Aishabibi Dukenbayeva

KIMEP University, Almaty, Kazakhstan
https://www.kimep.kz/school-of-computer-science-and-mathematics/faculty/
✉ a.dukenbayeva@kimep.kz

Education

2018 - 2022   **Ph.D. in Mathematics**, *Ghent University, Belgium and Al–Farabi Kazakh National University, Kazakhstan*.

2015–2017   **M.A. in Applied Mathematics**, *University of Southern California*, Los Angeles, CA, USA.

2014–2015   **English language courses**, *Boston University - CELOP*, Boston, MA, USA.

2009–2013   **B.Sc. in Mathematics**, *Al-Farabi Kazakh National University*, Almaty, Kazakhstan.

Employment

Aug 2024 - Present   **Assistant Professor**, *KIMEP University*, Almaty, Kazakhstan.

Jan 2023 - Aug 2024   **Assistant Professor**, *Suleyman Demirel University*, Kaskelen, Kazakhstan.

Sep 2021 - Dec 2022   **Senior lecturer**, *Suleyman Demirel University*, Kaskelen, Kazakhstan.

Apr 2017 - Present   **Researcher**, *Institute of Mathematics and Mathematical Modeling*, Almaty, Kazakhstan.

Publications

1. Global existence and blow-up of solutions to pseudo-parabolic equation for Baouendi-Grushin operator. **Open Mathematics**, 23:1, 2025, DOI: https://doi.org/10.1515/math-2025-0144.

2. (with M. Sadybekov) Spectral properties of the Laplace operator with variable dependent boundary conditions in a disk. **Axioms**, 13(11):794, 2024, DOI: https://doi.org/10.3390/axioms13110794.

3. (with M. Sadybekov) On boundary value problems of the Samarskii–Ionkin type for the Laplace operator in a ball. **Complex Variables and Elliptic Equations**, 67(2):369–383, 2022.

4. (with M. Sadybekov) On a boundary value problem of the Samarskii-Ionkin type for the Laplace operator in a ball. **Kazakh Mathematical Journal**, 20:1, 84-94, 2020.

5. (with M. Sadybekov) Direct and inverse problems for the Poisson equation with equality of flows on a part of the boundary. **Complex Variables and Elliptic Equations**, 64(5):777–791, 2019.

6. (with M. Sadybekov and N. Yessirkegenov) On a generalised Samarskii-Ionkin type problem for the Poisson equation. **Springer Proceedings in Mathematics and Statistics**, 264:207-216, 2018.

7. (with M. Sadybekov) On a class of direct and inverse problems for the Poisson equation with equality of flows on part of the boundary. **AIP Conference Proceedings**, 2048, 040009, 2018, DOI: https://doi.org/10.1063/1.508208.

8. On a generalized problem of the Samarskii-Ionkin type for the Poisson equation in a disk (in russian). **Kazakh Mathematical Journal**, 18:1, 78-87, 2018.

Awards

2025 **"Research excellence award"**, KIMEP University.

2013 **"Bolashak" scholarship**, Ministry of Education and Science of the Republic of Kazakhstan.

2009 **"Golden Medal"**, for excellence at school, Ministry of Education and Science of the Republic of Kazakhstan.

Conference and Seminar Talks

Sep 2022 *The scientific seminar at the Analysis and PDE center of Ghent University*, Ghent, Belgium.

May 2022 *The scientific seminar at the Analysis and PDE center of Ghent University*, Ghent, Belgium.

June 2021 *The scientific seminar "Differential operators and their applications" under the guidance of Academician of the NAS RK M. Otelbaev, Academician of the NAS RK T.Sh. Kalmenov, Corresponding Member of NAS RK M.A. Sadybekov, Professor B.E. Kanguzhin*, Almaty, Kazakhstan.

May 2021 *The scientific seminar at the Analysis and PDE center of Ghent University*, Ghent, Belgium.

Apr 2021 *International Traditional April Scientific Conference*, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.

Oct 2020 "Theory and Computational Methods for Inverse and Ill-posed Problems", *the twelfth international scientific school conference for young scientists*, Novosibirsk, Akademgorodok, Russia.

Sep 2020 *The scientific seminar at the Analysis and PDE center of Ghent University*, Ghent, Belgium.

Apr 2020 *International Traditional April Scientific Conference*, Institute of Mathematics and Mathematical Modeling, Almaty, Kazakhstan.

Feb 2020 *The scientific seminar at the Analysis and PDE center of Ghent University*, Ghent, Belgium.

Research Grants and Fellowships

2024-26 Researcher, Grant of Ministry of Science and Higher Education of the Republic of Kazakhstan , "Cylindrical and hypoelliptic functional inequalities" (AP23490970) 2024-2026.

2022-24 PI, Grant of Ministry of Science and Higher Education of the Republic of Kazakhstan , "Nonlinear degenerate parabolic and pseudo-parabolic equations for the Baouendi–Grushin operator" (AP14972714) 2022-2024. **Head: Aishabibi Dukenbayeva**.

2022-24 Researcher, Grant of Ministry of Science and Higher Education of the Republic of Kazakhstan , "Magnetic functional inequalities" (AP14871691) 2022-2024.

2021-23 Researcher, Grant of Ministry of Science and Higher Education of the Republic of Kazakhstan , "Noncommutative hypoelliptic analysis" (AP09058474) 2021-2023.

2018-20   Researcher, Grant of Ministry of Science and Higher Education of the Republic of Kazakhstan , "Boundary value problems of periodic type for Laplace equation in a ball and related direct and inverse parabolic problems" (AP05133271) 2018-2020.

Teaching experience

Aug 2024-Present   **Assistant Professor at School of Computer Science and Mathematics**.
KIMEP University, Almaty, Kazakhstan

Jan 2023-Aug 2024   **Assistant Professor at Department of Mathematics**.
Suleyman Demirel University, Kaskelen, Kazakhstan

Sep 2021-Dec 2023   **Senior Lecturer at Department of Mathematics**.
Suleyman Demirel University, Kaskelen, Kazakhstan

2013-2014   **Mathematics Teacher**.
Smagulov Specialized Physics and Mathematics Secondary Boarding School for gifted students, Almaty, Kazakhstan

Jan 2013   **Teaching Assistant in Mathematics**.
The Republican Specialized Physics-Mathematics Secondary Boarding School for Gifted Students named after O.Zhautykov, Almaty, Kazakhstan

References

Michael Ruzhansky, Ghent University and Queen Mary University of London, *michael.ruzhansky@ugent.be*.

Makhmud Sadybekov, Institute of Mathematics and Mathematical Modeling, *sadybekov@math.kz*.