

Aleksandra A. Filimonova

Associate Professor, Ph.D

Department: Mechatronics and Automation

School of Engineering and Technology, South Ural State University (National Research University)

2 patents, 51 publications

h-index:

Scopus - 3, Web of Science - 3

CONTACT INFORMATION

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1. EDUCATION

June 2010	BSc, Engineering and Technology, South Ural State University (National Research University)
April 2011	BSc (Specialist Degree), Economist, Finance and Credit, South Ural State University (National Research University)
June 2012	MSc, Engineering and Technology, South Ural State University (National Research University)
February 2017	Ph.D. in Automation and Control Systems (candidate of science), Process control systems, South Ural State University (National Research University)

2. EMPLOYMENT HISTORY

2012 – 2017	Assistant Professor , Automation and Control Systems Department, South Ural State University, Chelyabinsk, the RF.
2017 – pres.	Associated Professor, Automation and Control Systems Department, South Ural State University, Chelyabinsk, the RF.
2018 – pres.	Associated Professor, Mechatronics and Automation department, South Ural State University, Chelyabinsk, the RF.

3. TEACHING EXPERIENCE

3.1. Undergraduate courses

2012 – pres.	‘Information technologies in Industries’, 3 th Semester: Lectures, WS, Lab classes, Tutorials
2013 – pres.	‘Project management’, 9 th Semester: Lectures, WS, Lab classes, Tutorials. ‘Control Systems Engineering’, 7-8 th Semester: WS, Tutorials.
2016 – pres.	‘Process control systems’, 9-10 th Semester: Lectures, Tutorials. ‘Mathematical foundations for the control systems design’, 4, 6 th Semester: Lectures, Tutorials.
2019 – pres.	‘Control Theory’, 9 th Semester: Lectures, Tutorials.

3.2. Laboratory tutorials

2016 – pres.	Lecturer, Laboratory tutorials: ‘Control Engineering’ ‘Process control systems’
2016 – pres.	Assistant Professor, Laboratory tutorials: ‘Control Engineering’ ‘Process control systems’

4. AREAS OF SCIENTIFIC EXPERTISE (RESEARCH INTERESTS):

1. Energy Management
2. Control Theory
3. Process control systems

5. CONFERENCES AND RESEARCH PAPERS

Participation in international conferences:

- 1) The 7th International Conference on Sustainability in Energy and Buildings, 2015, SEB-15, July 1-3, 2015. Lisbon, Portugal.
- 2) The 8th International Conference on Sustainability in Energy and Buildings, SEB-16, 11-13 September 2016, Turin, Italy.
- 3) International Russian Automation Conference, RusAutoCon 2018, September 16-23d, 2018, Sochi, Russian Federation.

Selected Papers:

1. Shnayder D.A., Filimonova A.A., Kazarinov L.S. An approach to energy-efficient street lighting control on the basis of an adaptive model //Advances in Intelligent Systems and Computing, Vol. 1 , pp.1271-1284.
2. Filimonova A.A., Zatsepin E.P., Zatssepina V.I. Multilevel control of power consumption at metallurgical plants // 2018 International Russian Automation Conference, RusAutoCon 2018, DOI: 10.1109/RUSAUTOCON.2018.8501746
3. Kazarinov L.S., Barbasova T.A., Kolesnikova O.V., Filimonova A.A. Method of multilevel rationing and optimal forecasting of volumes of electric-energy consumption by an industrial enterprise// Automatic Control and Computer Sciences, 2014, Vol. 48, No. 6, pp. 324–333.
4. Filimonova A.A., Kazarinov L.S., Barbasova T.A. Dispatching control of industrial facility power consumption / Energy Procedia. – 2015, Vol. 83, pp. 111–120.
5. Barbasova T.A., Kolesnikova O.V., Filimonova A.A. Automated system for equipment energy efficiency monitoring in heat energy facility / Energy Procedia. – 2015, Vol. 83, pp. 69–78.

6. PROFESSIONAL DEVELOPMENT

- “Standard for Energy Management Systems ISO 50001”, June 2012 in DQS-UL MSS Management Solution Center, Russia, Moscow.
- “Energy Management Certification Program”, June 2012 - July 2013 in The Northwest Water and Energy Education Institute, USA, Eugene.
- «Renewable Energy and Sustainability BEST Training», July 2013 in CleanEdison company, USA, Tampa.
- “Feasibility study of energy-saving projects”, September 2014 in Institute for Continuing Education, Russia, St. Petersburg.
- “Industrial mechatronic and robotic complexes and automation systems”, July 2019 in South Ural State University (National Research University), Russia, Chelyabinsk