

ANDREI NIKOLAYEVICH RUSLANTSEV

PhD in Mechanics of Solids

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PERSONAL DETAILS

Date of birth: 13 March 1991

Gender: male

Civil status: married

SKILLS

Professional skills: Mathematical modeling, machine learning, composite structures optimization,

experimental data analysis, mechanical tests planning and evaluation.

Computer skills: Linux, Python, sklearn, MATLAB, Maple, MS Windows, Word, Excel,

AutoCAD, Kompas3D, LaTeX, Ansys, Femap, Photoshop.

Languages: Russian, English

EDUCATION

2014 – 2018 Post-graduate student, "Composite structures for rocket and space" department,

Bauman Moscow State Technical University.

2012 – 2014 Master of science, "Composite structures for rocket and space" department, **Bauman**

Moscow State Technical University, graduate with excellence. GPA 5.00.

2008 – 2012 Bachelor of science, "Composite structures for rocket and space" department, **Bauman**

Moscow State Technical University, graduate with excellence. GPA 4.96.

1997 – 2008 Lyceum of Troitsk city, graduate with excellence.

WORK EXRERIENCE

Blagovravov Institute of machines science of the Russian Academy of Science Moscow, Russia

Engineer

Sept. 2012 – Sept. 2014

- Analytical mathematical models for fiber reinforced non-linear deformation development
- Reinforced plastics mechanical tests planning and evaluation
- Experimental data analysis

Junior researcher

Sept. 2014 – Jan. 2018

- Development of analytical mathematical models for fiber reinforced plastics under variable load (deformation and fracture analysis)
- Development of mathematical models for composite structures (stress-strain state analysis)
- Composite structures optimization
- Reinforced plastics mechanical tests planning and evaluation
- Repair, modernization and commissioning of testing equipment
- Experimental data analysis
- Organization and holding of international conferences "Deformation and fracture of composite materials and structures 2014" and "Deformation and fracture of composite materials and structures 2016"

Research officer Jan. 2018 – present

 Development of analytical mathematical models for fiber reinforced plastics (deformation and fracture analysis)

- Development of analytical mathematical models for fiber reinforced composites deformation under time-dependent loads
- Composite structures optimization
- Experimental data analysis
- Organization and holding of international conferences "Deformation and Fracture of Composite Materials and Structures 2018" (DFCMS-2018)

Bauman Moscow State Technical Unversity,

Moscow, Russia

Laboratory assistant

Sept. 2010 – Jul. 2014

- Refurbishment and recommissioning of rotary casting laboratory machine
- Development of special equipment for suspensions rotary casting
- Development of a probabilistic model of particle redistribution during the rotary casting process of suspensions
- Production of thin polished sections
- Working with automated laboratory measuring and testing equipment

Assistant Sept. 2015 – present

- Lecturing on Mechanics of composite structures (own course)
- Lecturing the overseas students on Composite materials mechanical testing (own course)
- Designing tasks, homework and control software on Mechanics of composite materials
- Thesis supervisor and scientific advisor
- Curator of the student group
- Lecturing the high school students ("Engineering class" program, http://profil.mos.ru/inj.html#/)
- Project development aid for high school students ("Step into the future" program, http://cendop.bmstu.ru/step-into-the-future/)

MAIN ARTICLES

- 1. A.N. Ruslantsev, A.M. Dumansky. Carbon-fiber reinforced plastics deformation under time-varying load. *Trudy MAI*, **97**, 1-17 (2017)
- 2. A.N. Ruslantsev, A.M. Dumansky, M.A. Alimov. The model of the curvilinear layered composite beam stress-strain state. *Trudy MAI*, **96**, 1-21 (2017)
- 3. A.N. Ruslantsev, Ya.M. Portnova, L.P. Tairova, A.M. Dumansky. Analisys of mechanical properties anisotropy of nanomodified carbon fiber-reinforced woven composites. *IOP Conference Series: Material Science and Engineering (MSE)*, **153** (2016) DOI: 10.1088/1757-899
- 4. A.M. Dumansky, A.N. Ruslantsev, L.P. Tairova. The model of non-linear carbon fiber reinforced plastic deformation. *Composite material constructions*, **4 (132)**, 6-12 (2013)

ADDITIONAL INFORMATION

25 articles published in journals. Main field of research – mechanics of composite materials.

Participant of more than 20 international and all-Russian conferences on the composites mechanics.

Awards: Scholarship of President of Russian Federation (2012-2013, 2013-2014), scholarship of the Club of the Imperial Technical School (2014), Scholarship of Moscow region governor (2008)

Third degree diploma of the Moscow region mathematics olympiad (2008).

Participant of Sibur ethylene production optimization challenge, PIK digital day.

Kaggle account: https://www.kaggle.com/aruslantsev

Driver license cat. A, A1, B, B1, M.