YULIYA S. DZYAZKO

Curriculum Vitae

Professional Address:
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Education

1981-1986	T.G. Shevchenko National University, chemical faculty
1999	Ph.D Thesis "Sorption properties of inorganic proton-conductive materials based on titanium phosphate"
2013	Doctoral dissertation "Ion exchange and transport properties of highly hydrated materials based on phosphates and dioxides of zirconium"

Positions

1986-1999	V.I. Vernadskii Insttute of General & Inorganic Chemistry, Engineer
1999-2000	V.I. Vernadskii Insttute of General & Inorganic Chemistry, Junior Researcher
2000-2006	V.I. Vernadskii Insttute of General & Inorganic Chemistry, Scientific Researcher
2006-2015	V.I. Vernadskii Insttute of General & Inorganic Chemistry, Senior Researcher
2015-now	V.I. Vernadskii Insttute of General & Inorganic Chemistry, Leading Researcher.

Training

2000	Technical University of Eindhoven (the Netherlands), Faculty of Chemical Engineering (under supervision of Dr. L.J.J. Janssen)
2003	CNRS-ENSIC, (Nancy, France), Laboratory of Chemical Engineering (under supervision of Dr. Francois Lapique)
2004-2005	Institute for Macromolecular Chemistry (Kiev, Ukraine), Department of Physics of Polymers (under supervision of Prof. V.V. Shilov)
2006	Ege University (Izmir, Turkey), Faculty of Chemical Engineering (under supervision of Prof. Nalan Kabay).
2013	National University of Food Industry of the MES of Ukraine (under supervision of Prof. Valerii Myronchuk).

Field of investigations
Membrane, ion-exchange and sorption processes and materials, nanomaterials and nanocomposites, separation for food technology.

Membership in Thesis Committee
V.I. Vernadskii Insttute of General & Inorganic Chemistry,
speciality
Physical chemistry

International grants

1999-2003	NATO SfP 972490 "Removal of Heavy or Transition Metals from Dilute Process Solutions by Ion-Exchange Assisted Electrodialysis"

2003-2005 CTCU 1183 “Development of electromembrane process technology and equipment for water purification”.

2003-2004 "Dnipro" Programme “Chromium Removal from Diluted Solutions with Eletrodialysis Method using Composite Inorganic Membranes” (supported by the Ministry of Education and Science of Ukraine and EGIDE foundation of France, grant # 53M-2002).

2005-2006 Joint Ukrainian-Turkish Programme “Removal of toxic ionic impurities from waste and drinking water using electrodeionization method” (supported by the Ministry of Education and Science of Ukraine and TUBITAK, grant # M/128-2005)

2007-2010 Grant “Nanostructured functional materials based on inorganic compounds characterized by electrical conductive, photochemical and ion exchange properties" (supported by the National Academy of Science of Ukraine, program "Nanostructured systems, nanomaterials, nanotechnologies")

.2011-2014 “Hybrid organic-inorganic and inorganic materials for membrane sepatayion processes" (supported by the National Academy of Science of Ukraine, program "Problems of sustainable development, environmental management and environmental protection").

2014-2016 “Organic-inoeganic membranes for electrodialysis and baromembrane separation" (supported by the National Academy of Science of Ukraine, program "Fundamental problems of creation of new substances and materials for chemical production"),

2015-2016 Joint Ukrainian-Turkish Programme “Application of Membrane Technologies for Water Reclamation and Whey Desalination in Food Industry” (supported by the Ministry of Education and Science of Ukraine and TUBITAK

Number of publications:	**293**
particularly	
in refereed journals	**108**
book chapters	**9**
patents	**8**

Selected publications (2012-2017)

1. Dzyazko Yu. S., Ponomareva L.N., Volfkovich Yu.M, Sosenkin V.E. (2012), Effect of the porous structure of polymer on the kinetics of Ni^{2+} exchange on hybrid inorganic-organic ionites, *Russ. J. Phys. Chem. A*, 86(6), pp. 913-919.
2. Dzyazko Yu.S., Ponomaryova L.N., Volfkovich Yu.M., Sosenkin V.E., Belyakov V.N. (2013), Polymer Ion-Exchangers Modified with Zirconium Hydrophosphate for Removal of Cd^{2+} Ions from Diluted Solutions , *Separ. Sci. Technol*., 48(14), pp. 2140-2149.
3. Dzyazko Yu.S., Rudenko A.S., Yukhin Yu.M., Palchik A.V., Belyakov V.N. (2014), Modification of ceramic membranes with inorganic sorbents. Application to electrodialytic recovery of Cr(VI) anions from multicomponent solution, *Desalination*, 342, pp. 43-51.
4. Dzyazko Y.S., Ponomaryova L.N., Rozhdestvenskaya L.M., Vasilyuk S.L., Belyakov V.N. (2014), Electrodeionization of low-concentrated multicomponent Ni^{2+}-containing solutions using organic-inorganic ion-exchangers , *Desalination,* 342, pp. 52-60.
5. Dzyazko Yu. S., Ponomaryova L. N., Volfkovich Yu. M., Trachevskii V.V., Palchik A. V. (2014), Ion-exchange resin modified with aggregated nanoparticles of zirconium hydrophosphate. Morphology and functional properties, *Microporous and Mesoporous Materials*, 198, pp. 55-62.
6. Dzyazko Yu.S., Volfkovich Yu. M., Sosenkin V. E, Nikolskaya N.F., Gomza Yu.P. (2014), Composite inorganic membranes containing nanoparticles of hydrated zirconium dioxide for electrodialytic separation , Nanoscale Research Letters, 9(1), pp. 271-282.
7. Tonkha O.L., Dzyazko Yu.S. (2014), Soil and plant roots. In “Structural Properties of Porous Materials and Powders Used in Different Fields of Science and Technology” by Volfkovich

Yu.M., Filippov A.N., Bagotsky V.S. – London, Heidelberg, New York, Dordrecht: Springer, 2014, pp. 221-250.

8. Dzyazko Yu.S., Konstantinovsky B.Ya. (2014), Thermal Insulating Materials, In "Structural Properties of Porous Materials and Powders Used in Different Fields of Science and Technology" by Volfkovich Yu.M., Filippov A.N., Bagotsky V.S., London, Heidelberg, New York, Dordrecht: Springer, 2014, pp. 103-128.
9. Dzyazko Yu. S. , Rozhdestvenskaya L.M., Zmievskii Yu. G. , Vilenskii A.I., Myronchuk V.G., Kornienko L.V., Vasilyuk S.L., Tsyba N.N. (2015), Organic-inorganic materials containing nanoparticles of zirconium hydrophosphate for baromembrane separation, *Nanoscale Research Letters,* 10, pp. 64-75.
10. Dzyazko Yu., Rozhdestveskaya L., Zmievskii Yu., Volfkovich Yu., Sosenkin V., Nikolskaya N., Vasilyuk S., Myronchuk V., Belyakov V. (2015), Heterogeneous Membranes Modified with Nanoparticles of Inorganic Ion-Exchangers for Whey Demineralization , Materials Today: Proceedings, 2(6), pp. 3864–3873.
11. Zmievskii Yu.G., Rozhdestvenska L.M., Zakharov V.V., Dzyazko Yu.S., Myronchuk V.G. (2016), Whey electrodialysis using organic-inorganic membranes; In Promising materials and processes in technical electrochemistry, Barsukov V.Z., Borisenko Yu. V., Buket O.I., Khomenko V.G. (eds.), – KNUTD, Kyiv, 2016, pp. 214-218.
12. Dzyazko Yu. S., Volfkovich Y.M., Ponomaryova L.N., Sosenkin V.E., Trachevskii V.V., Belyakov V.N. (2016), Composite ion-exchangers based on flexible resin containing zirconium hydrophosphate for electromembrane separation, *J. Nanosci. Technol*, 2(1), pp. 43-49.
13. Myronchuk V.G., Dzyazko Yu.S., Zmievskii Yu.G., Ukrainets A.I., Bildukevich A.V., Kornienko L.V., Rozhdestvenskaya L.M., Palchik A.*V. (2016), Organic-inorganic membranes for filtration of corn distillery, Acta* Periodica Technologica, 47, pp. 153-165.
14. Zmievskii Yu., Dzyazko Yu., Myronchuk V., Rozhdestvenskaya L., Vilenskii A., Kornienko L. (2016), Fouling of polymer and organic-inorganic membranes during filtration of corn distillery, Ukrainian Food Journal, 5(4), pp. 739-747.
15. Rozhdestvenskaya L. M., Dzyazko Yu. S., Kudelko E. O., Vasilyuk S. L., Belyakov V. N. (2017), Desalination of glycerol-water solutions by electrodyalysis using the organo-inorganic membranes, Journal of Water Chemistry and Technology, 39(1), pp. 26-32.

Edition of collective monograph

Environmental Protection: from Sorbents to Membranes (N. Kabay, Yu. Dzyazko, M. Arda, K. Kazdobin, eds.): ArtOk Publishier, Kyiv, 2016, ISBN : 978-966-97621-2-2.

Selected International Conferences (2012-2016)

1. XIII Ukrainian—Polish Symposium on Theoretical and Experimental Studies of Interface Phenomena and their Technological Applications. 4th Compositum Conference Hybride Nanocomposites and their Applications Puszsha-Wodica (Kyiv), Ukraine, September 11-14, 2012.
2. International Conference "Nanotechnology and nanomaterials NANO-2013". 25 Aug.-1 Sept. 2013, Bukovel, Ukraine.
3. International Conference **"**Nanotechnology and nanomaterials NANO-2014", 27 -30 Aug., 2014, Lviv, Ukraine.
4. International Conference on Physics of Advanced Materials ICPAM 2014, 22-28 Sept. 2014, Iasi, Romania,.
5. International Conference EUROMED 2015, 10-14 May 2015, Palermo, Italy.
6. International Conference "Nanotechnologies and nanomaterials", 25-29 Aug. 2015,
7. Ukrainian-German Symposium on Physics and Chemistry of Nanostructures and on Nanobiotechnology,.21-25 September 2015, Kyiv, Ukraine.
8. International Conference on Energy, Environment and Material Science (EEMAS 2015), October 17-19, 2015, Agios Nikolaos, Crete, Greece.

9. International Conference “Desalination for the Environment: Clean Water and Energy” , 22–26 May 2016, Rome, Italy,
10. International Conference "Euromed 2017. Desalination for Clean Water and Energy Cooperation around the World". 9-12 May, 2017. Tel-Aviv, Israel
11. International Workshop "Application of membrane technologies for water reclamation and whey desalination in food industry", 22 May 2017, Izmir, Turkey.