SERIKBOLAT KADENOVICH ERIGABULOV

|  |  |  |
| --- | --- | --- |
| **Date of birth:** | 21 March 1977 |  |
| **Nationality:** | Republic of Kazakhstan |
| **Region:** | Astana |
| **Contacts:** | +7 777 529 4118+7 702 784 2103Serik-y@mail.ru |

EDUCATION

|  |  |  |  |
| --- | --- | --- | --- |
| **Educatio**n | 12.2002 -12.2005 | The Central Research and Design Institute for Residential and Public Buildings.RUSSIAN FEDERATION. ,Moscow | Speciality: 05.23.01 Building structures, buildings and constructions.Candidate of Technical Sciences |
| 09.1994 -06.1999 | [ZhezU](http://univer.zhez.kz/home.htm) Zhezkazgan Baikonurov University. RK | Speciality: Industrial and Civil Engineering.Qualification: Civil engineer |
| **Additional education** | 09.2020 | L.N. Gumilev Eurasian University | The digital skills of the modern teacher in a distance learning |
| **(advanced training)** |  |  | environment |
|  |  |  |
|  | 09.2018- | Innovation Technology Center | Energy audit of buildings and |
|  | 10.2018 | LLP | structures |
|  |  |  |  |
|  | 09.2016 | KAZGOR Project Academy, | Innovative products and technologies |
|  |  | SELENA Global Experience, | in the field of building chemistry |
|  |  | Astana |  |
|  |  |  |  |
|  | 12.2014 | URCAE | International Conference on |
|  |  | UAE, Dubai | Architecture and Civil Engineering |
|  |  |  |  |
|  | 2014 | Saint-Gobain Construction | Energy of the Future in new |
|  |  | Products Kazakhstan | construction. World experience of |
|  |  | France-Kazakhstan, Astana | energy saving for Kazakhstan |
|  |  |  |  |
|  | 08.2013 | IWO e.V. - Initiative "Housing in | A comprehensive approach to the |
|  |  | Eastern Europe" - National | thermo-modernisation of residential |
|  |  | Chamber of Housing and | buildings. Design features of passive |
|  |  | Construction of Kazakhstan | houses and zero-energy houses |
|  |  | Germany-Kazakhstan, Astana |  |
|  |  |  |  |
|  | 04.2012 | ENSI Energy Saving International | Energy audit of buildings |
|  |  | Norway-Kazakhstan, Astana |  |
|  |  |  |  |
|  | 03.2012 | UNDP/GEF - KazGASA | Energy-efficient design and |
|  |  | Almaty | construction of residential buildings |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 02.2012- | IWO e. V. - Housing in Eastern | Management of energy efficient |
| 03.2012 | Europe Initiative | refurbishment (thermo-modernisation) |
|  | Germany, Berlin | of buildings. Technical aspects of |
|  |  | refurbishment |
|  |  |  |
| 10.2010 | SCAD SOFTWARE | Generation of design layouts and |
|  | Russian Federation, Moscow | analysis of calculation results for |
|  |  | buildings and structures in SCAD |
|  |  | Office environment |
|  |  |  |
| 05.2007 | Association of Manufacturers of | Computer-aided calculation of |
|  | Energy Efficient Windows | building envelopes with certified |
|  | Russian Federation, Moscow | WINDOW-TEST and GOST 26602.1- |
|  |  | 99 |

PROFESSIONAL EXPERIENCE

|  |  |
| --- | --- |
| **07.2018-present** | **Senior Technical Specialist for Energy Efficiency** in the Energy Efficiency Improvement in Kazakhstan Project Team, The World Bank in Kazakhstan |
| **09.2016-present** | **Acting Associate Professor, Department of** Industrial and Civil Engineering Technology (ICCET), Faculty of Architecture and Civil Engineering (ACE), L.N. Gumilev Eurasian National University (ENU) L.N. Gumilev Eurasian NationalUniversity |
| **12.2017 - 05.2018**(part-time) | **Project Manager** for Energy Audit and Design Solutions in a Pilot Quarter in Astana (UNDP-GEF project "Sustainable Cities for Low Carbon Development") |
| **01.2017 - 06.2018** | **Curator of** the Civil Engineering Centre of the BI-Laboratory (BI-Group) |
| **2015 - 12.2016** | **Researcher at** Nazarbayev University, National Laboratory Astana, Laboratory of Intelligent Systems and Energy Efficiency. PCF Project Manager for "Increasing Energy Efficiency and Energy Saving in Kazakhstan" (part-time) |
| **09.2014 - 04.2015** | **Researcher** at the Intelligent Systems and Energy Efficiency Laboratory, NURIS ([Nazarbayev University Research and Innovation System](http://www.nu.edu.kz/)) |
| **04.2013 - 08.2014** | **Chief Specialist in Thermal Physics and Energy Conservation**[, NIITEP LLP](http://nii.kz/upload/prezentation.pdf) (Research Institute of Standard and Experimental Design, Institute of Housing) |
| **08.2013 - 07.2014**(part-time) | **Technical Expert and Technical Supervisor of** the UNDP/EBRD Project"Demonstration of Energy Efficiency Improvement in Transparent Public Buildings on the Example of School No. 25 of Astana". |
| **04.2014 - 09.2014**(part-time) | **Consultant for** the Energy Saving and Energy Efficiency Project (Laboratory ofIntelligent Systems and Energy Efficiency [Nazarbayev University Research and](http://www.nu.edu.kz/) [Innovation System](http://www.nu.edu.kz/)) |
| **03.2011 - 03.2013** | **Expert on improvement and development of normative and technical documentation** [of the RK Government/UNDP/GEF Project](http://www.undp.kz/mandat/3.jsp) on Energy EfficientDesign and Construction of Residential Buildings |
| **05.2010 - 03.2011** | **Chief Specialist** at Kazakhmys Corporation's Head Design Institute |
| **01.2000 - 03.**2009(part-time) | **Design engineer, designer-thermal engineer,** [laboratory](http://www.ingil.ru/science-structure/28-laboratory-heat-and-air-treatment-units.html) **technician** [for thermal](http://www.ingil.ru/science-structure/28-laboratory-heat-and-air-treatment-units.html) [and air conditions of buildings**,**](http://www.ingil.ru/science-structure/28-laboratory-heat-and-air-treatment-units.html) **Central Research Institute for Scientific Research and Development of Housing,** Moscow |
| **Conducting research and design work in the field of construction** | * Participate in the development of RK regulations and normative and technical documents in the field of energy saving and energy efficiency of buildings and structures;
* Participation in the development of energy-efficient standard and experimental building designs (latitudinal, meridional and diagonal orientation);
 |

|  |  |
| --- | --- |
|  | * Energy audits of newly constructed, existing, reconstructed buildings and structures, technically complex unique objects and architectural monuments;
* Determine the energy consumption of buildings and structures during the design, construction and operation phases;
* Improving the energy efficiency of newly constructed buildings and structures, as well as in major renovation, reconstruction (modernisation, refurbishment), expansion and functional reassignment of premises;
* A feasibility study on newly constructed, existing and renovated buildings and structures, selecting energy efficiency measures on their basis, starting with the more economically advantageous options;
* Project development, analysis and evaluation in the field of energy (heat, electricity, gas, solid fuels) and resource (water) efficiency in the housing and construction sector;
* Design and expertise in building physics (temperature, humidity, noise, acoustics, vibration, insolation, lighting, ventilation, air conditioning);
* Development and expert evaluation of the "Energy Efficiency" section of projects with the issuance of an "Energy Passport" for buildings and structures;
* Carrying out authoring, technical supervision and technical support for construction and installation work and energy efficiency measures;
* Computer modelling of the thermo-technical properties of building structures, elements and materials of building envelopes;
* Inspection and assessment of the thermal condition of building structures, elements and materials of load-bearing and enclosing structures of buildings and constructions;
* Creation of a climatic chamber for determining the thermal properties of building materials, products and building envelopes;
* Determination of the design thermal performance of new and existing building materials with regard to operational moisture;
* Laboratory accreditation, calibration of measuring instruments and equipment;
* Check under laboratory and field conditions of the ambient temperature and humidity conditions of enclosed spaces, load-bearing and enclosing structures and structural components, including air permeability and operating humidity;
* Check in the laboratory and in-situ (field) conditions of the microclimate, thermal and air conditions in the rooms;
* Checking the performance of the HVAC systems, identifying the causes of discomfort in the premises and developing recommendations for their elimination;
* Development of energy-efficient building envelopes, including ventilation devices, heat recovery, etc.
 |
| **On staff development** | Lectured and conducted practical sessions together with IWO (Germany) on "Building Energy Audit" in a training seminar: "Development and implementation of Energy Saving Building Renovation Management Course", "Comprehensive Approach to the topic of thermo-modernisation of residential buildings. Peculiarities of design of passive houses and zero-energy houses".Lectured and taught practical classes at KazCentre Housing and Utilities JSC on the following topics:* Analysis of the regulatory and legal framework for energy efficiency in civil (residential and public) buildings;
* The main tasks and stages of an energy audit of civil buildings;
* Methodology for energy audits of civil buildings;
* Development of an energy passport for civil buildings and recommendations for the selection of energy saving measures.
 |
| **Own developments, inventions, research papers, publications, patents** | PhD thesis on "Energy efficient exterior walls with organised air exchange". - Moscow, 2009.Participated in the development of normative legal acts and normative and technical documents of the Republic of Kazakhstan, as well as in the development of recommendations and reference materials, have publications in scientific and technical international journals and materials of scientific and technicalconferences, among which: |

|  |  |
| --- | --- |
|  | 1. Materials of the IV International Scientific-Practical Conference "Quality Management: Search and Solutions". Materials of the IV International, Scientific-Practical Conference. - Morocco, Casablanca November 27-29, 2018, - 518 p.;
2. Energy efficient expanded clay aggregate exterior walls with organised air exchange. Proceedings of the Joint International Scientific-Practical Conference dedicated to the Year of Uzbekistan in Kazakhstan. Actual Problems and Prospects of Building Structures: Innovations, Modernization and Energy Efficiency in Construction. Kazakh Leading Academy of Architecture and Construction (Kazakhstan) and Institute of Mechanics and Seismic Stability of Structures named after M.T. Urazbayev. M.T. Urazbayev (Uzbekistan), 7-8 December 2018, pp. 368;
3. Retrofitting measures for Existing Housing Stock in Kazakhstan. International Conference on Architecture and Built Environment, 17-19 October 2016, London, UK. International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering Vol 10, No 10, 2016, pp.1251-1258;
4. A Comparative Case Study of the Impact of Square and Yurt-Shape Buildings on Energy Efficiency. International research and practice conference. - London, October 2015;
5. Energy labelling of buildings and individual structures: Global experience and implementation opportunities in Kazakhstan. - Astana, UNDP, 2015. - 44 pp;
6. Handbook "How to choose the right energy efficient windows". - Astana, UNDP, 2015. -16 pp;
7. Experience of implementing energy efficient construction projects in the Republic of Kazakhstan // International Conference "Energy Efficient Buildings of the XXI Century. European and domestic experience of design, construction and operation of houses with minimum energy consumption. Alternative energy sources". - Minsk, 2013;
8. Decree of the Government of the Republic of Kazakhstan No. 1117 dated 31.08.2012 "Rules for determination and revision of energy efficiency classes of buildings, structures and constructions". - Astana, 2012;
9. Decree of the Government of the Republic of Kazakhstan No. 1181 of 11.09.2012 "Requirements for Energy Efficiency of Buildings, Structures, Structures and their Elements that are Part of Building Envelopes. - Astana, 2012;
10. Decree of the Government of the Republic of Kazakhstan No. 1192 dated 13.09.2012 "Requirements for Energy Saving and Energy Efficiency Improvement for Pre-project and (or) Project (Design and Estimate) Documents for Buildings, Structures, and Facilities". - Astana, 2012;
11. Catalogue of technical solutions for the design of energy-efficient residential buildings. Volume 1. External envelop structures. - Astana, 2012. -160 pp;
12. Catalogue of technical solutions for the design of energy-efficient residential buildings. Volume 2. Engineering systems. - Astana, 2012. -78 pp;
13. Methodological handbook for SN RK "Thermal protection of buildings". - Astana, 2012. -102 pp;
14. Methodological Guide to the SN RK "Heating, Ventilation and Air Conditioning". - Astana, 2012;
15. Green Building Handbook. - Astana, 2011. -35 pp;
16. Polialpan system façade heat-saving panels Recommendation for the design and application of a façade system for the construction and renovation of buildings. - Moscow, 2009. 136 pp;
17. Technical solutions album for mass application of the Polyalpan system for external thermal insulation of building façades. - Moscow, 2008. -80 pp;
18. Experimental studies of fragments of external walls with ventilation devices

/ "Construction materials, equipment, technologies of XXI century". - М.,№1, 2007; |

|  |  |
| --- | --- |
|  | 1. Increase of thermal efficiency of windows and improvement of air mode of premises // Materials of scientific-technical conference: Building physics in XXI century. / NIISF RAASN. - Moscow, 2006;
2. Improvement of thermal efficiency of windows and improvement of indoor air conditions / "Construction materials, equipment, technologies of the XXI century". -M, No.9 p., 2006
3. Investigation of a fragment of external wall structures with ventilation devices. Journal of Housing Construction, - Moscow, no. 11, 2005.
 |
| **Significant projects implemented** | 1. Supervise the rehabilitation and thermo-modernisation of more than 30 public social facilities (children's homes, kindergartens, schools, hospitals, polyclinics, urban street lighting) in all climatic regions of RK. Projects implemented 2017-2021
2. Supervised the structural part of the world's first yurt-shaped BG-Yurt building based on the passive house principle on the grounds of Nazarbayev University JSC. The project was implemented in 2016;
3. thermo-modernisation and sanitation of school No. 25 in Astana. The project was implemented in 2014;
4. He initiated and supervised the execution of design and estimate documentation of the first RK energy efficient standard projects of 5 and 9 storey residential buildings of mass housing construction in all climatic regions of the Republic of Kazakhstan with normal geological conditions. The projects passed state expertise, received positive conclusions and were submitted for implementation to the Committee for Construction and Housing and Communal Services of the Republic of Kazakhstan, 2012-2014;
5. Initiated and supervised the design of the first energy efficient 10-storey 184- apartment affordable residential building in the Republic of Kazakhstan (Karaganda). The project was implemented in 2011-2013;
6. Performed the section "Energy efficiency" with calculation of temperature fields of wall panels of a 15-storey 8-section residential building with the first non-residential floor of the Large-Panel House Building Combine (ZAO "KKPD", Rostov-on-Don) for mass housing construction in the Russian Federation. The project was implemented in 2009.
 |

ADDITIONAL:

|  |  |
| --- | --- |
| **Marital status, children:** | Married, four children |
| **Language skills:** | Kazakh, Russian - fluent. English - with dictionary |
| **Working skills****with the computer, the software:** | Proficient user of PC and office equipment: Microsoft Office, Microsoft Teams, Zoom, AutoCAD, KOMPAS, Autodesk Architectural Desktop, MathCAD, SCAD Office, etc. Modelling and analysis [of](http://www.aprok.org/WINDOW.php) heat transfer in building structures using [WINDOW-TEST](http://www.aprok.org/WINDOW.php) software as part of THERMand WINDOW programmes |