applications." For the program 055-101-149 / 2012-2014, position - Project Executor.
3. Project on the topic: "Intellectual Potential of the Country-7/14", Research Institute ETF KazNU named after Al-Farabi, 2012-2014, position – Leading Researcher.
4. Project on the topic: "Actual problems of the theory of the atomic nucleus. Astrophysical Applications ". Under the program 120 "Grant financing", position – Leading Researcher.
5. Project on the topic: "New neutron-free thermonuclear process with fast laser ignition." Under the program "Grant financing 2015-2017". Position - Project Manager

**Curriculum vitae:**

2017-present - Director of the Department of Science, Vice-Rector for Research and Digitalization of the Abay Kazakh National Pedagogical University  
2016-2017 - President of the Scientific and educational complex "KazIITU"  
2015-2016 - General Director of the Institute of Nuclear Physics of the Ministry of Energy of the Republic of Kazakhstan  
2013-2015 - President of the Scientific and educational complex "KazIITU"  
2005-2013 - Director of Department, Head of Directorate of the Central Office of the People's Democratic Party "Nur Otan"  
2004-2005 - Head of the Office of Personnel and Organizational Work of the Ministry of Education and Science of the Republic of Kazakhstan  
2000-2004 - Chief Specialist, Head of Department, Deputy Head of Directorate, Head of Directorate of the Ministry of Education and Science of the Republic of Kazakhstan  
1995-2000 - Senior Lecturer of

**Author's courses:** basics of vector and tensor analysis, quantum theory of scattering

**Publications (selected):**

1. Bayakhmetov O., Seksembayev Zh., Azamatov A., Kukulin V., Pukhov A., Sakhiyev S. Static properties of the  ${}^9\text{Be}$  nucleus in the ground and excited states in the cluster model. // Physica Scripta, 2019, 94(8), 085301. **i.f. - 1.985**
2. Seksembayev Zh., Kukulin V., Sakhiyev S. Study of a dense hot plasma's burning in Z-pinch devices with inertial-magnetic confinement. // Physica Scripta, 2018, 93(8), 085602 **i.f. – 2.045**
3. Seksembayev Zh.B., Bayakhmetov O.S., Sakhiyev S.K. Coulomb explosions in plasma. // Journal of Physics: Conference Series, 2017, 907(1), 012028
4. Urazbekov B.A., Denikin A.S., Sakhiev S.K., Lukyanov S.M. Studying the reactions of deuteron interaction with  ${}^9\text{Be}$  nuclei at low energies. // Bulletin of the Russian Academy of Sciences: Physics, 2017, 81(6), pp. 690–694
5. Pomerantsev V.N., Kukulin V.I., Rubtsova O.A., Sakhiev S.K. Fast GPU-based calculations in few-body quantum scattering. // Computer Physics Communications, 2016, 204, pp. 121–131
6. Urazbekov B.A., Denikin A.S., Sakhiev S.K., Burtebaev N.T. Manifestation of the cluster structure of the  ${}^9\text{Be}$  nucleus in direct nuclear reactions. // Bulletin of the Russian Academy of Sciences: Physics, 2016, 80(3), pp. 247–251

the Al-Farabi Kazakh State  
National University

**Awards:**

2012 - medal «Ерен еңбегі үшін»,  
2011 - anniversary medal «Қазақстан  
Республикасының тәуелсіздігіне 20  
жыл»,  
2008 - medal «10 лет Астаны»,  
2005 - medal «10 лет Конституции  
РК»