

Dr Oleksii Nosko

Associate professor

1. Scientific degrees

2010 Dr in Tribology, Bauman Moscow State Technical University, Russia;
2013 Ph.D. in Mechanical Engineering, Saitama University, Japan;
2017 Dr Habilitated in Mechanics, Bialystok University of Technology, Poland.

2. Research directions

- airborne particle emissions from sliding contacts;
- temperature and thermo-mechanical processes at sliding contacts;
- temperature measurements at sliding contacts.

3. Professional career

2013–2014 assistant professor, Faculty of Mechanical Engineering,
Dahl East Ukrainian National University;
2014–2016 researcher, Department of Machine Design,
KTH Royal Institute of Technology;
2016–2018 assistant professor, Faculty of Mechanical Engineering,
Bialystok University of Technology;
2018–now associate professor, Faculty of Mechanical Engineering,
Bialystok University of Technology.

4. Membership in scientific organisations

2017–now Polish Society of Theoretical and Applied Mechanics

5. Awards

2007 Imperial Technical School Club Scholarship
at Bauman Moscow State Technical University;
2010 Japanese Government Scholarship;
2014 Marie Curie Fellowship at the Rebrake Project;
2018 Rector Individual Award at Bialystok University of Technology.

6. Grants

2017 grant MB/WM/11/2017,
Ministry of Science and Higher Education of Poland;
2018–2021 grant 2017/26/D/ST8/00142, SONATA13,
National Science Centre of Poland.

7. Scientific supervision

- thesis defence committee member for 1 Ph.D. thesis;
- supervisor of 1 Master's project.

8. Membership in journal editorial boards

- technical editor of *Acta Mechanica et Automatica* (ISSN 1898-4088);
- reviewer at *Friction*, *Environmental Engineering Research*, *Environmental Science & Technology*, *International Journal of Mechanical Sciences*, *Wear*, *Mechanism and Machine Theory*, *Tribology Letters*, *Micromachines*, *International Journal of Heat and Mass Transfer*, *Tribology International*, *Journal of Friction and Wear*, *Advances in Mechanical Engineering*.

9. Publication history

Number of papers in JCR journals	19
Number of monographs	2
Number of patents	1
Number of study books	1
WoS citations (without self-citations)	50
WoS h-index	5

10. Main publications

1. O. Nosko (2013) Partition of friction heat between sliding semispaces due to adhesion-deformational heat generation, *International Journal of Heat and Mass Transfer*, 64, 1189–1195.
2. O. Nosko, T. Nagamine, A.L. Nosko, A.M. Romashko, H. Mori, Y. Sato (2015) Measurement of temperature at sliding polymer surface by grindable thermocouples, *Tribology International*, 88, 100–106.
3. O. Nosko (2016) Analytical study of sliding instability due to velocity- and temperature-dependent friction, *Tribology Letters*, 61, 1.
4. N.S. Belyakov, O. Nosko (2016) Analytical solution of non-stationary heat conduction problem for two sliding layers with time-dependent friction conditions, *International Journal of Heat and Mass Transfer*, 98, 624–630.
5. O. Nosko, R. Borrajo-Pelaez, P. Hedström, U. Olofsson (2017) Porosity and shape of airborne wear microparticles generated by sliding contact between a low-metallic friction material and a cast iron, *Journal of Aerosol Science*, 113, 130–140.
6. O. Nosko, U. Olofsson (2017) Effective density of airborne wear particles from car brake materials, *Journal of Aerosol Science*, 107, 94–106.
7. O. Nosko, U. Olofsson (2017) Quantification of ultrafine airborne particulate matter generated by the wear of car brake materials, *Wear*, 374–375, 92–96.
8. O. Nosko, J. Vanhanen, U. Olofsson (2017) Emission of 1.3–10 nm airborne particles from brake materials, *Aerosol Science and Technology*, 51, 91–96.
9. O. Nosko (2018) Thermal boundary conditions to simulate friction layers and coatings at sliding contacts, *International Journal of Heat and Mass Transfer*, 127, 1128–1137.
10. O. Nosko (2019) Hyperbolic heat conduction at a microscopic sliding contact with account of adhesion-deformational heat generation and wear, *International Journal of Thermal Sciences*, 137, 101–109.

11. Educational contribution

- author and coordinator of ERASMUS+ courses:
 - MER0003 *Strength of Materials*,
 - FME00089 *Engineering Mechanics*,
 - FME00185 *Research Methodology in Mechanical Engineering*;
- teacher of the courses:
 - MF2072 *Research Methodology in Machine Design*
(KTH Royal Institute of Technology, 2015–2016),
 - MER0003 *Strength of Materials*,
 - FME00089 *Engineering Mechanics*,
 - FME00185 *Research Methodology in Mechanical Engineering*,
 - MNS0202 *General Mechanics*,
 - DBEM302OB *Tribology* (Ph.D. students).