SERGIY M. PONOMARENKO

Associate Professor of Physics, Scientist & Educator

@ sergiy.ponomarenko@gmail.com Kyiv, Ukraine
Citizen of Ukraine +38 (093) 563-29-53

EXPERIENCE

Associate Professor of Physics

National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»

2013 — Present Kyiv, Ukraine

- Taught Physics of Combustion and Quantum Chemistry to master's degree students.
- Actively serving variety of schools and task forces focused on curriculum development, textbook review.
- I also participate in scientific projects:
  - Heat exchange and gas dynamics of surface vortex systems of film cooling of blades of high-temperature gas engines, Contract Number 2935.
  - Heat exchange and gas dynamics of surface vortex systems of film cooling of blades of high-temperature gas turbine engines, Contract Number 29350p
  - Thermogas dynamics of turbulent flows in rotating channels of high-temperature power plants, Contract Number 2018/TF/1
  - Thermogas dynamics of turbulent flows in rotating channels of high-temperature power plants, Contract Number 1.7.1.AH.2, Registration Number 0118U000006

Associate Professor of Physics

Kyiv National University of Construction and Architecture

2005 — 2013 Kyiv, Ukraine

- Taught Physics to bachelor's degree students.
- Actively serving variety of schools and task forces focused on curriculum development, textbook review.

Researcher

Institute of Macromolecular Chemistry of National Academy of Sciences of Ukraine

2005 – 2011 Kyiv, Ukraine

- Research the physicsl properties (thermoelasticity, electrical conductivity) of polymer nanocomposites.
- Participation in scientific projects of the Department of Thermophysics of Polymers.

Gastwissenschaftler

Albert-Ludwigs-Universität Freiburg

2003 Freiburg, Germany

- Study of polymers using Nuclear Magnetic Resonance Spectroscopy (NMR) Analysis.

LINKS

My page on Google Scholar

My ORC ID

MOST PROUD OF

Technology enthusiast
My willingness to learn more and teach more with latest technology

Student Growth
Taught hundreds of students in my teaching and training career

Inspiring Students for Learning
Encourage students to become engineers and scientists

STRENGTHS

Hard-working | Persuasive | Experienced Teacher & Motivator

LANGUAGES

English ●●●○○

EDUCATION

M.Sc. in Physics & Mathematics

V. O. Sukhomlynskyi National University of Mykolaiv

Mykolaiv,Ukraine 2001

PhD in Applied Physics

Institute of Macromolecular Chemistry of National Academy of Sciences of Ukraine

Kyiv, Ukraine 2005

SOFTWARE SKILLS

- MS Office
- LaTeX 2ε
- Python
- C/C++
- ORCA (quantum chemistry program)
- Gaussian (general purpose computational chemistry software)

REFERENCES (IN ENGLISH)

1. Thermoelastic behavior of synthetic rubber/organoclay nanocomposites at low elongations / Privalko V.P., Ponomarenko S.M., Privalko E.G., Shoen F., Gronski W.// Advanced Composites Letters. –2003. –№2. –Vol. 12. – P. 69-72.
2. Interfacial Interactions-Controlled Thermoelasticity and Stress Relaxation Behavior of Synthetic Rubber/Organoclay Nanocomposites Privalko V.P., Ponomarenko S.M., Privalko E.G., Shoen F., Gronski W.// J. Macromol. Sci. Phys. – 2003. Vol. B42. –№ 6. – P. 1183-1196.
3. Structute and Thermoelastic Behavior of Synthetic Rubber/Organoclay Nanocomposites / Privalko V.P., Ponomarenko S.M., Privalko E.G., Shoen F., Gronski W., R. Staneva, B. Stuen
4. Structure and Thermoelasticity of Synthetic Rubber/Silica Composites / Privalko V.P., Ponomarenko S.M., Privalko E.G., Shoen F., Gronski W. // J. Macromol. Sci. Phys. – 2004. Vol. 43. – № 6. – P. 1163-1174.
5. Thermoelasticity and stress relaxation behavior of polychloroprene/organoclay nanocomposites / Privalko V.P., Ponomarenko S.M., Privalko E.G., Shoen F., Gronski W. // European Polymer Journal. – 2005, – Vol. 41, – p. 3042–3050.
6. Structure/properties Relationships for Poly(Vinylidene Fluoride)/Doped Polyaniline Blends / Privalko V.P., Ponomarenko S.M., Privalko E.G., Lobkov S.V., Rekhteta N.A., Pud A.A., Bandurenko A.S., Shapoval G.S. // Journal of Macromolecular Science, Part B. Physics. – Vol. 44, 2005, – P. 749 – 759.