

Name

Liudmyla Ponomarova

Affiliation

Associate Professor of Theoretical and Applied Chemistry Department

E-mail:

ponomarova.ln@gmail.com

l.ponomarova@chem.sumdu.edu.ua

https://www.researchgate.net/profile/L_Ponomareva

**Education:**

- 2003–2008 Sumy State Pedagogical University (Ukraine), Department of Natural Sciences;
- 2009–2012 PhD study in the Vernadskyi Institute of general and inorganic chemistry of the Ukrainian National Academy of Sciences, Kyiv, Ukraine

Academic degrees

2013: Ph.D., specialty 02.00.04 – physical chemistry, Kyiv, Ukraine

Academic rank: Associate Prof.

Area of Research

The study of the laws of ion-exchange and sorption processes and materials, nanomaterials and nanocomposites, water purification technologies, electrodeionization.

Analytical chemistry and chemistry of objects of agriculture and food, raw materials of medicinal plants.

Professional experience:

- Since 2018: Associate Professor of General Chemistry Department, Sumy State University, Sumy, Ukraine
- 2013–2018: Assist. Prof. of the Therapy, Pharmacology, Clinical Diagnostics and Chemistry Department, Faculty of Veterinary medicine Sumy National Agrarian University Sumy, Ukraine
- 2012–2013: Junior researcher of the Vernadskyi Institute of general and inorganic chemistry of the Ukrainian National Academy of Sciences, Kyiv, Ukraine
- 2009–2012: PhD study in Researcher of the Vernadskyi Institute of general and inorganic chemistry of the Ukrainian National Academy of Sciences, Kyiv, Ukraine
 - 2008–2009: Laboratory assistant of Chemistry Department, Sumy State Pedagogical University, Sumy, Ukraine

Participation in research projects:

- "Creating effective nanostructured hybrid sorption and membrane substances with improved functional properties based on organic polymers and oxides multivalent metals (Ti, Zr, Mn, Fe)" 0110U000615 (2010-2012),

- "Hybrid organic-inorganic and inorganic nanocomposite materials for membrane separation process" (supported by the National Academy of Science of Ukraine, program "Problems of sustainable development, environmental management and environmental protection"). 0110U00534 (2011-2014),
- Target complex multidisciplinary program of scientific research of the NAS of Ukraine on the issues sustainable development, environmental management and conservation the environment (No. 30/10, 2010).
- Development of technology of organic dried vegetable and fruit semi-finished products and energy efficient installation using solar panels (2017 -2020)
- Biological and ecological characteristics of cultivation of Ginkgo biloba L. as organic raw materials, pharmaceutical purposes by establishing plantations in the North-Eastern forest-steppe of Ukraine (2017 -2020)

Teaching experience:

Since 2013: «Chemistry», «Inorganic and analytical chemistry», «Organic chemistry», «Medical chemistry», «Bioorganic chemistry» (in Ukrainian, Russian and English languages)

Level of proficiency (English) B₂

Professional honors, awards and fellowships:

- Scholarship of the national Academy of Sciences of Ukraine for young scientists (2012–2013)
- Scholarship of the Cabinet of Ministers of Ukraine for young scientists (2016– 2018)

The most significant publications:

1. Ponomarova L. N. Composite ion exchangers based on cation-exchange resin and zirconium hydrophosphate. – Manuscript. - Thesis for the degree of Candidate of Chemical Sciences by specialty 02.00.04. –Physical chemistry. – V. I. Vernadsky Institute of General and Inorganic Chemistry of National Academy of Sciences of Ukraine. – Kyiv, **2013**. – 24 p.
2. Yuliya S. Dzyazko, Ludmila N. Ponomarova, Yurii M. Volfkovich et al. Hybrid Organic-inorganic Ion-exchangers for Removal of Heavy Metal Ions From Diluted Solutions // Separation Science and Technology, - V.48. - **2013**.- P. 2140–2149.
3. Yu.S. Dzyazko, L.N. Ponomarova, L.M. Rozhdestvenskaya Electrodeionization of low-concentrated multicomponent Ni²⁺-containing solutions using organic–inorganic ion-exchanger // Desalination - 342 - **2014** – P. 43–51.
4. Yuliya S. Dzyazko, Ludmila N. Ponomarova, Yurii M. Volfkovich, Ion-exchange resin modified with aggregated hydrophosphate. Morphology and functional properties nanoparticles of zirconium // Microporous and Mesoporous Materials – V. 198 - **2014** – P. 55–62.
5. Dzyazko, Y., Ponomarova, L., Volfkovich Y. et al. Influence of zirconium hydrophosphate nanoparticles on porous structure and sorption capacity of the composites based on ion exchange resin // Chemistry and Chemical Technology. – **2016**. – V.10, N 3. – P. 329 –335.
6. Dzyazko, Y., Ponomarova, L., Volfkovich Y. et al. Effect of Incorporated Inorganic Nanoparticles on Porous Structure and Functional Properties of Strongly and Weakly Acidic Ion Exchangers In book: Nanochemistry, Biotechnology, Nanomaterials, and Their Applications :Springer Proceedings in Physics, **2018**. – V.214. – P.63-77.

Patent

Patent of Ukraine UA No. 97184, IPC B 01 J 20/00, B 01 J 39/00, 82 B B 1/00. The method of obtaining organic-inorganic nanocomposite ion exchangers, selective for d - metal cations / Ponomarova L. M., Dzyazko Yu.S., Belyakov V. M. Institute of General and inorganic chemistry named. V. I. Vernadsky of the NAS of Ukraine. - No. a201006483; Appl. 27.05.2010; publ. 10.01.2012, No. 1.