



Prof. Dr. Valentine P. Ananikov

Academician of Russian Academy of Sciences

Elected Member of European Academy "Academia Europaea"

Elected Honorary Academician of Bashkortostan Republic

Zelinsky Institute of Organic Chemistry
Russian Academy of Sciences
Leninsky Prospect 47, Moscow, 119991, Russia

E-mail: val@ioc.ac.ru; valentin.ananikov@gmail.com

Web: <http://AnanikovLab.ru>

Google Scholar: <https://scholar.google.com/citations?user=V2bwOqsAAAAJ>

Web of Science: <https://www.webofscience.com/wos/author/record/3874538>

ORCID: <https://orcid.org/0000-0002-6447-557X>

PROFESSIONAL EXPERIENCE

2024: Honorary Academician of National Academy of Sciences of Bashkortostan Republic
2022: Head of Chemistry Section of Russian Academy of Sciences
2019: Academician of Russian Academy of Sciences
2012: Professor, Chemistry Department, Moscow State University
2009: Head, Division of Structural Studies, Zelinsky Institute of Organic Chemistry
2008: Elected Member of Russian Academy of Sciences
2005: Head, Laboratory of Transition Metal and Nanoparticle Catalysis, Zelinsky Institute of Organic Chemistry
2004 - 2005: Leading Scientist
2000 - 2003: Researcher of Zelinsky Institute of Organic Chemistry
1996 - 1999: Ph.D. Student, Russian Academy of Sciences

EDUCATION

2003: Habilitation (Doctorate of Science in Organic Chemistry), Moscow, Russia.
1999: Ph.D in Organic Chemistry, Zelinsky Institute of Organic Chemistry, Moscow, Russia.
1996: Masters of Science in Biochemistry.

SELECTED AWARDS AND ACHIEVEMENTS

- Best Artificial Intelligence project distinction in the field of chemistry and materials science (2024).
- International Markovnikov Prize by Tatarstan Republic for distinguished contribution to the field of organic chemistry (2024).
- "Gravity" International Prize for outstanding achievements and groundbreaking scientific research in the field of Artificial Intelligence (2023).
- Zelinsky Prize by Russian Academy of Sciences for outstanding achievements in organic chemistry (2020).
- Reaxys Award Russia, Elsevier Science, The Netherlands (2019).
- Election as a Member of European Academy "Academia Europaea" (2018).
- Organometallics Distinguished Author Award Lectureship by American Chemical Society, USA (2016).

- Hitachi High-Technologies Award In Appreciation for Novel Approach and Outstanding Contribution to Setting New Standards for Electron Microscopy Applications in Chemistry, Japan (2016).
- Scopus Award, Elsevier Science, The Netherlands (2016).
- Actively Cited Researcher, Web of Science, Thomson Reuters, USA (2015).
- MegaGrant of St.Petersburg State University, Russia (2013).
- Liebig Lecturer by German Chemical Society, Germany (2010).
- Balandin Prize for outstanding achievements in the field of catalysis by Russian Academy of Sciences (2010).
- Research Grants of President of Russia (2004, 2007).
- "Outstanding scientists of Russian Academy of Sciences" Award by Science Support Foundation (2005).
- Russian State Prize for Young Scientists for Outstanding Achievements in Science and Technology (2004).
- Medal of Russian Academy of Sciences (2000).
- Emerson Center Fellowship, Emory University, Atlanta, USA (1998).

ADVISORY AND EDITORIAL BOARDS

Angewandte Chemie International Edition (Wiley, Germany): International Advisory Board

JACS Au (American Chemical Society, USA): Editorial Advisory Board

ACS Catalysis (American Chemical Society, USA): Editorial Advisory Board

Chemistry – A European Journal (Wiley, Germany): Editorial Board

Organometallics (American Chemical Society, USA): International Advisory Board

Advanced Synthesis & Catalysis (Wiley, Germany): Academic Advisory Board

Chemistry An Asian Journal (Wiley, Germany): International Advisory Board

OpenChemistry (Wiley, Germany): International Advisory Board

Russian Chemical Reviews (Russian Academy of Sci., Moscow): Editorial Board

Mendeleev Communications (Elsevier Science): Editorial Board

Russian Chemical Bulletin (Russian Academy of Sci., Moscow): Editorial Board

RESEARCH INTERESTS

AI in chemistry, Catalysis, Nanotechnology, Organic Synthesis. Mechanistic studies, molecular complexity and transformations. Transition-metal-catalyzed transformations towards application in organic chemistry.

FEW SELECTED RECENT PUBLICATIONS

- Kozlov K.S., Boiko D.A., Burykina J.V., Ilyushenkova V.V., Kostyukovich A.Yu., Patil E.D., Ananikov V. P. "Discovering organic reactions with a machine-learning-powered deciphering of tera-scale mass spectrometry data", *Nature Communications*, **2025**, 16, 2587.
- Ananikov V.P. "Top 20 influential AI-based technologies in chemistry", *Art.Int.Chem.*, **2024**, 2(2), 100075.
- Prima D.O., Kulikovskaya N.S., Novikov R.A., Kostyukovich A.Yu., Burykina J.V., Chernyshev V.N., Ananikov V. P., "Revealing the mechanism of combining best properties of homogeneous and heterogeneous catalysis in hybrid Pd/NHC systems", *Angew. Chem. Int. Ed.*, **2024**, 63 (27), e202317468.
- Galushko A.S., Boiko D.A., Pentsak E.O., Eremin D.B., Ananikov V. P. "Time-Resolved Formation and Operation Maps of Pd Catalysts Suggest a Key Role of Single Atom Centers in Cross-Coupling", *J. Am. Chem. Soc.*, **2023**, 145, 16, 9092-9103.

- Boiko D.A., Kozlov K.S., Burykina J.V., Ilyushenkova V.V., Ananikov V.P., "Fully Automated Unconstrained Analysis of High-Resolution Mass Spectrometry Data with Machine Learning" *J. Am. Chem. Soc.*, **2022**, 144, 32, 14590-14606.
- Eremin D.B., Galushko A.S., Boiko D.A., Pentsak E.O., Chistyakov I.V., Ananikov V. P., "Toward Totally Defined Nanocatalysis: Deep Learning Reveals the Extraordinary Activity of Single Pd/C Particles", *J. Am. Chem. Soc.*, **2022**, 144, 13, 6071–6079

Complete publications list: <http://ananikovlab.ru/publications>