PERSONAL INFORMATION

KAIYROV RUSTEM



- Republic of Kazakhstan, Karaganda city, University street, 28, Buketov Karaganda University
- ✓ kairov.rustem@mail.ru
- 1 https://www.webofscience.com/wos/author/record/29354721

Date of birth: 19.12.1985

PLACE OF WORK, POSITION

Karaganda Buketov University, Associate professor of the Department of Algebra, Mathematical Logic and Geometry Named after. prof. T.G. Mustafin.

SCIENTIFIC DEGREE, SCIENTIFIC TITLE (ACADEMIC DEGREE)

Doctor of Philosophy (PhD)

WORK EXPERIENCE

16 years

Place and date

2007-2018 years – teacher of technical mechanics, Karaganda Polytechnic College **2018-2021 years -** Doctoral student of the Department of Mechanics, Kazakh National University. al-Farabi

Starting 2021 year - Assistant Professor of the Department of Algebra, Mathematical Logic and Geometry named after prof. T.G. Mustafina, Karaganda University named after E.A. Buketova

EDUCATION AND PROFESSIONAL TRAINING

2003-2007 years - Karaganda State University named after Academician E.A. Buketov, Faculty of Mathematics, specialty - "Mechanics", qualification bachelor of mechanics (with honors);

Education

2007-2009 years - Karaganda State University named after Academician E.A. Buketov, Faculty of Mathematics, specialty - "6N0603-Mmechanics", qualification Master of Mechanics (with honors);

2018-2021 years – Al-Farabi Kazakh National University, Faculty of Mechanics and Mathematics, specialty "6D060300-Mechanics" doctoral studies (with honors);

Professional trainings, Scientific trips

From 02.12.2020 to 05.22.2020 - Internship under the ERASMUS+ program. School of Computing and Mathematics, Keele University, UK;

SKILLS DEVELOPMENT INFORMATION

Certificate No. 000005 (05.10.2021-23.12.2021) attended a course of guest lectures on soil mechanics.

- Associate Professor, Ph.D., Konyushkov V.V., St. Petersburg State University of Architecture and Civil Engineering.
- Certificate No. 0000014 (28.03.2022-17.04.2022). Completed the course "Introduction to the theory of algorithms". Doctor of Physical and Mathematical Sciences, Professor, Novosibirsk State University, Head, Laboratory of Logistics Systems, Institute of Mathematics named after S.L. Sobolev, Siberian Branch of the Russian Academy of Sciences.
- Certificate No. 374021 (11.22.2021 11.27.2021) completed the advanced training course "Study of reanomalous materials with small deformations." In KarU named after academician E.A. Buketov.

PERSONNEL QUALITIES Native language Kazakh **RUSSIAN UNDERSTANDING SPEAKING LANGUAGE WRITING** Hearing Reading Oral speech LANGUAGE CERTIFICATE: **English** LANGUAGE CERTIFICATE: **Digital skills** USER: MICROSOFT OFFICE (WORD, EXCEL, POWER POINT) Other skills (hobbies) reading, traveling, sports games (volleyball, asyk atu, table tennis, checkers, chess)

ADDITIONAL INFORMATION

1. Zh. Baigunchekov, R.A. Kaiyrov

Direct kinematics of a 3-PRRS type parallel manipulator.

International Journal of Mechanical Engineering and Robotics Research, 2020, 9(7), pp. 967-972.

2. Baigunchekov Zh., Naurushev B., Zhumasheva Zh., Kaiyrov R., Amanov B.

Structurally Parametric Synthesis and Position Analysis of a RoboMech Class Parallel Manipulator with Two End-Effectors.

IAENG International Journal of Applied Mathematics, 2020, 5(1-77), crp. 1–11

3. Ж.Ж. Байгунчеков, А.Қ. Мустафа, Р.А. Кайыров, А.Н. Касинов

Структурный синтез и геометрия параллельных манипуляторов вида 3-PRRS и 3-PRPS.

Вестник КБТУ №2, Алматы 2019, с. 54-58.

4. Ж.Ж. Байгунчеков, Р.А. Кайыров

Обратная задача кинематики параллельного манипулятора вида 3-PRRS.

Вестник КБТУ №2, Алматы 2019, с. 64-68.

5. Р.А. Кайыров

Жаңа трипод түрдегі 3-PRRS параллель манипулятордың кинематикалық талдауы.

КазНУ хабаршысы, математика, механика және информатика сериясы, Том 108, №4 2020, б. 58-71.

6. Baigunchekov Z., Laribi M.A., Mustafa A., Kaiyrov, R., Amanov B., Kassinov A.

Geometry and Inverse Kinematics of 3-PRRS Type Parallel Manipulator

Advances in Intelligent Systems and Computing, 2020, 980, crp. 12–18

7. Zh. Baigunchekov, M.A. M.A. Laribi, M. Izmambetov, Zh. Zhumasheva, R. Kaiyrov

The First Type of Singularity of a 3-PRRS Parallel Manipulator.

Mechanisms and Machine Science, 2020, 84, pp. 356-363.

8. Zh. Baigunchekov, Zh. Zhumasheva, B. Naurushev, A. Mustafa, R. Kaiyrov, B. Amanov

Parallel Manipulator of a Class RoboMech with Two End-Effectors, Lecture Notes in Engineering and Computer Science. Imperial College London, 2019, pp. 7-20.

9. Zhumadil Baigunchekov, Talgat Baigunchekov, Azamat Mustafa, Rustem Kaiyrov, Abzal Kassinov.

Structural-Parametric Synthesis and Position Analysis of Parallel Mechanism with Two Rectilinear Moving End-Effectors,

Proceeding of Seoul International Conference on Applied Science and Engineering, SICASE 2019, May 21-23, 2019, Seoul, Korea, pp.134-146.

10. Baigunchekov Z., Laribi M.A., Kaiyrov R., Zholdassov E.

Inverse Kinematics and Workspace of a 3-PRRS Type Parallel Manipulator

- in journals in Scopus base 2;
- in journals in Clarivate Analytics base 2;
- in editions recommended by KOKSON MES RK 3;

Hirsh index in Scopus base – 2.

Hirsh index in Web of Science base – 1.

Participation in the implementation of scientific projects

Competition for grant funding for scientific and (or) scientific and technical projects for 2022-2024. Development and research of new parallel manipulators of the tripod type with six degrees of freedom.

Membership in professional scientific organizations

Awards and titles

Main publications

- 1. Questions of mechanics in robotics
- 2. Fundamentals of robotics
- 3. Theoretical mechanics
- 4. Software package MatLab

Courses

- 5. Strength of materials
- 6. Analytical mechanics and dynamics of rigid bodies
- 7. Mechanics of machines and robotic systems

Professional and scientific interests

theory of mechanisms and machines, robotics

SCIENTIFIC DATABASES IDENTIFIERS

ORCID ID: https://orcid.org/0000-0002-0899-4981

Author ID Scopus: 57208861849 **ResearcherID Web of Science:** GBS-4336-2022