PERSONAL INFORMATION

*Family name, First name: Mitchenko, Tetiana

*Date of birth: 25.12.1951

*Sex: F

*Nationality: Ukraine

Researcher unique identifier(s) (ORCID, ResearcherID, etc.): http://orcid.org/0000-0002-4876-5411 Author ID: 6603005144

URL for personal web site: http://www.tmitchenko.name/index.html

***EDUCATION**

1996	Doctor of Science in Technical Sciences: Disputation date: 16.10.1996.
	Chemical Technologies Faculty, National Technical University of Ukraine "Igor Sikorsky
	Kyiv Polytechnic Institute", Ukraine
1981	PhD: Disputation date: 01.07.1981.
	Scientific institute of Chlorine Industry, Ukraine
1968	Master (Engineer's Degree in Technical Electrochemistry)
	Chemical Technologies Faculty, National Technical University of Ukraine "Igor Sikorsky
	Kyiv Polytechnic Institute", Ukraine

***CURRENT AND PREVIOUS POSITIONS**

2015-to date Professor

Chemical Technologies Faculty, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

- 1996- to date Chair of The Laboratory Laboratory of Ion Exchange and Adsorption, Chemical Technology Department of Inorganic Substances Technologies and General Chemical Technologies, Chemical Technologies Faculty, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine
- 2010 to date President of Ukrainian Water Association WaterNet
- 1974-1996 Senior scientific associate in laboratory of ecology, Scientific institute of Chlorine Industry
- 1996-2014 Consultant of The Dow Chemical Company, Water Solutions branch
- 1994 - to date CEO of The ECOSOFT Ltd.

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

2009-2017 4 PhD

2007-2017 11 Master Students

Chemical Technologies Faculty, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

TEACHING ACTIVITIES

- 2015-to date Professor Advanced Methods of Water Purification Technologies, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- 2015-to date Professor Basic of Scientific Research, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- 2015-to date Professor Technology and Equipment for Water and Wastewater Treatment Technology, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

ORGANISATION OF SCIENTIFIC MEETINGS

2015, 2017 Co-head of International conference "Pure water. Fundamental, applied and industrial aspects, 289 participants, Ukraine

2018	Chairman of the Organizing Committee of the KPI of the competition "All-Ukrainian
	Youth Water Prize" - the national stage of the International Competition «Stockholm
	Junior Water Price» / number of participants – 38 / Ukraine
2017	Chairman of the Organizing Committee of the KPI of the competition "All-Ukrainian
	Youth Water Prize" - the national stage of the International Competition «Stockholm
	Junior Water Price» / number of participants – 35 / Ukraine
2016	Chairman of the Organizing Committee of the KPI of the competition "All-Ukrainian
	Youth Water Prize" – the national stage of the International Competition «Stockholm

Junior Water Prize^a – the national stage of the International Competition «Stoc Junior Water Price» / number of participants – 56 / Ukraine

COMMISSIONS OF TRUST

 Since 1997 Member of Scientific Advisory Board Water purification technology and Chemical Technologies of Inorganic Substances, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine
Since 2001 Chief of editorial boards in Journals: Water and Water purification Technologies Chemical Technology of Ukraine Member of editorial boards in Journals: National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine «Water and water purification technologies. Scientific and technical news», «Sorbtsionnye i Khromatograficheskie Protsessy»

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Since 2010 WaterNet Ukrainian Assosiation,

MAJOR COLLABORATIONS

Water Harmony Eurasia, Harmonization research and teaching strategies on water technology

prof. H. Ratnaweera and Dr. Zakhar Maletskyi, Norwegian University of Life Sciences, Norway,

Prof. V. Martsul and prof. O. DormeshkinBelarusian State Technological University, Belarus

Prof. Rosa Sarimzakova, Kyrgyz National University, Kyrgyzstan

Prof. M. Zhekeev, M. Auezov South Kazakhstan University, Kazakhstan

Prof. Z. Razykov, Mining-metallurgical Institute of Tajikistan, Tajikistan

Prof. I. IONEŢ and N. Ciobanu, Technical University of Moldova, Republic of Moldova

Prof. R. Azizov, Tajik Technical University, Tajikistan

Prof. A. Pivovarov, Ukrainian State University of Chemical Technology, Ukraine

Prof. H. Stoliarenko, Cherkasy State Technological University, Ukraine

Track record

- 1. The total <u>number</u> of publications during the career -248.
- 2. <u>List</u> up to ten publications, from the last ten years:
 - Svietlieishaya E.M., Mitchenko T.E., Astrelin I.M. Removal of natural organic matters by ultrafiltration with coagulant dispensing in a flow // Journal of Water Chemistry and Technology. – 2014. –V.36. – №1. – P. 47–56. (Citation 5)
 - 2. Adsorption of organic substances from water solutions on hydrophobic polymer sorbent Porolas T Fridman, L.E., Podlesnik, V.V., Mitchenko, T.E. 1991 Khimiya i Tekhnologiya Vody (Citation 2)
 - 3. Sus, M., Mitchenko, T. Sorbents with biocidal properties for disinfection of water for various purposes Water Science and Technology: Water Supply 2014 (Citation 1)
 - 4. Fendri, F., Mitchenko, T., Maletskyi, Z. Optimization of the reverse osmosis seawater demineralization technologies for a power producing industry Desalination and Water Treatment 2011 (Citation 2)
 - 5. Mitchenko, T., Stender, P., Makarova, N. Optimization of sorption purification of industrial effluents, waste waters and technological solutions from polyvalent metal ions Solvent Extraction and Ion Exchange 1998 (Citation 16)

2. Organisation of international conferences in the field of the applicant (membership in the steering and/or organising committee);

2016, 2018 - VI and VII International Conference of students, postgraduates and young scientists in chemistry and chemi cal engineering,Ukraine, co-head

Scientific Council of National Technical University of Ukraine

- International Water Association (IWA)
- Water Quality Association (WQA)
- European Desalination Society (EDS)
- 3. Research monographs:

1. Mitchenko, T., Stender, P., Makarova, N. Optimization of sorption purification of industrial effluents, waste waters and technological solutions from polyvalent metal ions Solvent Extraction and Ion Exchange Marcel Dekker Inc, New York-Basel-Hong Kong, 1998, pp.75-150

2. Mitchenko, T., Stender, P., Makarova, N. Optimization of sorption purification of industrial effluents, waste waters and technological solutions from polyvalent metal ions Ion Exchange edited by

D.Muraviev, V.Gorshkov, A.Warshawsky, Marcel Dekker Inc, New York-Basel, 2000, pp.75-149

3. Tetiana Mitchenko, Iryna Kosogina, Svitlana Kyrii. The Local Solutions for Water Security in

Ukraine Proceedings of the NATO Advanced Research Workshop on Physical and Cyber Safety in Critical Water Infrastructure. Sub-Series D: Information and Communication Security – 2019, Vol. 56,

99-106. DOI 10.3233/NICSP190044. http://ebooks.iospress.nl/volumearticle/536394. I.M. Astrelin, H. Ratnaweera, T.E. Mitchenko et. al. Physico-chemical methods of water treatment.

- Water resources management. 2015, 630 pages. ISBN 978-82-999978-0-5
- 4. Granted patents:
 - 1. Means for stabilization treatment of water, process for preparation of such means, cartridge filler for filters, containing such means, and process for treatment of water on membranes of reverse osmosis using such means, UA 104361, 2014
 - 2. Thermo-insulation shell, UA 77845, 2013
 - 3. Device for stabilization treatment of water, UA 77696, 2012
 - 4. Composition of filtering materials, installation and method for deep purification of water from hardness salts, UA 96131, 2011
 - 5. Filter loading for complex water treatment, UA 88603, 2011
 - 6. Method of deep water softening, UA 37156, 2008
 - 7. Filter media for complex water treatment, RU 2305001, 2007
 - 8. Filter for complex water treatment, RU 29672, 2003
 - 9. Method of drinking water treatment, UA 36461A, 2001

6. Invited presentations to peer-reviewed, internationally established conferences:

 Y. Orestov, T. Mitchenko Permeate remineralization with targeted magnesium and calcium content for domestic RO units / Proceedings of International Conference MDIW 2017 – Membranes in Drinking and Industrial Water Production, 6–8 February 2017, De Harmonie, Leeuwarden, The Netherlands. P.74

- 2. Orestov Y., Mitchenko T. Feed water pretreatment for membrane desalination using antiscalant media. Desalination for the Environment: Clean Water and Energy 22-26 May 2016, Rome, Italy
- 3. Mitchenko T., Maletskyi Z. Human Right to Water in Countries with Transition Economy: Water Quality Monitoring Issues. IWA World Water Congress, 21-26 September 2014, Lisbon, Portugal
- T.E. Mitchenko et al. Technology remineralization of water for household RO system. Pure water. Fundamental, applied and industrial aspects (26-28 October 2016, Kyiv): proceedings of the IV International Scientific and Technical Conference / Editors: Kozar M. – Kiev: NTUU "Igor Sikorsky Kyiv Polytechnic Institute", 2016. ISBN 978-617-7177-08-0. - p. 132-134.
- E. Shevchuk, Y. Orestov, T. Mitchenko Antiscaling water treatment applying functionalized filter media. Abstract book of 1st International Conference on Desalination using Membrane Technology, 7-10 April 2013, Sitges, Spain.
- 9. Examples of leadership in industrial innovation or design

Method of deep removal of cadmium from waste waters applying inorganic sorbent based on titanium phosphate.

Method and industrial technology of deep removal of mercury from waste waters utilizing vinilperidinium anion exchange resins.

Filter media and technology for complex water treatment "Ecomix".

Production of hard antiscalant "Ecozone".

Optimization of ion exchange and membrane water demineralization processes.

Removal of Natural Organic Matter (NOM) compounds from natural waters utilizing sorption methods. Developing of filter media for complex water treatment.