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Appointments

2016–present	Professor	Civil and Environmental Engineering, MSU	
2022–present	Director	Center for European, Russian and Eurasian Studies, MSU	
2024–present	Interim Director	Global Innovations in Development, Engagement & Scholarship, MSL	
2024-present	Adjunct Professor	Environmental Engineering, Istanbul Technical University, Türkiye	
2020–2022	Associate Director	Center for European, Russian and Eurasian Studies, MSU	
2012–2018	Associate Director	Environmental Science and Policy program, MSU	
2010–2016	Associate Professo	r Civil and Environmental Engineering, MSU	
2004–2010	Assistant Professor	Civil and Environmental Engineering, MSU	
1998–2004	Research Assistant	Civil and Environmental Engineering, Rice University	
1995–1997	Research Assistant	Institute of Bioorganic Chemistry, Moscow, Russia	

Education

Ph.D. (2004)	Environmental Engineering, Rice University, Houston, Texas, USA
MS (2001)	Environmental Engineering, Rice University, Houston, Texas, USA
Diplom (1997)	Solid State Physics, National Research Nuclear University MEPhI, Moscow, Russia
1991–1994	Undergraduate coursework, Dnipro National University, Dnipro, Ukraine

Professional certifications

BCEEM (2024) American Academy of Environmental Engineers and Scientists

Research interests

Water treatment and reuse. Physicochemical treatment processes Interfacial phenomena and colloids in aqueous media Synthetic membranes; Membrane filtration and osmotic separations Liquid-liquid dispersions and emulsions Virus adhesion and removal

Editorial responsibilities

Editor, Separation and Purification Technology, Elsevier, 2021 – present Editorial Board member, Water and Water Purification Technologies (Ukraine), 2020 – present Editor for Special Collections, Journal of Environmental Engineering, ASCE, 2017 – present Associate Editor, Journal of Environmental Engineering, ASCE, 2012 – present

Memberships in professional societies

ACS: American Chemical Society AEESP: Association of Environmental Engineering and Science Professors ASCE: American Society of Civil Engineers EWRI: Environmental and Water Research Institute, American Society of Civil Engineers IWA: International Water Association NAMS: North American Membrane Society Fulbright Association (lifelong member) Sigma Xi

Honors and recognitions

Fellow, Environmental & Water Resources Institute, ASCE (2023) Fulbright Global Scholar award (France, Georgia, Singapore), U.S. Department of State (2021/22) ASCE Associate Editor award, American Society of Civil Engineers (2021) Fulbright Specialist placement (Ukraine), U.S. Department of State (2021) Withrow Global Leadership award, College of Engineering, MSU (2020) Doctor honoris causa, Agricultural University of Georgia, Tbilisi (2019) Fulbright U.S. Scholar (Georgia), Research Flex award, U.S. Department of State (2014/17) Paul L. Busch award, Water Environment Research Foundation (2011) John K. Hudzik Emerging Leader in Advancing International Studies and Programs award. MSU (2010) Lilly Teaching Fellow, MSU (2009) Certificate of Merit (paper co-authors: J. Taurozzi and M. Bruening), ACS Div. Environ. Chem. (2005) Outstanding Ph.D. student award, Environmental Engineering, Rice University (2004) Graduate research award in membrane-based separations, AIChE - Separations Division (2003) North American Membrane Society poster award, 2nd place (2003) Eleanor and Mills Bennett Fellowship, Rice University (2002) Outstanding MS student award, Environmental Engineering, Rice University (2001) Best student paper award (paper co-authored with M. R. Wiesner), AWWA and WEF Texas (2001) Graduation with honors, MEPhI (1997)

Advising/mentorship/supervision record^A

- 9 postdocs, 14 Ph.D. students (including 3 co-advised), 15 MS students, 27 undergraduate research assistants, 11 high school research interns, 15 visiting researchers.
- (Excluding the above) Service on 32 PhD dissertation committees and 7 MS thesis committees.

Current projects

09/01/20- 08/31/24	Collaborative Research: IRES Track I: Materials based innovations for sustainable water treatment and reuse Role: PI	National Science Foundation OISE-1952438
03/01/20- 08/31/24	Membrane processes for the next decade's challenges in the water sector Role: International collaborator PI: H. Ratnaweera (Norwegian University of Life Sciences)	The Research Council of Norway

Institutional, professional and public service^B (current)

University service

- Coordinator for MSU, International Research Experience Program, Big Ten Academic Alliance (2021 – present)
- Chair, Advisory committee, Civil & Environmental Engineering (2013 2016, 2023 present)
- Member, Faculty Advisory Council, Canadian Studies Center (2020 present)
- Member, Advisory Board, Asia Hub (2023 present)
- Faculty Adviser, Albanian-American Student Organization (2022 present)

Northern Michigan Area Committee, U.S Coast Guard, U.S. EPA. Member (2020 – present) Environmental and Water Resources Institute, ASCE

^A Details are provided in "Research group members (current)" and "Research group members (former)" sections

^B Past assignments are listed in the section "Service"

- Chair, International track, 2024 World Environmental and Water Resources Congress, Milwaukee, WI, May 19-24, 2024
- Chair (2022 present), Member (2019 2022), International Linkage Task Committee
- Member, Emerging and Innovative Technologies Committee (2019 present)
- Member, International Participation Committee (2019 present)
- Scientific committee, WMCC 2024: Water Management in Changing Conditions conference, Munich, Germany, May 14-15, 2024

International Advisory Board, Istanbul Technical University, Türkiye (2023 - present)

Publications^C

Journal papers

- Wen, J.; Cheng, L.; Wei, K.; Zhou, Y.; Li, J.; Zhou, L.; <u>Fang, D.</u>; Tarabara, V. V. Acidophilic ammonia-oxidizing bacteria mediated Fenton facilitates anaerobically digested sludge dewatering and chemicals usage reduction by initiating diverse free radical reactions. Separ. Purif. Technol. 343 (2024) 127126.
- 94. Chevarin, C.; Wang*, X.; <u>Bouyer, D.</u>; <u>Tarabara, V. V.</u>; Chartier, T.; Ayral, A. CFD-guided patterning of tubular ceramic membrane surface by stereolithograhy: Optimizing morphology at the mesoscale for improved hydrodynamic control of membrane fouling. J. Membr. Sci. 672 (2023) 121435.
- Hamlin, J.; Nuruddin, M.; Tarabara, V. V.; <u>Szczepanski, C.</u> Incorporation of cellulose nanocrystals and reactive surfactant for the emulsion polymerization of pressure sensitive adhesives with improved performance. AIChE J. 68 (2022) e17910.
- Tao, N.; Hu, L.; <u>Fang, D.</u>; Tarabara, V.; Zhou, L. Supplementation of tea polyphenols in sludge Fenton oxidation improves sludge dewaterability and reduces chemicals consumption. Water Res. 218 (2022) 118512.
- Murali*, A.; Hillstead*, K. D.; Wrobel**, B. S.; Thomas**, D. J.; Gonety**, R.; <u>Tarabara, V. V.</u> Moringa oleifera-derived coagulants for water treatment: Floc structure, residual organics, and performance tradeoffs. Environ. Sci. Pollut. Res. 29 (2022) 24381-24389.
- 90. Wang*, X.; <u>Tarabara, V. V.</u> Virus adhesion to archetypal fomites: A study with human adenovirus and human respiratory syncytial virus. Chem. Eng. J. 429 (2022) 132085.
- 89. Dang*, H. T. T.; <u>Tarabara, V. V.</u> Attachment of human adenovirus onto household paints. Colloids Surf. B. 204 (2021) 111812.
- Şengür-Taşdemir[¶], R.; Ürper-Bayram[¶], G. M.; Türken[¶], T.; Ates-Genceli, E.; Tarabara, V. V.; <u>Koyuncu, İ</u>. Hollow fiber nanofiltration membranes for surface water treatment: Performance evaluation at the pilot scale. J. Water Process Eng. 42 (2021) 102100.
- 87. <u>Gunn, G.;</u> Tarabara, V.; Rutty, M.; Bessette, D.; Richardson, R. Roughness and storage capacity of freshwater ice in the Straits of Mackinac. Cold Reg. Sci. Technol. 186 (2021) 103278.
- 86. Kücük*, Ş.; Hejase*, C. A.; Kolesnyk, I. S.; Chew, J. W.; <u>Tarabara, V. V.</u> Microfiltration of crude oil emulsions in seawater: Effects of dispersant and salinity. J. Hazard. Mater. 412 (2021) 124747.
- 85. <u>Bessette, D.</u>; Rutty, M.; Gunn, G.; Tarabara, V. V.; Richardson, R. The perceived risk of freshwater oil pipelines and spills in icy conditions. J. Great Lakes Res. 47 (2021) 226-235.
- Ozofor, I. H.; Tarabara, V. V.; <u>Da Costa, A. R.</u>; Morse, A. N. Analysis of microstructural properties of ultrafiltration cake layer during its early-stage formation and growth. J. Membr. Sci. 620 (2021) 118903.
- Lasareishvili, B.; Shi*, H.; Wang*, X.; Hillstead*, K. D.; Tediashvili, M.; Jaiani, E.; <u>Tarabara, V. V.</u> Virus recovery by tangential flow filtration: A model to guide the design of a sample concentration process. Biotechnol. Prog. 31 (2021) e3080.
- 82. Hejase*, C. A.; <u>Tarabara, V. V.</u> Nanofiltration of saline oil-water emulsions: Combined effect of salt concentration polarization and fouling. J. Membr. Sci. 617 (2021) 118607.

^C Name of the corresponding author is underlined; * Current or former graduate advisee; ** Current or former undergraduate advisee; [§] Current or former postdoc in Tarabara research group; [¶] Current or former graduate student advised through service on the guidance committee.

- 81. Wang*, X.; Şengür-Taşdemir[¶], R.; Koyuncu, İ.; <u>Tarabara, V. V.</u> Lip balm drying promotes virus attachment: Characterization of lip balm coatings and XDLVO modeling. J. Colloid Interface Sci. 581 (2021) 884–894.
- 80. Tummons*, E. N.; Han, Q.; Tanudjaja, H.; Hejase*, C. A.; <u>Chew, J. W.</u>; <u>Tarabara, V. V.</u> Membrane fouling by emulsified oil: A review. Separ. Purif. Technol. 248 (2020) 116919.
- Gorobets[§], A. V.; <u>Tarabara, V. V.</u> Separation performance of desanding and deoiling hydrocyclones treating three-phase feeds: Effect of oil-particle aggregates. Separ. Purif. Technol. 237 (2020) 116466.
- 78. Türken[¶], T.; Şengür-Taşdemir[¶], R.; Ürper-Bayram[¶], G. M.; Ates-Genceli, E.; Tarabara, V. V.; <u>Koyuncu, İ.</u> Fabrication and characterization of polysulfone reinforced hollow fiber membrane. Environ. Technol. DOI: 10.1080/09593330.2019.1710571
- 77. Tummons*, E. N.; Hejase*, C. A.; Yang[¶], Z.; Chew, J. W.; Bruening, M. L.; <u>Tarabara, V. V.</u> Oil droplet behavior on model nanofiltration membrane surfaces under conditions of hydrodynamic shear and salinity. J. Colloid Interface Sci. 560 (2020) 247–259.
- Kaya, R.; Tirol, N.; Ozgun, H.; Ersahin, M. E.; Tarabara, V. V.; Yiğit, N. O.; Arikan, O. A.; <u>Koyuncu, İ.</u> Impact of magnetically induced vibration on the performance of a pilot-scale membrane bioreactor. J. Environ. Eng. 146 (2020) 04020001.
- Kobaladze, A.; Lomidze, I.; Maludze, S.; Sakevarashvili, A.; <u>Didebulidze, K.</u>; Metreveli, Z.; <u>Tarabara, V. V.</u>; Titvinidze, G.; Tkeshelashvili, T. Filterability of surface water from Tbilisi Sea: Preliminary assessment of ultrafiltration as a process alternative. (Note.) Separ. Sci. Technol. 55 (2020) 1891-1896.
- 74. Türken[¶], T.; Şengür-Taşdemir[¶], R.; Ates-Genceli, E.; Tarabara, V. V.; <u>Koyuncu, İ.</u> Progress on reinforced braided hollow fiber membranes: A review. J. Water Process Eng. (2019) 32, 100938.
- 73. Ürper-Bayram[¶], G. M.; Şengür-Taşdemir[¶], R.; Sayinli, B.; Türken[¶], T.; Pekgenc, E.; Gunes, O.; Ates-Genceli, E.; Tarabara, V. V.; <u>Koyuncu, İ.</u> Nanocomposite hollow fiber nanofiltration membranes: Fabrication, characterization, and pilot-scale evaluation for surface water treatment. J. Appl. Polym. Sci. (2019) 136, 48205.
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- 71. Tanudjaja, H. J.; Hejase*, C. A.; Tarabara, V. V.; Fane, A. G.; <u>Chew, J. W.</u> Membrane-based separation for oily wastewater: A practical perspective. Water Res. (2019) 156, 347-365.
- Kim, Y.; Snow, S. D.[§]; Reichel-Deland, V.; Maghsoodi, M.; Langlois, G. M.; Tarabara, V. V.; Rose. J. B. Current status and recommendations toward a virus standard for ballast water. Management of Biological Invasions. 10 (2019) 267–284.
- 69. Maghsoodi, M.; Jacquin, C.; Teychené, B.; Heran, M.; Tarabara, V. V.; <u>Lesage, G.</u>; <u>Snow, S. D.</u> Photocatalysis for MBR effluent post-treatment: Assessing the effects of effluent organic matter characteristics. Environ. Science: Water Res. Technol. 5 (2019) 482-494.
- 68. Dang*, H. T. T.; <u>Tarabara, V. V.</u> Virus deposition onto polyelectrolyte-coated surfaces: A study with bacteriophage MS2. J. Colloid Interface Sci. 540 (2019) 155-166.
- 67. Wang*, F.; Shi*, H.; <u>Tarabara, V. V.</u> Combined precipitative and colloidal fouling of reverse osmosis membranes. J. Environ. Eng. 145 (2019) 04019040.
- 66. Casabuena*, A. L.; Shi*, H.; Yin¹, Z.; Xagoraraki, I. <u>Tarabara, V. V.</u> Human adenovirus 40 removal in a side-stream membrane bioreactor. (Technical Note.) J. Environ. Eng. 145 (2019) 06019004.
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- Şengür-Taşdemir[¶], R.; Sayinli, B.; Ürper[¶], G. M.; Tutuncu, E.; Karaguler, N. G.; Genceli, E.; Tarabara, V. V.; <u>Koyuncu, İ.</u> Hollow fiber nanofiltration membranes with integrated Aquaporin Z. New J. Chem. 42 (2018) 17769-17778.
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- 62. Yin[¶], Ż.; Voice, T. C.; Tarabara, V. V.; <u>Xagoraraki, I.</u> Sorption of human adenovirus to wastewater solids. (Technical Note) J. Environ. Eng. ASCE. 144 (2018) 06018008.

- 61. Shi[§], H.; <u>Tarabara, V. V.</u> Charge, size distribution and hydrophobicity of viruses: Effect of propagation and purification methods. J. Virol. Methods 256 (2018) 123–132.
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- 59. <u>Zeytuncu[§], B.</u>; Ürper[¶], G. M.; Koyuncu, İ.; <u>Tarabara, V. V.</u> Photo-crosslinked PVA/PEI electrospun nanofiber membranes: Preparation and preliminary evaluation in virus clearance tests. Separ. Purif. Technol. 197 (2018) 432-438.
- Guo*, B.; Snow[§], S. D.; Starr*, B. J.; Xagoraraki, I.; <u>Tarabara, V. V.</u> Photocatalytic inactivation of human adenovirus 40: Effect of dissolved organic matter and prefiltration. Separ. Purif. Technol. 193 (2018) 193-201.
- 57. Shi*, H.; Pasco*, E. V.; <u>Tarabara, V. V.</u> Membrane-based methods of virus concentration from water: A review of process parameters and their effects on virus recovery. Environ. Sci. Water Res. Technol. (2017) 778-792.
- 56. Tummons*, E. N.; Chew, J. W.; Fane, A. G.; <u>Tarabara, V. V.</u> Ultrafiltration of saline oil-in-water emulsions stabilized by an anionic surfactant: Effect of surfactant concentration and divalent counterions. J. Membr. Sci. 537 (2017) 384-395.
- 55. Motin[¶], A.; Tarabara, V. V.; Petty, C. A.; <u>Bénard, A.</u> Hydrodynamics within flooded hydrocyclones: Understanding of turndown ratio. Separ. Purif. Technol. 185 (2017) 41-53.
- 54. Ürper[¶], G. M.; Şengür-Taşdemir[¶], R.; Türken[¶], T.; Genceli, E. A.; Tarabara, V. V.; <u>Koyuncu, İ.</u> Hollow fiber nanofiltration membranes: A comparative review of interfacial polymerization and phase inversion fabrication methods. Separ. Sci. Technol. 52 (2017) 2120-2136.
- 53. <u>Sovadinová, I.;</u> Babica, P.; Adamovský, O.; Alpatova, A.; Tarabara, V.; Upham, B. L.; Luděk, B. Chlorination and ozonation reduce microcystin content and tumour promoting activity of complex cyanobacterial extract. Adv. Oceangr. Limnol. 8 (2017) 107-120.
- Tanudjaja, H. J.; Tarabara, V. V.; Fane, A. G.; <u>Chew, J. W.</u> Effect of cross-flow velocity, oil concentration and salinity on the critical flux of an oil-in-water emulsion in microfiltration. J. Membr. Sci. 530 (2017) 11-19.
- 51. Crock*, C. A.; Şengür-Taşdemir[¶], R.; <u>Koyuncu, İ.</u>; <u>Tarabara, V. V.</u> High throughput catalytic dechlorination of TCE by hollow fiber nanocomposite membranes with embedded Pd and Pd-Au catalysts. Separ. Purif. Technol. 179 (2017) 265-273.
- O'Brien¹, E.; Munir, M.; Marsh, T.; Heran, M.; Lesage, G.; Tarabara, V. V.; <u>Xagoraraki, I.</u> Diversity of DNA viruses in effluents of membrane bioreactors in Traverse City, MI (USA) and La Grande Motte (France). Water Res. 111 (2017) 338-345.
- 49. Mamouri[¶], S. J.; Tarabara, V. V.; <u>Bénard, A.</u> Analytical solutions for laminar flow in membrane channels with cylindrical symmetry: single- and dual- membrane systems. J. Membr. Sci. 523 (2017) 373-384.
- Shi*, H.; Xagoraraki, I.; Parent, K. N.; Bruening, M. L.; <u>Tarabara, V. V.</u> Elution is a critical step for human adenovirus 40 recovery from tap and surface water by cross-flow ultrafiltration. Appl. Environ. Microbiol. 82 (2016) 4982-4993.
- 47. Şengür-Taşdemir[¶], R.; Ürper[¶], G. M.; Türken[¶], T.; Genceli, E. A; Tarabara, V. V.; <u>Koyuncu, İ.</u> Combined effects of hollow fiber fabrication conditions and casting mixture composition on the properties of polysulfone ultrafiltration membranes. Separ. Sci. Technol. 51 (2016) 2070 - 2079.
- 46. Starr*, B. J.; <u>Tarabara, V. V.</u>; Herrera-Robledo[§], M.; Zhou, M.; Roualdès, S.; Ayral, A. Coating porous membranes with a photocatalyst: Comparison of LbL self-assembly and plasmaenhanced CVD techniques. J. Membr. Sci. 514 (2016) 340-349.
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- 44. Ji[¶], P.; Motin[¶], A.; Shan*, W.; Bénard, A.; Bruening, M. L.; <u>Tarabara, V. V.</u> Dynamic crossflow filtration with a rotating tubular membrane: Using centripetal force to decrease fouling by buoyant particles. Chem. Eng. Res. Des. 106 (2016) 101-114.
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- 42. Lu, R.; Li, Q.; Yin[¶], Z.; Xagoraraki, I.; Tarabara, V. V.; <u>Nguyen, T. H.</u> Effect of virus influent concentration on Its removal by microfiltration: the case of human adenovirus 2. J. Membr. Sci. 497 (2016) 120–127.
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- 40. Yang¹, Z.; Tarabara, V. V.; <u>Bruening, M. L.</u> Adsorption of anionic or cationic surfactants in polyanionic brushes and its effect on brush swelling and fouling resistance during emulsion filtration. Langmuir 31 (2015) 11790–11799.
- 39. Guo*, B.; Pasco*, E. V.; Xagoraraki, I.; <u>Tarabara, V. V.</u> Virus removal and inactivation in a hybrid microfiltration-UV process with a photocatalytic membrane. Separ. Purif. Technol. 149 (2015) 245–254.
- 38. Byun[§], S.; Taurozzi^{*}, J.; <u>Tarabara, V. V.</u> Ozonation as a pretreatment for nanofiltration: Effect of oxidation pathway on the permeate flux. Separ. Purif. Technol. 149 (2015) 174–182.
- Ahmadiannamini[§], P.; Bruening, M. L.; <u>Tarabara, V. V</u>. Sacrificial polyelectrolyte multilayer coatings as an approach to membrane fouling control: Disassembly and regeneration mechanisms. J. Membr. Sci. 491 (2015) 149–158.
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- 34. Motin[¶], A.; Tarabara, V. V.; <u>Bénard, A.</u> Numerical investigation of the separation performance and hydrodynamics of a rotating tubular membrane filtration system. J. Membr. Sci. 473 (2015) 245–255.
- Pasco*, E. V.; Shi*, H.; Xagoraraki, I.; Hashsham, S. A.; Parent, K. N.; Bruening, M. L.; <u>Tarabara</u>, <u>V. V.</u> Polyelectrolyte multilayers as antiadhesive membrane coatings for virus concentration and recovery. J. Membr. Sci. 469 (2014) 140–150.
- Dulebohn, J.; Ahmadiannamini[§], P.; Wang[§], T.; Kim, S.-S.; Pinnavaia, T. J.; <u>Tarabara, V. V.</u> Polymer mesocomposites: Ultrafiltration membrane materials with enhanced permeability, selectivity and fouling resistance. J. Membr. Sci. 453 (2014) 478–488.
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- 30. Darvishzadeh[¶], T.; Tarabara, V. V.; <u>Priezjev, N. V.</u> Oil droplet behavior at a pore entrance in the presence of crossflow: Implications for microfiltration of oil-water dispersions. J. Membr. Sci. 447 (2013) 442-451.
- 29. Taurozzi*, J. S.; Redko, M. Y.; Manes, K. M.; Jackson, J. E.; <u>Tarabara, V. V.</u> Microsized particles of Aza222 polymer as a regenerable ultrahigh affinity sorbent for the removal of mercury from aqueous solutions. Separ. Purif. Technol. 116 (2013) 415-425.
- 28. Crock*, C. A.; Rogensues*, A. R.; Shan*, W.; <u>Tarabara, V. V.</u> Polymer nanocomposites with graphene-based hierarchical fillers as materials for multifunctional water treatment membranes. Water Res. 47 (2013) 3984-3996.
- Byun[§], S.; Taurozzi^{*}, J. S.; Alpatova, A. L.; Wang^{*}, F.; <u>Tarabara, V. V.</u> Performance of membranes treating ozonated surface water. Effect of ozone dosage. Separ. Purif. Technol. 81 (2011) 270-278.
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Book chapters

- 6. Şengür-Taşdemir[¶], R.; Türken[¶], T.; Ürper[¶], G. M.; Genceli, E. A.; Tarabara, V. V.; Koyuncu, İ. Hollow fiber nanofiltration membranes for water treatment. In: *Encyclopedia of Water: Science, Technology, and Society.* Maurice, P.A. (Ed.) Wiley, 2020.
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Presentations^D

- 136. (Keynote) Vera, A.; Murali, A.; Hillstead, K.; Wrobel, B.; Thomas, D.; Gonety, R.; Tarabara, V. Moringa oleifera-derived coagulants for water treatment: Floc structure, residual organics, performance tradeoffs. IWA Particle Separation Conference, Johannesburg, South Africa, December 7, 2023.
- 135. Tarabara, V. V., Snow, S. D., Wiesner, M. R. Leveraging international research to enhance Engineering curriculum: Lessons learned from PIRE and IRES projects. 26th Annual Colloquium on International Engineering Education, Alexandria, VA, November 3, 2023.
- 134. (**Plenary**) Virus removal in water treatment systems: The role of virus adhesion. 7th MEMTEK International Symposium on Membrane Technologies and Applications, Istanbul, Türkiye, October 18, 2023.
- 133[#]. (Plenary) Environmental forensics for ensuring microbial safety in critical settings. International conference "Chemistry, Chemical Technology and Ecology" celebrating 125th anniversary of Kyiv Polytechnic Institute, September 27, 2023.
- 132. (**Keynote**) Virus adhesion to archetypal membrane surfaces: Developing guidance on membrane selection for virus removal. International Congress on Membranes & Membrane Processes 2023, Chiba, Japan, July 12, 2023.
- 131. Environmental forensics for ensuring microbial safety of the workplace: An international network-of-networks collaboration across disciplines. 2023 World Environmental and Water Resources Congress, Henderson, NV, May 23, 2023.
- 130[#]. Контроль якості питної води в США: Національні стандарти, технології водопідготовки, методологія фахової освіти (In Ukrainian). Курс «Сучасні методи водопідготовки: теоретичні засади і методологія викладання». Online lecture series organized by NGO WaterNet and National Technical University "Igor Sikorsky Kyiv Polytechnic Institute" with support from Suomen suurlähetystö Kiova (Embassy of Finland in Kyiv), May 18, 2023.

^D Zoom/online presentations are marked with superscript "#"

- 129. Virus adhesion to archetypal membrane surfaces: Developing guidance on membrane selection for virus removal. 2023 North American Membrane Society annual meeting, Tuscaloosa, Alabama, May 16, 2023.
- 128. (**Keynote**) Wang, X.; Tarabara, V. V. Virus separation for removal and detection: The role of virus adhesion. International Congress on Separation and Purification Technologies. Online. December 12, 2022.
- 127. Wang, X.; Tarabara, V. V. Virus adhesion to archetypal membrane surfaces: Implications for virus removal in water treatment systems. 2022 Euromembrane conference, Sorrento, Italy, November 22, 2022.
- 126. Tarabara, V. V. Virus adhesion to archetypal membrane surfaces: Implications for virus removal and microbial safety of water treatment facilities. Seminar at the Singapore Membrane Technology Center, Nanyang Technological University, Singapore, September 28, 2022.
- 125. Hejase, C. A.; Tarabara, V. V. Nanofiltration of saline oil-water emulsions: Combined effect of salt concentration polarization and fouling by oil. Nanofiltration 2022 conference, Achalm, Germany. June 28, 2022.
- 124. Microbial forensics: Tracking surface-associated viruses to protect public health. Seminar at the International Laboratory for Learning, IUT Montpellier Sète, Montpellier, France. June 21, 2022.
- 123. Wang, X.; Tarabara, V. V. Virus adhesion to membrane materials: Implications for virus removal in water treatment systems, Institut Européen des Membranes, Université de Montpellier, Montpellier, France. June 20, 2022.
- 122[#]. Тагаbага, V. V. Викладання основ академічної етики як один з аспектів підготовки аспірантів для дослідницької роботи: Досвід інженерного коледжу у США (In Ukrainian). International Scientific and Technical Conference "Information Technology in Metallurgy and Machine Building", May 18, 2022.
- 121[#]. Tarabara, V. V. Microbial forensics: Tracking surface-associated viruses to protect public health. Water Quality Virtual Institute, Institute for Global Health, MSU, October 26, 2021.
- 120. Fulbright Specialist lecture "Оформлення заявок на гранти: практичні рекомендації" (In Ukrainian). Ukrainian State Chemical Technology University, Dnipro, Ukraine. October 12, 2021.
- 119. Fulbright Specialist lecture "Водопідготовка для малих водоканалів: Досвід США" (In Ukrainian)
 - Kyiv, Ukraine. September 22, 2021
 - Lviv, Ukraine. September 28, 2021
 - Dnipro, Ukraine. October 8, 2021
- 118. Fulbright Specialist lecture "Мембрани та мембранні технології: фундаментальні основи та застосування у водоподготовці" (In Ukrainian)
 - National Technical University "Igor Sikorsky Kyiv Polytechnic Institute", Kyiv, Ukraine. September 22, 2021
 - National University of Water and Environmental Engineering, Rivne, Ukraine. September 30, 2021
 - Odesa National Academy of Food Technologies, Odesa, Ukraine, October 6, 2021
 - Ukrainian State Chemical Technology University, Dnipro, Ukraine, October 11, 2021
- 117, Fulbright Specialist lecture "Методологія викладання основ водопідготовки для студентів. Методологія підготовки аспірантів для дослідницької роботи" (In Ukrainian)
 - National Technical University "Igor Sikorsky Kyiv Polytechnic Institute", Kyiv, Ukraine. September 22, 2021
 - Lviv Polytechnic National University, Lviv, Ukraine, September 27, 2021
 - National University of Water and Environmental Engineering, Rivne, Ukraine. October 1, 2021
 - Odesa Polytechnic State University, Odesa, Ukraine, October 4, 2021
 - Odesa National Academy of Food Technologies, Odesa, Ukraine, October 5, 2021
 - Ukrainian State Chemical Technology University, Dnipro, Ukraine, October 7, 2021

- 116. (**Keynote**) Wang*, X.; Dang*, H. T. T.; Tarabara, V. V. Virus adhesion to archetypal fomites: Implications for surface-mediated transmission of viruses. 2021 ACS Fall national meeting, Atlanta, GA, July 23, 2021.
- 115[&]. (Invited) Wang^{*}, X.; Dang^{*}, H. T. T.; Tarabara, V. V. Virus adhesion to archetypal fomites: Implications for surface-mediated transmission of viruses. International Conference "Materials for Humanity", Singapore, July 6, 2021.
- 114[#]. (Keynote) Hejase^{*}, C. A.; Tarabara, V. V. Nanofiltration of saline oil-water emulsions: Combined effect of salt concentration polarization and fouling by oil on flux performance. International Congress on Membranes and Membrane Processes 2020, December 8, 2020.
- 113[#]. Tarabara V. V. Membrane separation of saline oil-water emulsions. Seminar at the Department of Chemical and Biomedical Engineering, West Virginia University, October 2, 2020.
- 112[#]. (Invited) Tarabara, V. V. Анализ и исследование вирусов, Webinar series "Современные аналитические методы исследования воды и материалов", Water Harmony program, July 8, 2020.
- 111[#]. Hejase, C. A.; Tarabara, V. V. Nanofiltration of saline oil-water emulsions: Combined effect of salt concentration polarization and fouling by oil. 2020 North American Membrane Society annual meeting, May 18, 2020.
- 110. Marinelli**, V. T.; Thomas**, D.; Calderon**, C. M.; Beatty, A.; Gunn, G. E.; Rutty, M.; Bessette, D. L.; Richardson, R. B.; Tarabara, V. V. Detection and fate of oil spills under ice: Kinetics of oil spreading under ice cover. Joint EWA/IWA conference "Water Management in Cold Climates", Harbin, China, January 14, 2020.
- 109. (Invited) Ceramic membranes for water treatment and reuse: Materials and process design. Seminar at the School of Sustainable Engineering and the Built Environment, Arizona State University, Tempe, AZ, December 3, 2019.
- 108. (**Keynote**) Deoiling of saline emulsions: Understanding oil droplet behavior at membrane surfaces. 6th MEMTEK International Symposium on Membrane Technologies and Applications, Istanbul, Türkiye, November 19, 2019.
- 107. Küçük*, Ş.; Hejase*, C. A.; Kolesnyk, I.; Chew, J. W.; Tarabara, V. V. Cleaning up emulsified oil spills in sea water: Assessing microfiltration as a remediation strategy. 6th MEMTEK International Symposium on Membrane Technologies and Applications, Istanbul, Türkiye, November 18, 2019.
- 106. Tarabara, V. V. Removal of viruses in MBRs: Implications for membrane selection and process design. International Membrane Technology Seminar, Chuo University, Tokyo, Japan, August 2, 2019.
- 105. Shi*, H.; Tarabara, V. V. Charge, size distribution and hydrophobicity of viruses: Effect of virus propagation and purification methods. 2019 North American Membrane Society annual meeting, Pittsburgh, May 15, 2019.
- 104. Dang*, H. T. T.; Shi*, H.; Wang*, X.; Tarabara, V. V. Virus attachment to surfaces: Assessing relative contributions of electrostatic, van der Waals, and acid-base interactions. 2nd International School/Conference "Applied Biosciences and Biotechnology 2019", Tbilisi, Georgia, April 4, 2019.
- 103. Tarabara, V. V. Bacteriophages as surrogates for human viruses: Fundamentals and applications to water quality control. 2nd International School/Conference "Applied Biosciences and Biotechnology 2019", Tbilisi, Georgia, April 3, 2019.
- 102. (Invited) Tarabara, V. V. თუ წყალი არ მოგყვება, შენ მიჰყევი წყალს: Environmental Engineering solutions for safe and sustainable water supply. Agricultural University of Georgia, Tbilisi, Georgia, April 2, 2019.
- 101. Tarabara, V. V. New membranes and membrane processes for water treatment and reuse. Talk at Nanjing Agricultural University, Nanjing, China, December 17, 2018.
- 100. Tarabara, V. V. Dynamics of salt-surfactant-oil droplet interactions in the membrane boundary layer during separation of saline emulsions. Seminar at MEM-TEK, Istanbul Technical University, Istanbul, Türkiye, November 7, 2018.
- 99. Tarabara, V. V. Membrane technology for securing microbiological safety of water: From routine treatment to emergency management. NATO Advanced Research Workshop "Physical and cyber safety in critical water infrastructure", Oslo, Norway, October 9, 2018.

- 98. (Invited) Tarabara, V. V. Hydrophobicity/hydrophilicity measurement of a membrane surface and membrane foulants: Implications for modeling foulant-membrane interactions. 2nd Workshop "State-of-the-art techniques for characterizing membranes", European Institute of Membranes, Montpellier, France, September 27, 2018.
- 97. Yin[¶], Z.; Casabuena^{*}, A. L.; Shi^{*}, H.; Xagoraraki, I. Tarabara, V. V. Removal of human adenovirus in MBRs: Roles of membrane pore size, fouling, pressure relaxation and membrane cleaning. Euromembrane 2018, Valencia, Spain, July 10, 2018.
- 96. (Invited) Tarabara, V. V. Deoiling of saline emulsions: Understanding oil droplet behavior at membrane surfaces. HTW Berlin, Germany, May 17, 2018.
- 95. (Invited) Tarabara, V. V. Hierarchically structured nanocomposite membranes for flowthrough catalytic reactions. Department of Chemistry, University of Utah, Salt Lake City, UT, October 30, 2017.
- 94. Crock*, C. A.; Şengür-Taşdemir[¶], R., Koyuncu, İ.; Tarabara, V. V. High throughput dechlorination by nanocomposite membranes with graphene-supported Pd and Pd-Au catalysts. 8th IWA Membrane Technology Conference and Exhibition for Water and Wastewater Treatment and Reuse, Singapore, September 7, 2017.
- 93. Hejase*, C. A.; Tummons*, E. N.; Chew, J.-W.; Fane, A. G.; Tarabara, V. V. Deoiling of saline emulsions: understanding oil droplet behavior at the membrane surfaces. 2017 International Congress on Membranes and Membrane Processes, San Francisco, CA, August 1, 2017.
- 92 Lasareishvili, B.; Shi*, H.; Osepashvili, M.; Gogibedashvili, L.; Tediashvili, M.; Jaiani, E.; Tarabara, V. Podoviridae phages as surrogates for validating efficacy of membrane filters: How to select a bacteriophage to serve as a suitable surrogate? Centennial Celebration of Bacteriophage Research, G. Eliava Institute of Bacteriophages, Microbiology and Virology, Tbilisi, Georgia, June 29, 2017.
- 91. (Invited) Tarabara, V. V. Reactive membranes for water treatment and reuse: Materials and process design, Environmental Nanotechnology Gordon Research Conference, Stoweflake, VT, June 20, 2017.
- 90. Shi*, H.; Xagoraraki, I.; Parent, K. N.; Bruening, M. L.; Tarabara, V. V. Understanding virus adhesion to surfaces: Example of human adenovirus 40 recovery from tap and surface water for detection. 2017 Borchardt Conference, Ann Arbor, MI, February 21, 2017.
- 89. Tarabara, V. V. Emerging technologies and research needs: Membrane separations. Workshop "Research needs in the area of physical methods of oil spill remediation: Lessons learned in remediating oil spills in the Gulf of Mexico and Michigan", 2017 Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 6, 2017.
- 88. Tarabara, V. V. Understanding virus adhesion to polymeric membranes: Applications to virus removal and recovery from water, Department of Civil and Environmental Engineering, Clarkson University, Potsdam, NY, October 12, 2016.
- 87. (Invited) Tarabara, V. V. Understanding virus adhesion to polymeric membranes: Application to virus recovery from tap and surface water, Department of Chemical Engineering, McMaster University, Hamilton, ON, Canada, September 20, 2016.
- 86. (Invited) Yin[¶], Z.; Shi*, H. Xagoraraki, I.; Tarabara, V. V. Virus removal in MBRs: Mechanisms and implications. Seminar at the European Institute of Membranes, Montpellier, France, June 20, 2016.
- 85. Yin[¶], Z.; Tarabara, V. V.; Xagoraraki, I. Removal of human adenovirus 40 in membrane bioreactors: Roles of membrane pore size, fouling, pressure relaxation and membrane cleaning. 2016 North American Membrane Society meeting, Bellevue, WA, May 25, 2016.
- 84. Guo*, B.; Starr*, B.; Xagoraraki, I.; Tarabara, V. V. Photocatalytic membrane reactors for high throughput virus removal and inactivation. 2016 North American Membrane Society meeting, Bellevue, WA, May 23, 2016.
- 83. (**Keynote**) Guo*, B.; Starr*, B. Xagoraraki, I.; Tarabara, V. Photocatalytic membranes for high throughput virus removal and inactivation. 2016 IWA Nano & Water Specialist Conference: Addressing the Water-Food-Energy Nexus, Rice University, Houston, TX, May 17, 2016.
- 82. (Invited) Tarabara, V. V. Human adenovirus removal in MBRs: Mechanisms and implications. University of Missouri, Colombia, MO, April 22, 2016.
- 81. Guo*, B.; Starr*, B. S.; Tarabara, V. V. Hybrid membrane filtration-UV disinfection process with photocatalytic membrane, 2016 American Water Works Association and American

Membrane Technology Association Membrane Technology Conference and Exposition, San Antonio, TX, February 3, 2016.

- Didebulidze, K.; Giorgadze, A; Glurjidze, T; Kobaladze, A.; Lomidze, I.; Maludze, S.; Metreveli, Z.; Patashuri, A.; Sakevarashvili, A.; Tarabara, V. Filterability of natural surface water from Mtkvari and Aragvi rivers: Water quality and ultrafiltration blocking law analyses. "Membrane and Sorption Processes and Technologies" conference, Kyiv, Ukraine, December 4, 2015.
- 79. Calderon**, C. M.; Tummons*, E. N.; Gorobets[§], A. V.; Shan*, W.; Tarabara, V. V. Separation of oil-water emulsions by porous membranes. "Membrane and Sorption Processes and Technologies" conference, Kyiv, Ukraine, December 3, 2015.
- 78. (Invited) Tarabara, V. V. New membranes and membrane processes for water treatment and reuse: Highlights from the NSF PIRE project, Singapore Membrane Technology Center, Nanyang Technological University, Singapore, September 25, 2015.
- 77. Yin[¶], Z.; Tarabara, V. V.; Xagoraraki, I. Human adenovirus removal by hollow fiber membranes, Effect of membrane fouling by suspended and dissolved matter. 250th ACS national meeting, Boston, MA, August 18, 2015.
- 76. (Invited) Tarabara, V. V. Membrane-based separation of oil-water dispersions: Understanding oil droplet behavior in the vicinity of a membrane pore, European Institute of Membranes, Montpellier, France. June 12, 2015.
- 75. (Invited) Tarabara, V. V. Membrane-based separation of oil-water dispersions: Understanding oil droplet behavior in the vicinity of a membrane pore, King Abdulla University of Science and Technology, Saudi Arabia, May 9, 2015.
- 74. (Invited) Tarabara, V. V. Virus separation by synthetic membranes: Concentration, removal and purification applications, Scientific and Technological Research Council of Türkiye (TÜBİTAK), Istanbul, Türkiye, May 5, 2015.
- 73. (Invited) Tarabara, V. V. Virus separation by synthetic membranes: Concentration, removal and purification applications, Giorgi Eliava Institute of Bacteriophages Microbiology and Virology, Tbilisi, Georgia, November 27, 2014.
- 72. Tarabara, V. V.; Gorobets[§], A. V.; Starr^{*}, B.; Motin[¶], A.; Bénard, A.; Bruening, M. L. Produced water treatment using crossflow filtration hydrocyclone based on ceramic membranes. 21st International Petroleum Environmental Conference, Houston, TX, October 15, 2014.
- 71. Yin[¶], Z.; Tarabara, V. V.; Xagoraraki, I. Effect of fouling on the removal of viruses by hollow fiber membranes: Implications for MBR design and operation. International Workshop on Next Generation MBRs, Istanbul, Türkiye, September 11, 2014.
- 70. (**Keynote**) Crock*, C. A.; Tarabara, V. V. Hierarchical materials as a design concept for reactive membranes. 248th ACS national eeting, San Francisco, CA, August 10, 2014.
- 69. (**Keynote**) Tarabara, V. V. Hierarchical materials as a design concept for catalytic membrane reactors. International Water Association Leading-Edge Conference on Water and Wastewater Treatment Technologies, Abu Dhabi, United Arab Emirates, May 28, 2014.
- 68. (Invited) Tarabara, V. V. Membrane-based separation of oil-water dispersions. Department of Civil and Environmental Engineering, National University of Singapore, February 14, 2014.
- 67. Petty, C. A.; Motin. A.; Bénard, A.; Tarabara, V. V. Hydrocyclone separation principles for cleaning produced water (co-presented with Dr. C. A. Petty). 2014 Produced Water Society seminar, Houston, TX, January 14, 2014.
- 66. Gorobets[§], A.; Starr*, B.; Shan*, W.; Tarabara, V.; Ji[¶], P.; Yang, Z.; Hogg, S.; Bruening, M.; Motin[¶], A.; Bénard, A. Separation of oil-water dispersions using rotating flow and charged hydrophilic membranes. 2014 Produced Water Society seminar, Houston, TX, January 14, 2014.
- 65. Gorobets[§], A.; Starr*, B.; Ji, P.; Shan*, W.; Hogg[¶], S.; Motin[¶], A.; Bénard, A.; Bruening, M.; Tarabara, V. Affinity-based hydrocyclone filter for oil-water separation and oil spill cleanup (teleconference presentation). 24th NO SPILLS Conference, Traverse City, MI, January 8, 2014.
- 64. (Invited) Tarabara, V. V. Functional membrane materials for water purification: Examples of ceramic and polymer composite formulations. Saint Gobain CREE, Cavaillon, France, December 13, 2013.

- 63. (Invited) Tarabara, V. V. Multifunctional membranes for water treatment applications. Seminar at the European Institute of Membranes, Montpellier, France, December 6, 2013.
- 62. (Invited) Tarabara, V. V. Polyelectrolyte multilayers as regenerable membranes: Design, removal and environmental applications. Department of Chemical and Biological Engineering, Tufts University, Medford, MA, November 18, 2013.
- 61. (Invited) Tarabara, V. V. Membrane processes and technologies for a sustainable future: Interdisciplinary research and education in water quality engineering. MSU Water Research Forum, April 26, 2013.
- 60. Crock*, C. A.; Rogensues*, A. R.; Shan*, W.; Tarabara, V. V. Multifunctional water treatment membranes based on hierarchical nanoarchitectures, Third International Conference on Multifunctional, Hybrid and Nanomaterials, Sorrento, Italy, March 3-7, 2013.
- Ji[¶], P; Shan*, W.; Hogg[¶], S.; Motin[¶], A.; Tummons*, E.; Bénard, A.; Bruening, M.; Tarabara, V. Affinity-based hydrocyclone filter for oil-water separation and oil spill cleanup. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, January 21, 2013.
- 58. (Invited) Pasco*, E.; Xagoraraki, I.; Hashsham, S.; Bruening, M.; Tarabara, V. Virus concentration and recovery using antiadhesive sacrificial membrane nanocoatings. 2012 NSF Nanoscale Science and Engineering Conference, Arlington, VA, December 3, 2012.
- 57. (Invited) Tarabara, V. V. Multifunctional water treatment membranes based on hierarchical nanomaterials. French-American Innovation Day, Cambridge, MA, November 29, 2012.
- 56. Tarabara, V. V. PIRE: Water and Commerce Technologies to enable environmental sustainability in global markets (New project presentation). 2012 NSF PIRE PI Meeting, Arlington, VA, November 14, 2012.
- 55. (Invited) Bénard, A.; Bruening, M.; Hashsham, S.; Masten, S.; Pinnavaia, T.; Priezjev, N.; Tarabara, V.; Xagoraraki, I. MSU Strategic Partnership "Advanced membrane technologies for a sustainable future". US DoE workshop "Advanced Materials for Extreme Environments", Kyiv, Ukraine, November 1, 2012.
- 54. (Invited) Tarabara, V. V. Multifunctional water treatment membranes based on hierarchical nanomaterials. WEFTEC, New Orleans, LA, October 1, 2012.
- 53. (Invited) Bénard, A.; Bruening, M.; Hashsham, S.; Masten, S.; Pinnavaia, T.; Priezjev, N.; Tarabara, V.; Xagoraraki, I. MSU Strategic Partnership "Advanced membrane technologies for a sustainable future", Presented at MSU-Dow meeting "Midland Institute for Global Supply Chain and Packaging Solutions", East Lansing, MI, June 26, 2012.
- 52. Pasco*, E. V.; Xagoraraki, I.; Hashsham. S. A.; Bruening, M. L; Tarabara, V. V. Polyelectrolyte multilayers as antiadhesive membrane films for virus concentration and recovery from water prior to detection. 2012 North American Membrane Society annual meeting, New Orleans, LA, June 9-13, 2012.
- 51. (Invited) Tarabara, V. V. Multifunctional materials for directed agent transport and concentration, Presented at Water Environment Research Foundation subscriber luncheon, Los Angeles, CA, September 18, 2011.
- 50. Rogensues*, A. R.; Crock*, C. A.; Shan*, W.; Tarabara, V. V. Polymer nanocomposite materials with hierarchical fillers as a conceptual framework for the design of multifunctional membranes. 242nd American Chemical Society national meeting, Denver, CO, August 28 September 1, 2011.
- 49. Tarabara, V. V. MSU Strategic Partnership on advanced membrane technologies for a sustainable future. Research Center of Maisons-Laffitte Veolia Environnement Research and Innovation, Paris, France, June 7, 2011.
- 48. (Invited) Tarabara, V. V. Nanomaterial-enabled membranes for water purification. International Water Association specialist conference "Nano Water 2011", Monte Verità, Ascona, Switzerland, May 18, 2011.
- 47. Shan*, W.; Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as backflushable nanofiltration membranes with tunable hydrophilicity and surface charge. 11th American Water Works Association Membrane Technology Conference, Long Beach, CA, March 28-31, 2011.
- 46. Wang*, F.; Tarabara, V. V. Mechanisms of combined fouling of reverse osmosis membranes by gypsum scale and colloids. 11th American Water Works Association Membrane Technology Conference, Long Beach, CA, March 30, 2011.

- Tarabara, V.; Davis*, T.; Shan*, W.; Petty, C.; Koppula, K.; Muthu, S.; Bénard, A.; Gaustad, M.; Rieck, R.; Mohan, R.; Brito, D.; Pacheco, J. Crossflow filtration hydrocyclones (CFFH): Challenges and opportunities for cleaning produced water. 21st Produced Water Seminar, Houston, TX, January 19, 2011.
- 44. (**Keynote**) Shan*, W.; Gaustad, M.; Rieck, R.; Bénard, A.; Petty, C.; Tarabara, V. Crossflow filtration hydrocyclone for produced water treatment, International Water Association Joint Membrane Technology and Water Reuse conference, Istanbul, Türkiye, October 21, 2010.
- 43. Shan*, W.; Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as backflushable nanofiltration membranes with tunable hydrophilicity and surface charge. International Water Association Joint Membrane Technology and Water Reuse conference, Istanbul, Türkiye, October 19, 2010.
- 42. Tarabara, V. V. Membrane research at MSU: Advanced membrane technologies for a sustainable future, National University of Singapore, Singapore, June 28, 2010.
- 41. Bénard, A.; Bruening, M.; Hashsham, S.; Masten, S.; Pinnavaia, T.; Priezjev, N.; Tarabara, V.; Xagoraraki, I. Advanced membrane technologies for sustainable future: Vision and strategy for an Engineering Research Center at MSU. Presentation to the MSU Foundation, East Lansing, MI, June 3, 2010.
- 40. Tubular ceramic membranes as a platform for hydrocyclone separators. Presented at NSF I/UCRC-MTP Teleconference, 10th Biannual Research Review Meeting, May 2010, East Lansing, MI.
- 39. (Invited) Tarabara, V. V. Nanomaterial-enabled membranes for water purification (presented via teleconference). Membrane and Sorption Processes and Technologies conference, Kyiv, Ukraine, April 20, 2010.
- (Invited) Tarabara, V. V. Nanomaterial-enabled membranes for a sustainable future. Department of Environmental Engineering, Istanbul Technical University, Istanbul, Türkiye, April 14, 2010.
- 37. (Invited) Tarabara, V. V. Nanomaterial-enabled membranes for water purification. NanoAQUA conference, Cairo, Egypt, April 12, 2010.
- 36. Tarabara, V. V. Advanced membrane technologies for a sustainable future. Presented to the Singapore Public Utility Board meeting, Singapore, January 18, 2010.
- 35. Tarabara, V. V.; Bruening, M. L.; Voice, T. C.; Wiesner, M. R. Internationalizing tomorrow's researchers Strategies and experiences from the Partnership for Education and Research in Membrane Nanotechnologies. 2009 Association of Environmental Engineering and Science Professors (AEESP) conference, Iowa City, IA, July 27, 2009.
- 34. Kim[§], J.; Shan^{*}, W.; Davies, S. H. R.; Baumann, M. J.; Masten, S. J.; Tarabara, V. V. Physicochemical bases of ceramic membrane fouling by ozonated NOM: Implications for ultrafiltration-ozonation hybrid process. 2009 North American Membrane Society meeting, Charleston, SC, June 23, 2009.
- 33. The promise of nanotechnology application to membranes in drinking water treatment. Presented as a part of Michigan American Water Works Association 2009 Research and Technical Practices seminar "Emerging Issues and Technologies in Drinking Water", Lansing, MI, April 2009.
- 32. Tarabara, V. V. Nanomaterial-enabled improvements in membranes for water treatment. NSF I/UCRC 2009 research summit, Houston, TX, April 22, 2009.
- 31. (Invited) Tarabara, V. V. Multifunctional nanoparticles-enabled membranes for water treatment. Department of Civil and Environmental Engineering, University of California Los Angeles, Los Angeles, CA, February 17, 2009.
- 30. (Invited) Tarabara, V. V. Toxicity of nanoparticles, MSU Center for Nanomaterials Design and Assembly seminar, East Lansing, MI, November 6, 2008.
- 29. (Invited) Tarabara, V. V. Multifunctional nanoparticles-enabled membranes for water treatment. Department of Chemical and Environmental Engineering, University of Toledo, Toledo, OH, October 30, 2008.
- 28. (Invited) Shan*, W.; Kim[§], J.; Davies, S.; Baumann, M.; Masten, S.; Tarabara, V. Interactions of aqueous NOM with TiO₂ nanoparticles: Implications for ceramic membrane filtration, Presented at the CEINT International Partners Meeting on Environmental Nanotechnology, Embassy of France, Washington, DC, October 27, 2008.

- 27. (Invited) Shan*, W.; Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Facile control of colloidal fouling and scaling in polyelectrolyte multilayer-based nanofiltration systems, 2008 IWA North American Membrane Research Conference, Amherst, MA, August 10, 2008.
- 26. (Invited) Taurozzi*, J. S.; Arul*, H., Bosak, V. Z.; Burban, A. F.; Voice, T. Č.; Bruening, M. L.; Tarabara, V. V. Effect of filler incorporation route on the properties of polysulfone-silver nanocomposite membranes of different porosities, 5th Polish-Ukrainian conference "Polymers of Special Applications", Radom, Poland, June 18, 2008.
- Tarabara, V. V. Nanomaterial-enabled improvements in membranes for water treatment.
 2008 IWA Regional Conference Membrane Technologies in Water and Waste Water Treatment, June 2 -4, 2008, Moscow, Russia.
- 24. Kim[§], J.; Davies, S.; Baumann, M.; Masten, S.; Tarabara, V. V. Control of NOM fouling in a hybrid ozonation-ceramic ultrafiltration system: Combined effects of hydrodynamics and solution chemistry, 2008 IWA Regional Conference Membrane Technologies in Water and Waste Water Treatment, Moscow, Russia, June 2 -4, 2008.
- 23. (Invited) Tarabara, V. V. Controlling colloidal fouling in polyelectrolyte multilayer-based nanofiltration systems. Department of Civil and Environmental Engineering, University of Houston, Houston, TX, April 1, 2008.
- 22. (Invited) Tarabara, V. V. Facile control of colloidal fouling and scaling in polyelectrolyte multilayer-based nanofiltration systems. 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- 21. Kim[§], J.; Davies, S.; Baumann, M.; Masten, S.; Tarabara, V. V. Hybrid ozonation-ultrafiltration for water purification: Combined effect of ozonation and hydrodynamics on flux and water quality, 2007 Association of Environmental Engineering and Science Professors (AEESP) conference, Blacksburg, VA, July 30, 2007,
- 20. Tarabara, V. V. Inside or Outside the Membrane, or where can a nanoparticle help purify water? Presented at the Department of Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD, May 5, 2007.
- 19. Wang*, F.; Tarabara, V. V. Coupled effects of scaling and colloidal deposition on the performance of reverse osmosis membranes. 233rd American Chemical Society national meeting, Chicago, IL, March 28, 2007.
- 18. (Invited) Tarabara, V. V. Inside or Outside the Membrane, or where can a nanoparticle help purify water? Department of Civil Engineering, McMaster University, Hamilton, Ontario, Canada, March 8, 2007.
- Dhawan, A.; Taurozzi*, J. S.; Pandey, A. K.; Shan*, W.; Miller, S. M.; Hashsham, S. A.; Tarabara, V. V. Stable colloidal dispersions of C₆₀ fullerenes in water: Evidence for genotoxicity. 2006 AIChE Annual Conference, San Francisco, CA, November 16, 2006.
- 16. (Invited) Tarabara, V. V. Yin and yang of particle deposition in membrane-based separation processes. Science at the Edge seminar, Michigan State University, East Lansing, MI, November 18, 2005.
- 15. Taurozzi*, J. S.; Tarabara, V. V. Membrane-supported nanoparticle sensors for water quality control, Presented at the 2nd International Symposium on Nanotechnology and Occupational Health, Minneapolis, MN, October 4, 2005.
- 14. Tarabara, V. V.; Bruening, M. L. Taurozzi, J. S. Membrane –supported nanoparticle sensors for water quality control, Presented at the AEESP-ACS Symposium on Environmental Nanotechnology, Division of Environmental Chemistry, 230th American Chemical Society national meeting, Washington, DC, September 1, 2005.
- 13. Tarabara, V. V., M. R. Wiesner. Morphological design of nanoparticle assemblies: Application to environmental sensing. Presented at 2004 AIChE Annual Conference, Austin, TX, November 10, 2004.
- 12. Tarabara, V. V., M. R. Wiesner. Design of in situ caps for the isolation of contaminated sediments, Presented at 2004 AIChE Annual Conference, Austin, TX, November 10, 2004.
- 11. Tarabara, V. V. Coupled effects of scaling and colloidal deposition on the performance of reverse osmosis membrane filters. Presented at the Research Advisory Board Meeting of the National Water Research Institute, Deerfield, IL, October 16, 2004.
- 10. Tarabara, V. V. Application of reverse osmosis membranes for desalination: Understanding the physicochemical basis for permeate flux performance. Presented at the Department of

Civil and Environmental Engineering, Michigan State University, East Lansing, MI, September 23, 2004.

- 9. Tarabara, V. V. Coupled effects of chemistry and hydrodynamics on permeate flux in cross flow ultrafiltration. Department of Civil and Environmental Engineering, Michigan State University, East Lansing, MI, November 11, 2003.
- Tarabara, V. V., M. R. Wiesner. Bench-scale investigation of the performance of subaqueous reactive barriers. Presented at the 2nd International Symposium on Contaminated Sediments: Characterization, Evaluation, Mitigation/Restoration, Management Strategy Performance, Quebec City, Quebec, Canada, May 26, 2003.
- 7. Tarabara, V. V. Coupled effects of chemistry and hydrodynamics on permeate flux in cross flow ultrafiltration. Department of Chemical Engineering, McGill University, Montreal, Quebec, Canada, May 22, 2003.
- Tarabara, V. V.; Koyuncu, İ.; Wiesner, M. R. Direct experimental observation of filter cake cross sections: Effect of hydrodynamics and solution chemistry on permeate flux in crossflow filtration. Presented at the 14th Annual Meeting of the North American Membrane Society, Jackson Hole, WY, May 17, 2003.
- 5. Tarabara, V. V. Morphology of particle deposits: Implications for environmental transport. Department of Civil and Environmental Engineering, Lehigh University, Bethlehem, PA, March 6, 2003.
- 4. Tarabara, V. V.; Wiesner, M. R. In situ containment and treatment: Engineering cap integrity and reactivity, Presented at the Annual Meeting of Hazardous Substance Research Centers/South and Southwest, Baton Rouge, LA, November 8, 2002.
- Tarabara, V. V., Wiesner, M. R., Bottero, J.-Y., C. Parron. Effect of suspension heterogeneity on the morphology of fouling cakes. Presented at the 12th Annual Meeting of North American Membrane Society, Lexington, KY, May 17, 2001.
- 2. Tarabara, V. V., M. R. Wiesner. Morphological properties of fouling layers formed from heterogeneous suspensions: Implications for membrane filtration. Presented at Texas Water 2001, University Forum, Houston, TX, April 4, 2001.
- 1. Tarabara, V. V., M. R. Wiesner. Morphological properties of fouling cakes formed from heterogeneous suspensions. Presented at the 2001 American Water Works Association Membrane Technology Conference, San Antonio, TX, March 6, 2001.

Conference proceedings (full publication review)

- Kaya, R.; Tarabara, V. V.; Koyuncu, İ. CFD modeling of a bench-scale vibratory MBR module. 9th IWA Specialised Membrane Technology Conference and Exhibition for Water and Wastewater Treatment and Reuse, Toulouse, France, June 23-27, 2019.
- Jahangiri[¶], M. S.; A.; Tarabara, V. V.; Benard, A. A wall film model for membrane fouling (paper FEDSM2018-83298). Proceedings of the 5th Joint U.S.-European Fluids Engineering Summer Meeting (FEDSM), Montreal, QC, July 15-20, 2018.
- 8. Jahangiri[¶], M. S.; Tarabara, V. V. Bénard, A. Numerical investigation on the effect of external flow conditions and pore shape on droplets interactions with pores during microfiltration using a volume of fluid method. Proceedings of the International Mechanical Engineering Congress and Exposition, Phoenix, AZ, November 11-17, 2016.
- 7. Jahangiri[¶], M. S.; Tarabara, V. V. Bénard, A. Numerical simulation of filtration of charged oil particles in stationary and rotating tubular membranes. Proceedings of the International Mechanical Engineering Congress and Exposition, Houston, TX, November 13-19, 2015.
- 6. Motin[¶], A.; Tarabara, V.V.; Bénard, A. Numerical study of internal flow structures within hydrocyclones with parabolic and hyperbolic swirl chambers. Proceedings of the International Mechanical Engineering Congress and Exposition, Montreal, Canada, November 14-20, 2014.
- Motin[¶], A.; Tarabara, V. V.; Bénard, A. CFD study of hydrodynamics and separation performance of a novel crossflow filtration hydrocyclone (CFFH). Proceedings of the 4th Joint U.S.-European Fluids Engineering Summer Meeting (FEDSM), Chicago, IL, August 3-7, 2014.
- 4. Darvishzadeh[¶], T.; Tarabara, V. V.; Priezjev, N. V. Oil droplet behavior at a pore entrance in the presence of crossflow: Implications for microfiltration of oil-water dispersions. DFD13 Meeting of The American Physical Society, Pittsburgh, PA, November 24, 2013.

- Motin[¶], A.; Gaustad, M. D.; Tarabara, V. V.; Bénard, A., Performance and simulation of crossflow filtering hydrocyclone (CFFH) for oil-water separation. ASME Fluid Engineering Division Summer Meeting, paper no. 16195, Lake Tahoe, NV, July 7-11, 2013.
- Darvishzadeh[¶], T.; Priezjev, N.; Tarabara, V. V. Numerical study of crossflow enhanced microfiltration of oil-in-water emulsions. Proceedings of the 65th Annual Meeting of the American Physical Society, Division of Fluid Dynamics, San Diego, CA, November 18-20, 2012.
- Tarabara, V. V.; Wiesner, M. R. Bench-scale investigation of the deposition-structureperformance relationship for in situ deposited sediment caps. In: Transactions of the 2nd International Symposium on Contaminated Sediments: Characterization, Evaluation, Mitigation/Restoration, Management Strategy Performance, p. 234-238, Quebec City, Canada, May 26-28, 2003.

Conference proceedings (abstracts reviewed)

- 47. Yasui, M.; Tarabara, V.; Katayama, H. Effect of Surface Interactions on Virus Membrane Removal Considering Extended DLVO model (ウイルス膜ろ過除去における表面相互作用の影響 の拡張DLVOモデルによる評価). The 57th Annual Conference of Japan Society on Water Environment, Ehime, Japan, March 15 - 17, 2023 (in Japanese).
- 46. Zhou, J.; Tarabara, V. Developing International Research Collaboration through Fulbright Program, 2021 EWRI Congress, May 23, 2021.
- 45. Bessette, D. L., Gunn, G. E., Rutty, M., Tarabara, V. V., Richardson, R. B. Perceived risk of oil spills under ice. 2019 Society for Risk Analysis Annual Meeting, Arlington, VA, December 8-12, 2019.
- 44. Gunn, G.; Nyland, K.; Tarabara, V.; Rutty, M.; Bessette, D.; Richardson, R. Implications of ice cover characteristics for underwater oil spills in the Straits of Mackinac, Michigan. 76th Eastern Snow Conference, Fairlee, VT, June 5, 2019.
- Bessette, D.; Gunn, G.; Tarabara, V.; Rutty, M.; Richardson, R. The perceived risk of underwater oil pipelines and spills under ice. Energy and Society in transition - 2nd International Conference on Energy research and Social Science. Tempe, AZ, May 28-31, 2019.
- 42. Tummons*, E. N.; Hejase*, C. A.; Yang, Z.; Chew, J. W.; Bruening, M. L.; Tarabara, V. V. Oil drop behavior on model nanofiltration membrane surfaces under conditions of hydrodynamic shear. 2019 North American Membrane Society annual meeting, Pittsburgh, PA, May 14, 2019.
- 41. Dang*, H. T. T.; Tarabara, V. V. Deposition of viruses onto household paints and polyelectrolytecoated surfaces. 2017 Association of Environmental Engineering and Science Professors (AEESP) conference, Ann Arbor, MI, June 22, 2017.
- 40. Hejase*, C.; Tummons*, E. N.; Chew, J. W.; Fane, A. G.; Tarabara, V. V. Deoiling of saline emulsions: Understanding oil droplets behavior at the membrane surface. Engineering with Membranes Conference (EWM 2017), Singapore, April 27, 2017.
- Starr*, B. J.; Tarabara, V. V.; Zhou, M.; Roualdès, S.; Ayral, A. Comparison of layer-by-layer and plasma-enhanced chemical vapor deposition techniques for the photocatalytic functionalization of ceramic membrane supports. 14th International Conference on Inorganic Membranes, Atlanta, GA, July 10-13, 2016.
- Tummons*, E. N.; Tarabara, V. V.; Chew, J. W.; Fane, A. G. Behavior of oil droplets at the membrane surface during crossflow microfiltration of oil-water emulsions. 2016 North American Membrane Society meeting, Bellevue, WA, May 21-25, 2016.
- 37. Didebulidze, K.; Giorgadze, A; Glurjidze, T; Kobaladze, A.; Lomidze, I.; Maludze, S.; Metreveli, Z.; Patashuri, A.; Sakevarashvili, A.; Vakuliuk, P.; Tarabara, V.; Yatseiko, O. Filterability of natural surface water from Mtkvari and Aragvi rivers. 8th Eastern European Young Water Professionals Conference, Gdansk, Poland, May 12-14, 2016.
- 36. Tummons*, E. N.; Tarabara, V. V.; Chew, J. W.; Fane, A. G. Behavior of oil droplets at the membrane surface during microfiltration. 2016 Produced Water Society seminar, Houston, TX, January 2016.
- 35. Crock*, C. A.; Tarabara, V. V. Pd and Pd-Au nanocatalysts supported on exfoliated graphite for high throughput dehalogenation in nanocomposite membranes, 250th American Chemical Society national meeting, Boston, MA, August 16-20, 2015.
- 34. Guo*, B.; Starr*, B. S.; Xagoraraki, I.; Tarabara, V. V. Hybrid microfiltration-UV process for

removal and photocatalytic inactivation of viruses, 250th American Chemical Society national meeting, Boston, MA, August 16-20, 2015.

- Shi*, H.; Pasco*, E. V.; Xagoraraki, I.; Bruening, M. L.; Tarabara, V. V. Novel membranes for adenovirus recovery from water. 248th American Chemical Society national meeting, San Francisco, CA, August 10-14, 2014.
- Motin[¶], A.; Tarabara, V. V.; Petty, C. A.; Bénard, A. Internal flow structures within hydrocyclones: Effects of the conical chamber aspect ratio. 17th U.S. National Congress on Theoretical and Applied Mechanics, East Lansing, MI, June 15-20, 2014.
- Ahmadiannamini, P.; Dulebohn, J.; Wang, T.; Kim, S.-S.; Pinnavaia, T. J.; Tarabara, V. V. Polymer mesocomposites: Ultrafiltration membrane materials with enhanced permeability, selectivity and fouling resistance. 2014 North American Membrane Society annual meeting, Houston, TX, May 31 - June 4, 2014.
- 30. Motin[¶], A.; Petty, C. A.; Bénard, A; Tarabara, V. V. Computational study of the effects of the conical chamber design on the internal flow structures within a hydrocyclone. Oil & Gas and Chemical Processing Filtration and Separation Conference, Houston, TX, March 25-26, 2014.
- 29. Bruening, M. L.; Bénard, A.; Hogg[¶], S.; Ji[¶], P.; Motin[¶], A.; Shan*, W.; Tarabara, V. V. Towards filtration of oil-water mixtures using rotating flow and hydrophilic membranes. 2013 North American Membrane Society annual meeting, Boise, ID, June 8-12, 2013.
- 28. Hogg[¶], S.; Tarabara, V. V. Bruening, M. L. Superhydrophobic polypropylene coatings for fouling reduction in membrane distillation, Abstracts of papers, 245th American Chemical Society national meeting, New Orleans, LA, April 7-11, 2013.
- Crock*, C. A.; Rogensues*, A. R.; Shan*, W.; Tarabara, V. V. Multifunctional water treatment membranes based on hierarchical materials. 7th IWA Specialized Membrane Technology Conference and Exhibition for Water and Wastewater Treatment and Reuse, Toronto, Canada, August 25-29, 2013.
- 26. Crock*, C. A.; Rogensues*, A. R.; Shan*, W.; Tarabara, V. V. Mixed matrix materials with hierarchical fillers for multifunctional membranes. 2012 North American Membrane Society annual meeting, New Orleans, LA, June 9-13, 2012.
- 25. Pasco*, E. V.; Xagoraraki, I.; Hashsham, S. A.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as sacrificial membrane coatings: A novel concept for virus recovery for detection. 2012 American Chemical Society national meeting, San Diego, CA, March 27, 2012.
- 24. Bénard, A.; Chase, G.; Davis*, T.; Gaustad, M.; Koppula, K.; Mohan, R.; Muthu, S.; Petty, C.; Pacheco, J.; Rieck, R. Shan*, W.; Tarabara, V. Crossflow filtration hydrocyclones for cleaning produced water. Joint 2010 meeting of the American Institute of Chemical Engineers and the American Filtration and Separation Society, San Antonio, TX, March 23, 2010.
- 23. Gaustad, M.; Rieck, R.; Shan*, W.; Bénard, A.; Tarabara, V. V.; Petty, C. A. Cross flow filtration hydrocyclone for liquid/liquid separation. 2009 AIChE annual meeting, Nashville, TN, November 8-13, 2009.
- Davies, S. H.; Baumann, M. J.; Corneal, L. M.; Byun, S.; Tarabara, V. V.; Masten, S. J. Fabrication of catalytic ceramic membranes for water filtration. 6th IWA Leading-Edge Conference on Water and Wastewater Technologies, Singapore, 2009.
- 21. Shan*, W.; Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as backflushable nanofiltration membranes with tunable hydrophilicity and surface charge. In: Proceedings of 2009 North American Membrane Society meeting, Charleston, SC, June 20-24, 2009.
- Voice, T. C.; Tarabara, V. V.; Wiesner, M. R.; Bruening, M. L. Internationalizing tomorrow's researchers – Strategies and experiences from the Partnership for Education and Research in Membrane Nanotechnologies. 2009 American Society for Engineering Education Annual Conference and Exposition, Austin, TX, June 14-17, 2009.
- Davies, S. H. R.; Alpatova*, A. L.; Baumann, M. J.; Corneal[¶] L. M.; Kim[§], J.; Tarabara, V. V.; Masten, S. J. Water treatment using hybrid ozonation-membrane filtration. 237th American Chemical Society national meeting, Salt Lake City, UT, March 22-26, 2009.
- Kim[§], J.; Davies, S. H. R.; Baumann, M. J.; Masten, S. J.; Tarabara, V. V. Control of NOM fouling in a hybrid ozonation-ceramic ultrafiltration system: Combined effects of hydrodynamics and solution chemistry. 2008 IWA North American Membrane Research Conference, Amherst, MA, August 10-13, 2008.

- 17. Kim[§], J. H.; Davies, S. H. R.; Masten, S. J.; Tarabara, V. V. Combined effect of physicochemical factors on the performance of hybrid ozone-ceramic ultrafiltration water treatment system. The Membrane Society of Korea, Taegu, Republic of Korea, November 6-7, 2008.
- 16. Kim[§], J.; Tarabara, V. V.; Davies, S. H. R.; Baumann, M. J.; Masten, S. J. Interactions of aqueous NOM with TiO2 nanoparticles: Effects of ozone, pH, and calcium content, International Environmental Nanotechnology Conference, Chicago, IL, October 8, 2008.
- 15. Kim[§], J.; Tarabara, V. V.; Davies, S. H. R.; Baumann, M. J.; Masten, S. J. Effects of solution chemistry on NOM fouling in a hybrid ozonation-ultrafiltration water treatment system, 2007 AIChE Annual Conference, Salt Lake City, UT, November 4-9, 2007.
- 14. Taurozzi*, J. S.; Bosak, V. Z.; Burban, A. F.; Bruening, M. L.; Tarabara, V. V. Novel route for the preparation of nanoparticle-filled polymeric membranes: Example of the synthesis of biofouling resistant Ag-polysulfone ultrafilters. 233rd American Chemical Society national meeting, Chicago, IL, March 25-29, 2007.
- Redko, M. Y.; Taurozzi*, J. S.; Manes, K.; Jackson, J. E.; Tarabara, V. V. Development of Aza222-based polymers, colloidal sorbents, and membranes for the removal of mercury from aqueous solutions 233rd American Chemical Society national meeting, Chicago, IL, March 25-29, 2007.
- 12. Masten, S. J.; Alpatova^{*}, A. L.; Baumann, M. J.; Davies, S. H. R.; Kim[§], J.; Tarabara, V. V. Combined effect of ozonation and hydrodynamic conditions on permeate flux in the hybrid ozonation-membrane filtration process, 42nd Central Canadian Symposium on Water Quality Research, Burlington, ON, February 23-24, 2007.
- 11. Wang*, F.; Tarabara, V. V. Coupled effects of salt concentration polarization and colloidal deposition on the performance of reverse osmosis membranes. 2006 AIChE Annual Conference, San Francisco, CA. November 12-17, 2006.
- 10. Taurozzi*, J.; Tarabara, V. V. SERS-active silver nanoparticle arrays on track etch membrane support as flow-through water quality sensors. 2006 AIChE Annual Conference, San Francisco, CA, November 12-17, 2006.
- Wiesner, M. R.; Koyuncu, İ.; Tarabara, V. V. Fluid flow, chemistry, and morphological variations in foulant layers. In: Abstracts of Papers, 229th American Chemical Society national meeting, March 13-17, 2005.
- Wiesner, M. R.; Cortalezzi, M.; Tarabara, V. V. Chemical factors controlling the structure of particle deposits: Relevance for membrane operation and fabrication, 78th American Chemical Society Colloid and Surface Science Symposium, New Haven CT, June 20-23, 2004.
- Tarabara, V.; Hovinga, R. M.; Wiesner, M. R. Transient permeate flux analysis: model validation, In: Proceedings of the Conference on Membranes in Drinking and Industrial Water Production, v.1, 197-205, Paris, France, October 3, 2000.
- Wiesner M. R.; Tarabara, V.; Parron, C.; Bottero, J.-Y. Morphology of membrane deposits. In: Abstracts of papers, 220th American Chemical Society national meeting, Washington, DC, August 20-24, 2000.
- Feofanov, A. V.; Mochalov, K. E.; Tarabara, V. V.; Ermichov, M. A.; Nabiev, I. R.; Sergeeva, T. V.; Iakubovskaya, R. I. SERS spectroscopy approach to analysis in vivo pharmacokinetics and biodistribution of cobalt octacarboxyphtalocyanine, 16th International Conference on Raman Spectroscopy, Cape Town, South Africa, 1998.
- Oleinikov V. A.; Kryukov, E. Yu.; Tarabara, V. V.; Feofanov, A. V.; Tuzikov, A. B.; Shiyan, S. D.; Bovin, N. V.; Nabiev, I. R. Raman spectroscopy study of sialic acid of glycoproteins. Search for characteristic bands. 16th International Conference on Raman Spectroscopy, Cape Town, South Africa, 1998.
- Tarabara, V.; Nabiev, I.; Feofanov, A. Thio-organically modified silver citrate hydrosol for SERS study of biomolecules, 7th European Conference on the Spectroscopy of Biological Molecules Annex, Madrid, 1997.
- Feofanov A. V.; Tarabara, V. V.; Kryukov, E. Yu.; Nabiev, I. R. Interpretation of Raman and SERS spectra of α-methylglycoside N-acetylneuraminic acid, In: Spectroscopy of Biological Molecules: Modern Trends. Eds. P. Carmona, R. Navarro, A. Hernanz, Dodrecht, Boston, London: Kluwer Academic Publishers, 1997, p. 281.

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Other (for posters, presenter's name is underlined)

- 107. <u>Yasui, M.</u>; Xunhao Wang, X.; Tarabara, V.; Katayama, H. Effect of electrostatic and hydrophobic interactions on virus removal by membranes. Poster presented at 21st International Symposium on Health-Related Water Microbiology (WATERMICRO23), Darwin, Australia, June 4 - 8, 2023.
- 106. <u>Urbina Ramos**, P. M.</u>; Wang, X.; Tarabara, V. Evolution of surface energy of PVDF membranes in intermittent exposure to foulants and cleaning agents. Poster presented at 2022 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), East Lansing, MI, July 27, 2022.
- 105. <u>Wang*, X.</u>; Tarabara, V. V. Understanding adhesion to monitor and control environmental processes: From virus detection to membrane fouling mitigation. Poster presented at 2022 Engineering Graduate Research Symposium, Michigan State University, East Lansing, MI, April 14, 2022.
- 104. <u>Meem**, M.; Kumar**, A.; Vitija**, X.</u>; <u>Nguyen**, P.</u>; Wang*, X.; Tarabara, V. V. Surface transmission of viruses in a grocery store setting. Poster presented at 2022 University Undergraduate Research and Arts Forum (UURAF), Michigan State University, East Lansing, MI, April 8, 2022.
- 103. <u>Bush**, S.; Choudhury**, A.; Pothuraju**, S.; Potvin**, B.</u>; Tarabara, V. V.; Wang*, X. Surface transmission of viruses in a healthcare facility. Poster presented at 2022 University Undergraduate Research and Arts Forum (UURAF), Michigan State University, East Lansing, MI, April 8, 2022.
- 102. Wang*, X.; <u>Marinelli**, V.</u>; Beuther**, S.; Tarabara, V. Quantifying fouling and cleaning cycles on membrane surface chemistry. Poster presented at 2022 University Undergraduate Research and Arts Forum (UURAF), Michigan State University, East Lansing, MI, April 8, 2022.
- 101[&]. Faculty-led case studies of promising practices in international STEM education. Workshop "Internationalizing STEM Education for Broader Impacts: Promising Practices and Tools for Assessment", MSU, October 27, 2021.
- 100. <u>Beuther**, S.;</u> Wang*, X.; Tarabara, V. Cleaning by bleach makes filtration membranes more hydrophobic: Evidence from surface energy measurements. Poster presented at 2021 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), East Lansing, MI, July 28, 2021.
- 99. Tarabara, V. V. Water purification by synthetic membranes. Seminar given to student participants of the NSF Research Experience for Undergraduates (REU) program "Cross-disciplinary research in sustainable chemistry and chemical processes", Department of Chemistry, Michigan State University, East Lansing, MI, June 16, 2021.
- 98. <u>Marinelli**, V.</u>; Hong**, S.; Gunn, G.; Rutty, M.; Bessette, D.; Richardson, R.; Tarabara, V. Oil spills under ice: Kinetics of oil spreading as a function of ice cover characteristics. 2021 University Undergraduate Research and Arts Forum, East Lansing, MI, May 2021.
- 97. Lasareishvili, B.; <u>Wang*, X.</u>; Shi*, H.; Osepashvili, M.; Gogibedashvili, L.; Tediashvili, M.; Jaiani, E.; Tarabara, V. Understanding fate and transport of viruses in water treatment facilities: How to select a bacteriophage to serve as a suitable surrogate? Poster presented at 2020 Borchardt Conference, Ann Arbor, MI, February 25, 2020.
- 96. Tarabara, V.; Bessette D.; Rutty M.; Richardson R.; Gunn G., "Oil Flow Beneath Ice in the Great Lakes: An Update ". How published: Michigan Policy Wonk blog. ippsr.msu.edu/public-policy/michigan-wonk-blog/oil-flow-beneath-ice-great-lakes-update, February 14, 2020.
- 95. Gunn, G.; Rutty, M.; Bessette, D.; Tarabara, V. V. Risk perceptions and detection of oil spills on ice covered lakes. Project overview presented at the Region 5 Regional Response Team Northern Michigan Area Committee meeting, Petoskey, MI, July 16, 2019.
- 94. Tarabara, V. V. Water purification by synthetic membranes. Seminar given to student participants of the NSF Research Experience for Undergraduates (REU) program "Cross-

disciplinary research in sustainable chemistry and chemical processes:", Department of Chemistry, Michigan State University, East Lansing, MI, June 26, 2019.

- 93. Kucuk*, S.; <u>Hejase*, C. A.</u>; Kolesnyk, I. S.; Tarabara, V. V.; Chew, J. W. Microfiltration of crude oil emulsions stabilized by Corexit 9500 dispersant: A feasibility study. Poster presented at 2019 North American Membrane Society annual meeting, Pittsburgh, May 13, 2019.
- 92. Public policy forum "Winter Lake Oil Spills Risk Perception, Detection, and Remediation". Panelists: D. Bessette, V. Tarabara, R. Richardson. Lansing, MI, April 17, 2019.
- 91. <u>Hejase*, C.A.</u>; Kucuk*, S.; Kolesnyk, I.S.; Chew, J.W.; Tarabara, V.V. Cleaning up emulsified oil spills in seawater: Assessing microfiltration as a remediation strategy. Poster presented at 2019 Fate of the Earth Symposium, East Lansing, Michigan, April 13, 2019.
- 90. <u>Murali*, A.;</u> Gonety, R.; Thomas. D.; Wrobel, B.; Tarabara, V. V. Plant-derived materials in lowcost water treatment: Moringa oleifera as a source of coagulants. Poster presented at 2019 Fate of the Earth Symposium, East Lansing, MI, April 13, 2019.
- 89. <u>Marinelli, V.;</u> Hejase*, C. A.; Mamouri, S. J.; Bénard, A.; Chew, J. W.; Tarabara, V. V. Microfiltration of emulsified oil for produced water treatment. Poster presented at 2019 University Undergraduate Research and Arts Forum, East Lansing, MI, April 5, 2019.
- 88. <u>Hejase*, C. A.</u>; Tarabara, V. V. The Deepwater Horizon and Kalamazoo River oil spills: A comparison of causes and impacts. Poster presented at the 2019 meeting of the Collaborative Research and Education Initiative, MSU Canadian Studies Center, March 26, 2019.
- 87. <u>Wang*, X.</u>; Tarabara, V. V. Virus attachment to lipophilic personal care products (ChapStick): Implications for human health. Poster presented at 2019 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 21, 2019.
- 86. <u>Murali*, A.;</u> Gonety, R.; Thomas. D.; Wrobel, B.; Tarabara, V. V. Coagulation and flocculation using plant-derived materials for low-cost water treatment: The case for Moringa Oleifera. Poster presented at 2019 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 21, 2019.
- 85. <u>Gonety, R.; Thomas, D.;</u> Murali*, A.; Wrobel, B.; Tarabara, V. V. Natural coagulants based on *Moringa Oleifera*: Physiochemical properties and applications to water treatment. Poster presented at 2018 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), East Lansing, MI, July 24, 2018.
- 84. Gonety, R.; Murali*, A.; Tarabara, V. V.; Thomas, D. Water treatment using coagulation and flocculation. Presented as a part of the Environmental Engineering module for the High School Engineering Institute, Michigan State University, East Lansing, MI, July 17, 2018.
- 83. Tarabara, V. V. Managing a research group at a University: A U.S. perspective. Presentation to the Water Harmony Eurasia project team, Munich, Germany, May 16, 2018.
- 82. <u>Hejase*, C. A.</u>; Tummons*, E. N.; Chew, J. W.; Tarabara, V. V. Oil droplet adhesion to charged surfaces under conditions of hydrodynamic shear. Poster presented at 2018 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 29, 2018.
- 81. <u>Küçük*, Ş.;</u> Hejase*, Č. A.; Kolesnyk, I. S.; Tarabara, V. V. Microfiltration of crude oil emulsions stabilized by Corexit 9500 dispersant: A feasibility study. Poster presented at 2018 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 29, 2018.
- 80. <u>Hejase*, C. A.</u>; Tarabara, V. V. The Deepwater Horizon and Kalamazoo River oil spills: A comparison of causes and impacts. Poster presented at 2018 Fate of the Earth Symposium, East Lansing, MI, March 24, 2018.
- 79. Şengür-Taşdemir, R., Sayınlı, B., Ürper, G.M., Pekgenç, E., Türken, T., Güneş, O., Ateş Genceli, E., Tarabara, V.V., Koyuncu, İ. İçme Suyu Eldesi için Pilot Ölçekli İnce Boşluklu Fiber Nanofiltrasyon Membran Üretimi, Desalinasyon Teknolojileri çalıştayı, İstanbul, 21 November 2017.
- 78. G. M. Ürper, B. Sayınlı, R. Şengür-Taşdemir, T. Türken, E. Pekgenç, O. Güneş, V. V. Tarabara, E. Ateş-Genceli, İ. Koyuncu, Karbon Nanotüp Katkılı ve Katkısız Destek Tabakası Üzerine İFK Nanofiltrasyon (NF) Membran Üretimi ve Performans Değerlendirilmesi, 5. Ulusal Membran Teknolojileri ve Uygulamaları Sempozyumu, Cevahir Hotel Istanbul Asia, Maltepe, İstanbul, Türkiye, 21-23 September 2017.
- 77. B. Zeytuncu, M. Ürper, İ. Koyuncu, V. V. Tarabara, Akrillenmiş PVA Esaslı Elektrospun Nanofiber Membranların Sentezlenmesi Ve Virüslerin Uzaklaştırılmasında Uygulanması, 5.

Ulusal Membran Teknolojileri ve Uygulamaları Sempozyumu, Cevahir Hotel Istanbul Asia, Maltepe, İstanbul, Türkiye, 21-23 September 2017.

- 76. <u>Shi*, H.</u>; Xagoraraki, I.; Parent, K. N.; Bruening, M. L.; Tarabara, V. V. Understanding virus adhesion to surfaces: Example of human adenovirus 40 recovery from tap and surface water for detection. Poster presented at 2017 AEESP meeting, Ann Arbor, MI, June 20-22, 2017.
- 75. <u>Hejase*, C.</u>; Tummons*, E. N.; Chew, J. W.; Fane, A. G.; Tarabara, V. V. Deoiling saline emulsions by porous membranes: A direct visualization study. Poster presented at 2017 Association of Environmental Engineering and Science Professors (AEESP) meeting, Ann Arbor, MI, June 20-22, 2017.
- 74. Babkin, M.; <u>Klestova, Z.</u>; Tarabara, V.; Blotska, O.; Dremykh, Yu. Virus inactivation in farm wastewater. Poster presented at 2017 Cooperative Biological Engagement Program (CBEP) Ukraine Regional One Health Research Symposium, Kyiv, Ukraine, April 24-28, 2017.
- 73 Lasareishvili, B.; Osepashvili, M.; Gogibedashvili, L.; Tediashvili, M.; Jaiani, E.; Tarabara, V. Podoviridae phages as surrogates for validating efficacy of membrane filters. Poster presented at Centennial Celebration of Bacteriophage Research, Institut Pasteur, April 23-26, Paris, France.
- 72. T. Türken, B. Sayınlı, R. Şengür-Taşdemir, G. M. Ürper, E. Pekgenç, V. V. Tarabara, E. Ateş-Genceli, İ. Koyuncu, Güçlendirilmiş NanofiltrasyonHollow Fiber Membran Üretimi5. Ulusal Membran Teknolojileri ve Uygulamaları Sempozyumu, Cevahir Hotel Istanbul Asia, Maltepe, İstanbul, Türkiye, 21-23 September 2017.
- 71. Urper, G.M., Sayinli, B., Sengur-Tasdemir, R., Pekgenc, E., Turken, T., Gunes, O., Ates-Genceli, E., V.V. Tarabara, Koyuncu, I., Katkılı ve Katkısız Destek Tabakası Üzerine İnce Film Kompozit ve İnce Film Nanokompozit Çalışmaları, İçme ve Kullanma Suyu Arıtımında Membran Teknolojileri Çalıştayı, İstanbul Teknik Üniversitesi Deprem Mühendisliği ve Afet Yönetimi Enstitüsü Konferans Salonu, İstanbul, Türkiye, 18 April 2017.
- 70. Turken, T., Sengur-Tasdemir, R., Urper, G.M., Sayinli, B., Pekgenc, E., Gunes, O., Genceli-Ates, E., V.V. Tarabara, Koyuncu, I., Güçlendirilmiş Hollow Fiber Nanofiltrasyon Membran Üretimi, İçme ve Kullanma Suyu Arıtımında Membran Teknolojileri Çalıştayı, İstanbul Teknik Üniversitesi Deprem Mühendisliği ve Afet Yönetimi Enstitüsü Konferans Salonu, İstanbul, Türkiye, 18 April 2017.
- 69. Sengur-Tasdemir, R., Pekgenc, E, Urper, G.M Tutuncu, E., Ergon T., Turken, T., Sayınlı, B., Karagüler, N.G., Ateş-Genceli E., V.V. Tarabara, Koyuncu, I. Aquaporin Proteini ine Nanofiltrasyon Membran Üretimi ve Karakterizasyonu, İçme ve Kullanma Suyu Arıtımında Membran Teknolojileri Çalıştayı, İstanbul Teknik Üniversitesi Deprem Mühendisliği ve Afet Yönetimi Enstitüsü Konferans Salonu, İstanbul, Türkiye, 18 April 2017.
- 68. Genceli-Ateş, E., Sengur-Tasdemir, R., Turken, T., Urper, G.M., Sayinli, B., Pekgenc, E., V.V. Tarabara, Koyuncu, I. Nanokompozit İnce Boşluklu (Hollow) fiber (HF) Nanofiltrasyon Membranlarının Üretimi ve İçme Suyu Arıtımı için Uygulanması, İçme ve Kullanma Suyu Arıtımında Membran Teknolojileri Çalıştayı, İstanbul Teknik Üniversitesi Deprem Mühendisliği ve Afet Yönetimi Enstitüsü Konferans Salonu, İstanbul, Türkiye, 18 April 2017.
- 67. <u>Wrobel*, B.</u>; Burns*, N.; Tarabara, V. V. Evaluation of seeds of Moringa oleifera (drumstick tree) as a natural coagulant for water treatment. Poster presented at 2017 University Undergraduate Research and Arts Forum, East Lansing, MI, April 7, 2017.
- 66. <u>Dang*, H. T. T.</u>; Tarabara, V. V. Kinetics of bacteriophage MS2 deposition onto polyelectrolytecoated surfaces. Poster presented at 2017 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 30, 2017.
- 65. <u>Hejase*, C.</u>; Chew, J. W.; Fane, A. G.; Tarabara, V. V. Deoiling saline emulsions by porous membranes: A direct visualization study. Poster presented at 2017 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 30, 2017.
- 64. <u>Shi*, H.;</u> Xagoraraki, I.; Parent, K. N.; Bruening, M. L.; Tarabara, V. V. Recovery of human adenovirus 40 from tap and surface water by crossflow ultrafiltration: Experimental determination and XDLVO predictions based on virion characterization. Poster presented at 2017 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 30, 2017.
- 63. <u>Hejase*, C.</u>; Chew, J. W.; Fane, A. G.; Tarabara, V. V. Deoiling saline emulsions by porous membranes: A direct visualization study. Poster presented at 2017 Borchardt Conference, Ann Arbor, MI, February 22, 2017.

- 62. <u>Dang*, H. T. T.;</u> Tarabara, V. V. Deposition kinetics of bacteriophage MS2 onto polyelectrolytecoated surfaces. Poster presented at 2017 Borchardt Conference, Ann Arbor, MI, February 21, 2017.
- 61. <u>Dang*, H. T. T.</u>; Tarabara, V. V. Deposition kinetics of bacteriophage MS2 onto polyelectrolytecoated surfaces. Poster presented at 2016 ESPP research symposium "Environmental Health", East Lansing, MI, November 11, 2016.
- 60. <u>LaRoy, C.</u>; Snow, S.; Roualdes, S. Tarabara, V. TiO2-mediated photocatalysis for wastewater disinfection: Effect of dissolved organics. Poster presented at 2016 Mid-Michigan Symposium for Undergraduate Research Experiences, East Lansing, MI, July 22, 2016.
- 59. Tarabara, V. V. Membrane technology and water quality. Seminar given to student participants of the NSF Research Experience for Undergraduates (REU) program "Cross-disciplinary research in sustainable chemistry and chemical processes", Department of Chemistry, Michigan State University, East Lansing, MI, June 1, 2016.
- 58. Tarabara, V. V. Membrane technology and water quality. Seminar given to student participants of the NSF Research Experience for Undergraduates (REU) program "Cross-disciplinary research in sustainable chemistry and chemical processes", Department of Chemistry, Michigan State University, East Lansing, MI, June 24, 2015.
- 57. <u>Dang*, H. T. T.</u>; Tarabara, V. V. Deposition kinetics of bacteriophage MS2 onto charged surfaces. Poster presented at 2016 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 31, 2016.
- 56. <u>O'Brien[¶], E.;</u> Munir, M.; Marsh, T.; Tarabara, V.; Lesage, G.; Heran, M.; Xagoraraki, I. Diversity of DNA viruses in membrane bioreactor effluents in France and the United States: Comparisons with the effluent of a conventional utility and natural waters. Poster presented at 2016 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 31, 2016.
- 55. <u>Tummons*, E. N.</u>; Tarabara, V. V.; Chew, J. W.; Fane, A. G. Behavior of oil droplets at the membrane surface during microfiltration. Poster presented at 2016 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 31, 2016.
- 54. <u>Jahangiri Mamouri[¶], S.</u>; Bénard, A.; Tarabara, V. V. Numerical simulation of a charged particle in a charged rotating tubular membrane. Poster presented at 2015 MSU Engineering Graduate Research Symposium, East Lansing, MI, April 9, 2015.
- 53. Tarabara, V. V. NSF PIRE and Fulbright programs: Participant's and reviewer's perspectives. Talk given at the ESPP workshop "International Environmental Research: Funding Opportunities", East Lansing, MI, February 19, 2015.
- 52. <u>Yin[¶], Z.</u>; Tarabara, V. V.; Xagoraraki, I. Human adenovirus removal by hollow fiber membranes in a bench-scale MBR: The effect of silica particles and humic acid as model foulants. Poster presented at 2014 MSU Engineering Graduate Symposium, East Lansing, MI, March 27, 2014.
- 51. <u>Starr*, B.;</u> Gorobets[§], A. V.; Tarabara, V. V.; Bruening, M. L.; Bénard, A. Produced water treatment using hybrid hydrocyclone-membrane technology. Poster presented at 2014 MSU Engineering Graduate Symposium, East Lansing, MI, March 27, 2014.
- 50. <u>Motin[¶], A.</u>; Tarabara, V. V.; Petty, C. A.; Bénard, A. Analyses of hydrodynamic features and separation performance of a hydrocyclone used for oil-water separation. Poster presented at 2014 MSU Engineering Graduate Research Symposium, East Lansing, MI, March 27, 2014.
- 49. <u>Motin[¶], A.</u>; Tarabara, V. V.; Petty, C. A.; Bénard, A. Analyses of hydrodynamic features and separation performance of a hydrocyclone used for oil-water separation. Poster presented at Oil & Gas and Chemical Processing Filtration and Separation Conference, Houston, TX, March 24-26, 2014.
- 48. <u>Yin[¶], Z</u>.; Tarabara, V. V.; Xagoraraki, I. Human adenovirus removal by hollow fiber membranes in a bench-scale MBR - The effect of silica particles and humic acid as model foulants. Poster presented at 23rd Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 25-26, 2014.
- 47. <u>Calderon*, C. M.</u>; Tarabara, V. V. Fractal nature of viscous fingers formed during oil-water separation. Poster presented at 2013 Mid-Michigan Symposium for Undergraduate Research Experiences (Mid-SURE), Michigan State University, East Lansing, MI, July 24, 2013.
- 46. Dulebohn, J.; <u>Ahmadiannamini[§], P.</u>; Wang[§], T.; Kim, S.-S.; Pinnavaia, T. J.; Tarabara, V. V. Polymer mesocomposite membranes for water purification. Poster presented at MSU Innovation Celebration, East Lansing, MI, June 6, 2013.

- 45. <u>Motin[¶], A.</u>; Bénard, A. Tarabara, V. V. Cross flow filtration hydrocyclone (CFFH) for oil-water separation. Poster presented at 2012 MSU Engineering Graduate Research Symposium, East Lansing, MI, November 9, 2012.
- 44. Wang^{*}, F.; <u>Shi^{*}, H.</u>; Tarabara, V. V. Combined effect of sparingly soluble salts and colloids on the desalination performance of reverse osmosis membranes. Poster presented at 2012 MSU Engineering Graduate Research Symposium, East Lansing, MI, November 9, 2012.
- 43. Tarabara, V. V.; Guo*, B.; Pasco*, E. V.; <u>Wingate*, A. J.</u> Hybrid microfiltration-UV process for high efficiency disinfection. Poster presented at MSU Summer Undergraduate Research Forum, East Lansing, MI, July 23, 2012.
- 42. <u>Guo*, B.</u>; Pasco*, E. V.; DiFranco*, N.; Tarabara, V. V. Hybrid microfiltration-UV process for high efficiency disinfection. Poster presented at 2011 MSU Engineering Graduate Research Symposium, East Lansing, MI, November 4, 2011.
- 41. Rogensues*, A. R.; <u>Crock*, C. A</u>.; Shan, W.; Tarabara, V. V. Mixed matrix materials with hierarchical fillers as a conceptual framework for the design of multifunctional nanocomposite membranes. Poster presented at 2011 MSU Engineering Graduate Research Symposium, East Lansing, MI, November 4, 2011.
- 40. <u>Pasco*, E. V.</u>; Xagoraraki, I.; Hashsham, S. A.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as sacrificial anti-adhesive membrane coatings: A "snake-skin" approach to virus recovery for detection. Poster presented at 2011 MSU Engineering Graduate Research Symposium, East Lansing, MI, November 4, 2011.
- Tarabara, V. V. Leveraging international research to enhance Engineering curriculum: Educating globally competent scientists and engineers. Talk given at the Center for Engineering Education Research brown bag seminar, East Lansing, MI, March 22, 2011.
- 38. Tarabara, V. V. Global water challenges for industrial and domestic uses. Presentation to MSU Center for Latin American and Caribbean Studies, East Lansing, MI, March 16, 2011.
- 37. Rogensues*, A. R.; <u>Crock*, C. A.</u>; Shan*, W.; Tarabara, V. V. Polymer nanocomposite materials with hierarchical fillers as a conceptual framework for the design of multifunctional membranes. Poster presented at 22st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 23, 2011.
- 36. <u>Pasco*, E. V.</u>; Xagoraraki, I.; Hashsham, S. A.; Bruening, M. L.; Tarabara, V. V. Pathogen concentration by ultrafiltration: Effects of hydraulic conditions on virus rejection and recovery. Poster presented at 22st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 23, 2011.
- 35. <u>Pasco*, E. V.</u>; Xagoraraki, I.; Hashsham, S. A.; Bruening, M. L.; Tarabara, V. V. Pathogen concentration by ultrafiltration: Effects of hydraulic conditions on virus rejection and recovery. Poster presented at 2011 AWWA/MWEA Joint Expo, Lansing, MI, February 8, 2011.
- 34. Tarabara, V. V. From international research to curricular innovation: Educating globally competent scientists and engineers. Talk given at the National University of Singapore, Singapore, June 28, 2010.
- 33. Tarabara, V. V._From international research to curricular innovation: Educating globally competent scientists and engineers. Talk given at the Project Directors Meeting of the United States-Russia Program: Improving Research and Educational Activities in Higher Education, June 9, 2010.
- 32. <u>Tarabara, V. V.</u> From international research to curricular innovation: Educating globally competent scientists and engineers. 2010 Lilly poster session, East Lansing, MI, April 29, 2010.
- 31. <u>Byun[§], S.</u>; Davies, S. H. R.; Baumann, M. J.; Masten, S. J.; Tarabara, V. V.; Alpatova^{*}, A. L. Effect of ozonation on the performance of catalytic membranes for hybrid ozonation-filtration. Poster presented at 2010 Joint Expo MI AWWA, Lansing, MI, February 2-3, 2010.
- 30. <u>Shan*, W.</u>; Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as backflushable nanofiltration membranes with tunable hydrophilicity and surface charge. Poster presented at Association of Environmental Engineering and Science Professors (AEESP) meeting, Iowa City, IA, July 28, 2009.
- 29. <u>Shan*, W.</u>; Adusumilli, M.; Pasco*, É. V.; Hashsham, S. A.; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer films as antiadhesive coatings with tunable hydrophilicity and surface charge. Poster presented at 2009 IWA Particle and Nanoparticle Separation conference, Duke, NC, June 3-5, 2009.

- 28. <u>Taurozzi*, J. S.</u>; Rogensues*, A. R.; Tarabara, V. V. Effect of filler aspect ratio and loading on the properties of porous nanocomposite membranes. Poster presented at 2009 IWA Particle and Nanoparticle Separation conference, Duke, NC, June 3-5, 2009.
- 27 Koyuncu, İ.; Keskinler, B.; Kınacı, C.; Soyer, E.; Erdim, E.; Özgün, H.; Kayaalp, N.; Erşahin, E.; Wiesner, M.; Tarabara, V.; Steinmetz, H. (2009). Su ve Atıksu Arıtımında Membran Teknolojisi Uygulamaları, İTÜ Nano-Bilim and Nano-Teknoloji Çalıştayı, Süleyman Demirel Kültür Merkezi, İstanbul,12-13 February 2009.
- 26. <u>Alpatova*, A. L.</u>; Babica, P.; Hashsham, S. A.; Upham, B. L.; Masten, S. J.; Tarabara, V. V. Removal of emerging contaminants from waters by ozonation and hybrid ozonationnanofiltration processes. Poster presented at 2009 AWWA/MWEA Joint Expo, Lansing, MI, February 5, 2009.
- 25. <u>Gorobets*, A. V.;</u> Taurozzi*, J. S.; Tarabara, V.; Vakuliuk, P.; Burban, A. Influence of silica fillers on the structure and hydraulic properties of polymeric ultrafiltration membranes. Poster presented at 5th Polish-Ukrainian Conference "Polymers of Special Applications", Radom, Poland, June 17, 2008.
- 24. <u>Taurozzi*, J. S.</u>; Arul*, H.; Bosak, V. Z.; Burban, A. F.; Voice, T. C.; Bruening, M. L.; Tarabara, V. V. Polysulfone-silver nanocomposites for membrane biofouling mitigation: formationstructure-function relationships. Poster presented at 2008 National AWWA Annual Conference and Exposition, Atlanta, GA, June 8, 2008.
- 23. <u>Rogensues*, A.</u>; Benedict, R.; Bruening, M. L.; Tarabara, V. V. Performance of polyelectrolyte multilayer –based membranes challenged by high gypsum content feeds. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- 22. <u>Alpatova*, A. L.</u>; Hashsham, S. A.; Davies, S. H. R.; Masten, S. J.; Tarabara, V. V. Cytotoxicity of nC60 fullerene suspensions subjected to ozonation and chlorination: E. coli viability tests. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- 21. <u>Wang*, F.;</u> Tarabara, V. V. Permeability of fiber-filled porous media. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- <u>Kim[§], J.</u>; Tarabara, V. V.; Davies, S. H. R.; Baumann, M. J.; Masten, S. J.. Physicochemical basis of NOM fouling in a hybrid ozonation-ultrafiltration system. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- <u>Taurozzi*, J. S.</u>; Arul*, H.; Bosak, V. Z.; Burban, A. F.; Voice, T. C.; Bruening, M. L.; Tarabara, V. V. Polysulfone-silver nanocomposites for membrane biofouling mitigation: formation-structure-function relationships. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- <u>Byun[§], S.</u>; Tarabara, V. V. Effect of preozonated NOM on the performance of polymeric nanofiltration membranes. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- 17. <u>Shan*, W.;</u> Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Facile control of colloidal fouling in polyelectrolyte multilayer based nanofiltration systems. Poster presented at 21st Triennial Borchardt Conference Symposium on Advancements in Water and Wastewater, Ann Arbor, MI, February 28, 2008.
- 16. Tarabara, V. V. New generation synthetic membranes: To safer drinking water through international research. Presentation given to East Lansing Rotary Club, East Lansing, MI, February 11, 2008.
- 15. <u>Rogensues*, A.</u>; Bruening, M. L.; Tarabara, V. V. Polyelectrolyte multilayer-based membranes for scaling mitigation in softening and desalination processes. Poster presented at 2008 AWWA/MWEA Joint Expo, Lansing, MI, February 5, 2008.
- <u>Taurozzi*, J. S.</u>; Arul*, H.; Bosak, V. Z.; Burban, A. F.; Voice, T. C.; Bruening, M. L.; Tarabara, V. V. Polysulfone-silver nanocomposites for membrane biofouling mitigation: formation-structure-function relationships. Poster presented at 2008 AWWA/MWEA Joint Expo, Lansing, MI, February 5, 2008.

- 13. <u>Shan*, W.;</u> Bacchin, P.; Aimar, P.; Bruening, M. L.; Tarabara, V. V. Facile control of colloidal fouling in polyelectrolyte multilayer based nanofiltration systems. Poster presented at Marie Curie Conference and Training Courses Action: Nanostructured material and membrane synthesis and characterization, Zaragoza, Spain, November 2007.
- <u>Taurozzi*, J. S.</u>; Arul*, H.; Bosak, V. Z.; Burban, A. F.; Voice, T. C.; Bruening, M. L.; Tarabara, V. V. Polysulfone-silver nanocomposites for membrane biofouling mitigation: formation-structure-function relationships. Poster presented at Marie Curie Conference and Training Courses Action: Nanostructured material and membrane synthesis and characterization, November 2007, Zaragoza, Spain.
- 11. Kim, J., Davies, S. H. R., Baumann, M. J. Masten, S. J., <u>V. V. Tarabara.</u> Hybrid ozonationultrafiltration for water purification: Combined effect of ozonation and hydrodynamics on flux and water quality, Poster presented at the NSF I/UCRC-MTP, 8th Industrial Advisory Board Meeting, Michigan State University, East Lansing, MI, November 2007.
- 10. <u>Wang*, F</u>., V.V. Tarabara. Coupled effects of scaling and colloidal deposition on the performance of reverse osmosis membranes, Poster presented at the NSF I/UCRC-MTP, 8th Industrial Advisory Board Meeting, Michigan State University, East Lansing, MI, November 2007.
- 9. <u>Rogensues*, A.;</u> Benedict, R.; Bruening, M.; Tarabara, V. Evaluation of polyelectrolyte multilayer films on ultrafiltration supports as salt rejection membranes. Poster presented at the National Science Foundation PIRE Grantees Conference, Washington, DC, October 15, 2007.
- 8. Tarabara, V. V. New generation synthetic membranes: Nanotechnology for drinking water safety Presented at CEE Professional Advisory Board Meeting, East Lansing, MI, April 26, 2007.
- 7. Tarabara, V. V. Nanotechnology-enabled water treatment. Presentation given in the "Introduction to Nanotechnology" class at Lansing Community College, Lansing, MI, May 2007.
- <u>Kim[§], J.</u>; Alpatova^{*}, A. L.; Wright[¶], L. M.; Baumann, M. J.; Davies, S. H. R.; Tarabara, V. V.; Masten, S. J. The effect of ozone dosage and hydrodynamic conditions on permeate flux in hybrid ozonation-ultrafiltration. Poster presented at 233rd American Chemical Society national meeting, Chicago, IL, March 25-29, 2007.
- 5. Tarabara, V. V. Membrane processes for water treatment: Desalination example. Talk given at a meeting of the MSU Environmental Engineering Student Society, East Lansing, MI, January 22, 2007.
- 4. <u>Rogensues*, A.</u>; Benedict, R.; Bruening, M.; Tarabara, V. Experimental evaluation of polyelectrolyte multilayer films (PMF) on ultrafiltration supports as salt rejecting membranes. Poster presented at Michigan AWWA Conference, Sault Ste Marie, MI, September 12, 2006.
- <u>Kim[§], J.</u>; Alpatova^{*}, A. L.; Wright[¶], L. M.; Baumann, M. J.; Davies, S. H. R.; Tarabara, V. V.; Masten, S. J. Nanomaterials separation by hybrid ozonation-membrane process for drinking water safety. Poster presented at NSF Nanoscale Science and Engineering Grantees Conference, Arlington, VA, December 4-6, 2006.
- 2. Tarabara, V. V. Environmental Separations and Sensors Laboratory: membrane-based separation and colloid characterization facilities. Talk given as a part of the brown bag seminar series, College of Engineering, Michigan State University, East Lansing, MI, November 2, 2004.
- 1. <u>Tarabara, V. V.</u>; Wiesner, M. R. Coupled effects of chemistry and hydrodynamics on permeate flux in cross flow ultrafiltration. Poster presented at 2003 AIChE Annual Conference, San Francisco, CA, 2003.

Patents

- Composite polymer membranes containing mesoporous metal oxide additives. Tarabara, V. V.; Pinnavaia T. Patent application no. PCT/US2013/020807. Publication date: July 18, 2013; Priority date: January 9, 2013.
- 2. Water and oil separation system. Tarabara, V. V.; Shan*, W. U.S. Patent No. 9,309,132B2; Filing date: August 8, 2011; Issue date: April 12, 2016.
- 3. Polyazacrown-based materials for mercury capture and synthesis of those materials. Redko, M. Y.; Jackson, J. E.; Tarabara, V.; Taurozzi*, J. U.S. Patent No. 7,968,673; Filing date: February 19, 2008; Issue date: June 28, 2011.

Technical reports

Tarabara, V. V. Coupled effects of scaling and colloid deposition on the performance of reverse osmosis membrane filters. Technical report for the National Water Research Institute, 2007. Note: Periodic progress reports were presented at Research Advisory Board Meetings of the National Water Research Institute: April 30, 2005 (Santa Ana, CA); April 28, 2006 (Reno, NV); October 28, 2006 (Santa Ana, CA); April 14, 2007 (Santa Ana, CA).

Theses

Morphology of particle deposits. Ph.D. thesis, Department of Civil and Environmental Engineering, Rice University, Houston, TX, 2004. Adviser: Dr. Mark R. Wiesner

Collision efficiency of colloidal particles and morphology of deposits: Implications for membrane filtration. MS thesis, Department of Environmental Science and Engineering, Rice University, Houston, TX, 2001. Adviser: Dr. Mark R. Wiesner

Modification of SERS-active surface of colloidal silver with n-alkanethiols. Diploma, Special Faculty of Physics, Moscow Engineering Physics Institute, Moscow, Russia, 1997. Adviser: Dr. Alexey V. Feofanov

Editorial work

Edited books

Encyclopedia of Membrane Science and Technology, Wiley, 2013. ISBN: 9780470919675 Co-Editor-in-Chief with E. M.V. Hoek and Associate Editors J. Dong and C.-C. Ho.

Editorials

Deng, Y.; Li, B; Nadagouda, M. N.; Tarabara, V. V. Editorial for the Special Collection "Virus monitoring and removal in natural and built systems". J. Environ. Eng. 146 (2020) 01820001.

Edited special issues and collections

- "Emerging membrane technologies for sustainable water and wastewater treatment". Special Issue of the Chem. Eng. J. Co-editor with T. M. Aminabhavi; S. R. Chae; W.-W. Li; M. Badawi; J. Kim. 2021 – present.
- "Emerging and Innovative Technologies in Environmental Engineering". Special Collection of ASCE J. Environ. Eng. Co-editor with H. Choi; Y. Deng; D. Dionysiou; G. Huang; D. Reible; R. Surampalli; H. Walker. 2020 – present.
- 3. "Virus monitoring and removal in natural and built systems". Special Collection of ASCE J. Environ. Eng. Co-editor with Y. Deng; B. Li; M. N. Nadagouda. 2020 – present.
- 4. "Views from Legends and Pioneers in Environmental Engineering". Special Collection of ASCE J. Environ. Eng. Co-editor with D. Dionysiou, 2018 present.
- 5. "Physical and cyber safety in critical water infrastructure". Special Collection of ASCE J. Environ. Eng. With guest co-editors H. Ratnaweera, R. Ugarelli, C. Makropoulos. 2020.
- 6. "Membrane bioreactor technology: Wastewater treatment, water reuse and nutrient recovery". Special Collection of ASCE J. Environ. Eng. With guest co-editors K.-H. Choo, A. Drews, M. Heran, 2020.
- 7. "Point-of-use membrane technologies: Challenges and opportunities". Special Issue of Membranes (MDPI). With guest co-editors K. Kimura, H. Ratnaweera, M. Daramola, M. Herrera-Robledo, 2019.

Editorial positions (past)

Editorial Board member, Membranes, MDPI, open access (2018 – 2021)

Completed projects

05/23/22- 04/30/23	 Protecting essential workers: Environmental forensics for ensuring microbial safety of the workplace Role: PI Grant type: Fulbright Global Scholar Host Institutions: University of Montpellier, France Eliava Institute of Bacteriophages, Microbiology and Virology, Tbilisi Nanyang Technological University, Singapore 	Fulbright Scholar program
2019-2022	Closing the Water Cycle Gap with Harmonised Actions for Sustainable Management of Water Resources Role: International collaborator PI: H. Ratnaweera (Norwegian University of Life Sciences)	H2020 ERA-NET Cofund Action WaterWorks2017
09/21/21- 10/16/21	 Environmental Science and Engineering curricula for the 21st century: Developing professional and global competencies. Host Institutions: NGO WaterNet (lead) National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Kyiv Lviv Polytechnic National University, Lviv National University of Water and Environmental Engineering, Rivne Odesa National Polytechnic University, Odesa Odesa National Academy of Food Technologies, Odesa Ukrainian State University of Chemical Technology, Dnipro 	Fulbright Specialist program
2020	Oil spills under ice: Challenges and solutions (working group) Role: Member of the steering committee	Cooperative Institute for Great Lakes Research
07/01/18- 10/31/20	Oil spill detection, remediation, and risk perceptions in winter conditions Role: Co-PI PI: G. Gunn (Geography, MSU); Co-PIs: D. Bessette, R. Richardson, M. Rutty	Institute for Public Policy and Social Research, MSU
01/01/17- 01/31/20	International partnership on membrane processes for research and educational excellence (MEMPREX) Role: International collaborator PI: H. Ratnaweera (Norwegian University of Life Sciences)	The Research Council of Norway
01/01/13- 12/31/19	PIRE: Water and Commerce: Technologies to enable environmental sustainability in global markets Co-PI and MSU Director with J. J. Bang (co-PI), P. L. Ferguson (PI), J. B. Rose (co-PI), M. R. Wiesner (co-PI)	National Science Foundation OISE-1243433
07/01/15- 12/31/18	Assessing and mitigating membrane fouling in membrane- based oil-water separation Role: International collaborator PI: J. W. Chew (Nanyang Technological University, SMTC)	Ministry of Education, Singapore

08/26/14- 08/31/17	REU: Cross-disciplinary research in sustainable chemistry and chemical processes Funding: NSF Research Experience for Undergraduates (REU) program	National Science Foundation CHE-1358842
06/01/14- 05/31/17	Faculty participant. PI: G. Swain Fabrication of nanocomposite hollow fiber nanofiltration membranes and their applications in drinking water treatment Role: Consultant PI: Dr. Ismail Koyuncu (Istanbul Technical University,	The Scientific and Technological Research Council of Türkiye (TÜBITAK), Türkiye
11/03/14- 07/01/17	Ensuring microbiological safety of water: Bacteriophages as human virus surrogates Grant type: Research, FLEX	Fulbright Scholar program
04/01/12- 03/31/17	Host Institution: Agricultural University of Georgia, Tbilisi STAR: Affinity-based hydrocyclone for oil spill cleanup and produced water treatment PI with co-PIs A. Bénard and M. Bruening * includes two years of no cost extension (03/15–03/17)	Environmental Protection Agency EPA Grant # R835183
12/01/14- 02/28/16	Integrating bacteriophage and membrane separation knowledge bases to ensure microbiological safety of water supply	CRDF Global SRNSF (Georgia) GRDF (Georgia)
01/01/13- 12/31/15	Co-PI. PI: E. Jaiani (Eliava Institute, Georgia) Collaborative Research: Virus removal in membrane bioreactors: Role of virus aggregation and adhesion PI with co-PI I. Xagoraraki and PI collaborator H. Nguyen (UIUC)	National Science Foundation CBET-1236393
01/26/14- 06/30/14	+ international supplement to CBET-1236393 MSU Strategic Partnership with Université Montpellier 2, France	Center for European, Russian and Eurasian
01/26/14- 06/30/14	MSU Strategic Partnership with the Eliava Institute of Bacteriophages, Microbiology and Virology, Republic of Georgia Single PI with international collaborator M. Tediashvili	Center for European, Russian and Eurasian Studies, MSU
01/01/14- 12/31/14	VISTAS: Bacteriophages as surrogate microorganisms for understanding virus removal by membrane filters Single PI with international collaborator E. Jaiani	Environmental Science and Policy Program, MSU
12/01/11- 03/31/14	(Agricultural University of Georgia) Multifunctional nanomaterial-enabled membranes for water treatment and reuse Single PI	Water Environment Research Foundation
08/16/10- 08/15/13	Advanced membrane technologies for a sustainable future PI with co-PIs A. Bénard, M. Bruening, S. Hashsham, S. Masten, T. Pinnavaia, N. Prieziev, I. Xagoraraki	MSU Strategic Partnership Grants program
07/01/12- 12/31/12	SBIR Phase I: Polymer mesocomposites: Novel materials for compaction-resistant, high-flux water treatment membranes Single PL (subcontract with In Pore, Inc.)	National Science Foundation IIP-1214993
10/01/05- 03/31/13	PIRE: USA-Ukraine-France-Russia partnership: New Generation Synthetic Membranes - Nanotechnology for Drinking Water Safety. PI, Project co-Director with T. Voice (PI), M. Bruening, and M. Wiesner * includes 2 years of no cost extension (03/11–03/13)	National Science Foundation OISE-0530174

09/01/06- 08/31/11	STAR: On-chip PCR, nanoparticles, and virulence/marker genes for simultaneous detection of 20 waterborne pathogens. Co-PI with S. Hashsham (PI) and J. Tiedje * includes 2 years of no cost extension (08/09–08/11)	Environmental Protection Agency EPA grant # R833010
09/01/05- 08/31/11	NIRT: Self-cleaning ceramic membranes for the removal of natural and synthetic nanomaterials from drinking water using hybrid ozonation-nanofiltration. Co-PL with S. Masten (PI), M. Baumann, S. Davies	National Science Foundation BES-0506828
01/01/09- 07/31/10	Crossflow filtration hydrocyclone (CFFH) separators for the treatment of produced water. NSF Industry/University Cooperative Research Center for Multiphase Transport Phenomena NSF research sites: MSU, University of Tulsa. Member of the center. PI: C. Petty	NSF and industry: Ansys, Bechtel, BP, CD-adapco, Chevron, ConocoPhillips, MI-Swaco, Petrobras, Pfizer;
09/01/09 08/31/10	From international research to curricula innovation: Educating globally competent scientists and engineers.	MSU Faculty and Organizational Development
07/01/05- 06/30/07	NER: Nanoscale design of aqueous carbon nanotube- reinforced molecular transducers for biosensors. Co-PI with E. Allocia (PI) and A. Mohanty	National Science Foundation BES-0508320
01/01/07- 12/31/07	Tumor promotional and immunological mechanisms of cyanobacterial metabolites and interactions with pharmaceutical wastes that contaminate water resources. Collaborator. PI: B. Upham	MSU Center for Water Sciences venture grant
07/01/06- 06/30/07	International research internships: Membrane separations for water quality control. Faculty lead (in collaboration with M. Bruening)	North American Membrane Society
07/15/06- 07/14/07	SGER: Regenerable polymer-supported sorbent for aqueous mercury removal.	National Science Foundation BES-604368
01/01/06- 09/31/07	Coupled effects of scaling and colloid deposition on the performance of reverse osmosis membrane filters. PI	National Water Research Institute NWRI project # 05-TM-007

Research group members (current)

-	Atef Choudhury	2022 - present	Undergraduate research assistant, MSU Honors College Research Scholars Program
_	Dr. Recep Kaya	2024 - present	Postdoctoral researcher
-	Dr. Peng Wang	2024 - present	Visiting Scholar

Research group members (former)

Postdoctoral research associates

-	Dr. Hang Shi	2018	
-	Dr. Bihter Zeytuncu	2015–2016	TÜBITAK postdoctoral fellow
-	Dr. Samuel D. Snow	2015–2016	
-	Dr. Andrii V. Gorobets	2012–2015	
-	Dr. Miguel Herrera-Robledo	2012–2014	CONACyT postdoctoral fellow
-	Dr. Pejman Ahmadiannamini	2012–2014	
-	Dr. Tao Wang	2011	(two-month appointment)
-	Dr. Seokjong Byun	2007–2008	
		2008–2010	(co-advised with 3 other PIs)

- Dr. JeongHwan Kim 2006–2008 (co-advised with 3 other PIs)

Ph.D. graduates

- Xunhao Wang 2019-2022 Ph.D., 2022
 Thesis: Understanding adhesion to monitor and control environmental processes: From virus detection to membrane fouling mitigation
- Charifa Hejase 2016-2020 Ph.D., 2020
- Thesis: Membrane-based separation of oil-water emulsions: Effects of stability and salinity-Hien Dang2012-2018Ph.D., 2018
- Thesis: Virus attachment to surfaces: Assessing relative contributions of electrostatic, van der Waals, and acid-base interactions
- Hang Shi 2011–2016 Ph.D., 2017
- Thesis: Membrane-based concentration and recovery of viruses from complex water matrices - Emily Tummons 2011–2016 Ph.D., 2016
- Thesis: Oil droplet behavior at the membrane surface during filtration of oil-water emulsions
 Bin Guo 2012–2016 Ph.D., 2016
- Thesis: Virus removal and inactivation in a photocatalytic membrane reactor: Disinfection mechanisms and effect of water quality
- Christopher A. Crock 2012–2016 Ph.D., 2016 Thesis: Polymer nanocomposite membranes with hierarchically structured catalysts for high throughput dehalogenation
- Elodie V. Pasco 2008–2012 Ph.D., 2012 Thesis: Virus concentration by crossflow membrane filtration: Effect of hydrodynamic conditions and membrane properties
- Wenqian Shan 2005–2010 Ph.D., 2010 Thesis: Environmental applications and implications of nanotechnology in membrane based separations for water treatment
- Julian S. Taurozzi 2005–2009 Ph.D., 2009 Thesis: Nanoparticle-polymer composite membranes: Synthesis, characterization, and environmental applications
- Fulin (Alex) Wang 2004–2008 Ph.D., 2008
 Thesis: Combined fouling of pressure-driven membranes treating feed waters of complex composition

Co-advised Ph.D. graduates

- Türker Türken Ph.D. 2019 (main adviser: İ. Koyuncu, Istanbul Technical University) Thesis: Reinforced hollow fiber nanofiltration membrane production and natural organic matter removal from surface water
- Reyhan Şengür-Taşdemir Ph.D. 2018 (main adviser: İ. Koyuncu, Istanbul Technical University) Thesis: Biomimetic approaches for the fabrication of hollow fiber nanofiltration membranes
 Ziqiang Yin Ph.D. 2015 (main adviser: I. Xagoraraki, MSU)
- Thesis: Human adenovirus removal in wastewater treatment and membrane process

MS graduates

- Andrea Vera 2022-2023 MS, 2023
- Thesis: feasibility of *M. oleifera* as a coagulant and its effects on downstream ultrafiltration - Kyle D. Hillstead 2018-2020 MS, 2020
- Project: Removal of viruses by coagulation and ultrafiltration: role of virus adhesion
 Akshay Murali 2017-2020 MS, 2020
- Project: Coagulants derived from the seeds of *Moringa oleifera*: Flocculation performance and floc characteristics
- Xunhao Wang 2017–2019 MS, 2019

Project: Human adenovirus adhesion to dry and hydrated lipbalm.

-	Şeyma Küçük	2016–2018	MS, 2018
	Thesis: Membrane filtration of	f Corexit 9500-s	tabilized crude oil emulsions
-	Alex Casabuena	2015–2016	MS, 2016
	Project: Virus removal in a me	embrane biorea	ctor: Submerged versus sidestream configuration
-	Charifa Ale Hejase	2014–2016	MS, 2016
	Project: Membrane filtration of	of high salinity oi	I-in-water dispersions
-	Claudio M. Calderon	2014 - 2015	MS, 2015
	Project: Salt rejection by nand	ofiltration memb	ranes treating saline oil-water emulsions
-	Brian J. Starr	2013–2015	MS, 2015
	Thesis: Photocatalytic membr	ranes for virus ir	nactivation
-	Emily Tummons	2011–2013	MS, 2013 (coursework option)
-	Hao Xu	2012–2013	MS, 2013
	Project: Polyelectrolyte-nanop	particle composi	ite nanofiltration membranes
-	Christopher A. Crock	2010–2012	MS, 2012
	Thesis: Polymer nanocomposite materials with hierarchical fillers as a conceptual framework for		
	the design of multifunctional r	membranes	
-	Adam R. Rogensues	2008–2012	MS, 2012
	Thesis: Nanomaterial-enable	d membranes fo	or water treatment
-	Bin Guo	2011–2012	MS, 2012
	Project: Hybrid UV-microfiltra	tion process for	virus removal and inactivation
-	Gautam Chalasani	2005–2007	MS, 2007 (coursework option)

Graduate research interns

-	Manon Cayuela	2023	Big Ten Academic Alliance International Research
			Experience (BTAA IREP) program
-	Madeline Robison	2022	NSF IRES project

Undergraduate research assistants

-	Julie Hostier	2023	International student exchange program with IUT Montpellier-Sète. France
-	Athénaïs Duffros	2023	International student exchange program with IUT Montpellier-Sète, France
-	Antoine Sapena	2023	International student exchange program with IUT Montpellier-Sète, France
_	Paola Urbina-Ramos	2022	REU program
_	Vincent T. Marinelli	2018 - 2022	
_	Steve Beuther	2021	REU program
_	Keaton Connelly	2020	REU program
_	Daniel Hong	2020	
_	Remi Gonety	2018-2019	MSU Honors College Research Scholars program
_	Daniel Thomas	2018-2019	
_	Brendan Wrobel	2017-2018	
_	Caroline LaRoy	2016	REU program
_	Aaron M. Rosenwinkel	2013–2016	MSU Professorial Assistantship program
_	Charifa Hejase	2013–2014	
_	Samuel Boyea	2013–2014	MSU Professorial Assistantship program
_	Claudio Calderon	2013	
_	Ryan McIntyre	2012–2013	MSU Professorial Assistantship program
_	Adam J. Wingate	2012–2013	
_	Tyler Rafferty	2010–2011	
_	Hugh McDowell	2009–2010	
_	Thomas Davis	2009–2011	
-	Nathan Danforth	2009–2011	
-	Sophie Carrell	2009–2010	

- Michael Hausinger 2009
- Putri JatiAdam R. Rogensues 2007–2008 2006–2007

High school research interns

-	Aodhan Beattie	2019-2020	
-	Noah Burns	2016-2017	Okemos High School research program
	Nina DiFranco	2011	MSU HSHSP
-	Joshua Christy	2009	
-	Twinkle Contractor	2009	MSU HSHSP
-	Saurav (Daniel) Haldar	2008	MSU HSHSP
-	Angel Yang	2008	MSU HSHSP
-	Hari Arul	2007	MSU HSHSP
-	Robin Deits	2007	
-	Michael Hausinger	2007	
-	Aubrey Huynh	2006	MSU HSHSP

Visiting scientists and students

-	Midori Yasui	2022	University of Tokyo, Japan
-	Noor Al-Huda Sabah Shineshil Al-Bedani	2022	Norwegian University of Life Sciences
-	Dr. Artyom Vorobiov	2019	Fulbright Scholar, Institute of General and Inorganic Chemistry, Belarus
-	Dr. Peng Chen	2019	Zhejiang University of Water Resources and Electric Power, China
-	Oleh Dzhodzhyk	2017	Kyiv-Mohyla Academy, Ukraine
-	Dr. Iryna Kolesnyk	2017	Kyiv-Mohyla Academy, Ukraine
-	Besarion Lasareishvili	2015	Agricultural University of Georgia, Georgia
-	Alexandra Siot	2014	University of Montpellier, France
-	Hira Amjad	2012–2013	National University of Science and Technology, Pakistan
-	Kateryna Guzykevych	2012	Kyiv-Mohyla Academy, Ukraine
-	Dr. Dmytro Rudakov	2011	National Mining University, Ukraine
-	Andrii Gorobets	2008	Kyiv-Mohyla Academy, Ukraine
-	Dr. Viktoria Konovalova	2007	Kyiv-Mohyla Academy, Ukraine
-	Volodymyr Bosak	2006	Kyiv-Mohyla Academy, Ukraine

Dissertation/thesis committee service

Graduated (Ph.D.)

2023	Xiaoyan Li	(adviser: R. Lahr)	Environmental Engineering, MSU
2022	Vanessa Maldonado	(adviser: T. Schuelke)	Chemical Engineering, MSU
2021	Lijiang Xu	(adviser: W. Lu)	Civil Engineering, MSU
2021	Dipti Kamath	(adviser: A. Anctil)	Environmental Engineering, MSU
2019	Gülsüm Melike Ürper	(adviser: İ. Koyuncu)	Environmental Engineering, Istanbul
	Bayram		Technical University, Türkiye
2018	Evan O'Brien	(adviser: I. Xagoraraki)	Environmental Engineering, MSU
2018	Eunsang Lee	(adviser: A. Anctil)	Environmental Engineering, MSU
2018	Sina Jahangiri Mamouri	(adviser: A. Bénard)	Mechanical Engineering, MSU
2017	Zhefei Yang	(adviser: M. Bruening)	Chemistry, MSU
2016	Yan Zhu	(adviser: M. Bruening)	Chemistry, MSU
2016	Hira Amjad	(adviser: Z. Khan)	Environmental Engineering, NUST
2015	Nicholas White	(adviser: M. Bruening)	Chemistry, MSU

adviser: I. Le	Sanyal	(adviser: I. Lee)	(Chemical Engineering, MSU
adviser: J. R	ıl Kim	(adviser: J. Rose)	F	Fisheries and Wildlife, MSU
adviser: A. B	l Motin	(adviser: A. Bénard)	1	Mechanical Engineering, MSU
adviser: M. B	n Armstrong	(adviser: M. Bruening)	(Chemistry, MSU
adviser: N. P	l Darvishzadeh	(adviser: N. Priezjev)	ſ	Mechanical Engineering, MSU
adviser: M. B	Cheng	(adviser: M. Bruening)	(Chemistry, MSU
adviser: M. B	juan Sheng	(adviser: M. Bruening)	(Chemistry, MSU
adviser: M. B	Hogg	(adviser: M. Bruening)	(Chemistry, MSU
adviser: M. B	ie Dong	(adviser: M. Bruening)	(Chemistry, MSU
adviser: M. B	stian Grajales	(adviser: M. Bruening)	(Chemistry, MSU
adviser: S. H	r Tourlousse	(adviser: S. Hashsham)	E	Environmental Engineering, MSU
adviser: M. B	ay Corneal	(adviser: M. Baumann)	(Chemical Engineering, MSU
adviser: M. B	uyang	(adviser: M. Bruening)	(Chemistry, MSU
adviser: M. K	anuel Pepprah	(adviser: M. Khire)	E	Environmental Engineering, MSU
adviser: S. N	s Sanlley	(adviser: S. Masten)	E	Environmental Engineering, MSU
adviser: S. N	ana Karnik	(adviser: S. Masten)	E	Environmental Engineering, MSU
adviser: E. A	Nodriguez-Lopez	(adviser: E. Alocilja)	E	Biosystems Engineering, MSU
adviser: M. E adviser: M. E adviser: M. E adviser: M. E adviser: M. E adviser: S. H adviser: M. E adviser: M. E adviser: M. K adviser: S. N adviser: S. N adviser: E. A	iuan Sheng juan Sheng Hogg stian Grajales r Tourlousse ay Corneal uyang anuel Pepprah s Sanlley ana Karnik a Rodriguez-Lopez	(adviser: M. Bruening) (adviser: M. Bruening) (adviser: M. Bruening) (adviser: M. Bruening) (adviser: M. Bruening) (adviser: S. Hashsham) (adviser: M. Baumann) (adviser: M. Bruening) (adviser: M. Bruening) (adviser: S. Masten) (adviser: S. Masten) (adviser: E. Alocilja)	() () () () () () () () () () () () () (Chemistry, MSU Chemistry, MSU Chemistry, MSU Chemistry, MSU Environmental Engineering, MS Chemical Engineering, MSU Chemistry, MSU Environmental Engineering, MS Environmental Engineering, MS Biosystems Engineering, MSU

Graduated (MS)

2022	Noor Al-Huda Sabah Shineshil Al-Bedani	(adviser: Z. Maletskyi)	Norwegian University of Life Sciences
2015	Shawn Muslim	(adviser: J. Bang)	Environmental Engineering, NCCU
2013	Zhassulan Svambayev	(adviser: I. Xagoraraki)	Environmental Engineering, MSU
2013	Pengyu Ji	(adviser: M. Bruening)	Chemistry, MSU
2013	Maggie Kronlein	(adviser: S. Hashsham)	Environmental Engineering, MSU
2007	Vidiya Srinivasan	(adviser: S. Hashsham)	Environmental Engineering, MSU
2007	Gizelle Torrizo	(adviser: M. Khire)	Environmental Engineering, MSU

In progress (Ph.D.)

-	Mohamed Alhaddad	(adviser: A. Bénard)	Mechanical Engineering, MSU
-	Gouree Kumbhar	(adviser: R. Ferrier)	Chemical Engineering, MSU
-	Rochow, Maria Frances	(adviser: Michael Hickner)	Chemical Engineering, MSU

Teaching

Graduate level courses

- ENE801: Dynamics of Environmental Processes (2021S, 2020S, 2019S, 2017S, 2013S, 2011S)
- ENE802: Physicochemical Processes in Environmental Engineering (2021F, 2019F, 2017F, 2015F, 2013F, 2011F, 2010F, 2009F, 2007S, 2006S)
- ENE811 Membrane Processes (2014S, 2012S, 2008S, 2005S)
- ESP801 Physical, Chemical, and Biological Processes of the Environment^E (2020F, 2019F, 2018F, 2017F, 2016F)

Undergraduate level courses

- UGS200H: Honors Research Seminar (2021F/2022S)
- CE272: Civil and Environmental Engineering Analysis; Probability and Statistics module (2014S, 2013S)
- CE372: Risk Analysis in Civil and Environmental Engineering (2020S, 2019S)
- CE/ENE483: Unit Processes in Environmental Engineering (2018F, 2008F, 2007F, 2006F, 2005F, 2004F)

^E Course coordinator

- CE490, Sec. 602: Membrane Processes (independent study) (2011S, 2010S, 2008S)
- CE495: Capstone Design^F (2011S)
- CE496: Review for the CE and ENE Fundamentals of Engineering Exams^G (2021F)

Teaching abroad

- A module on high pressure membranes, Hokkaido Summer Institute "Membrane Technology for Water and Wastewater Treatment: Fundamentals and Applications", Hokkaido University, Sapporo, Japan, July 29 – 31, 2019.
- Two lectures in the frame of the European Master Erasmus Mundus Master in Membrane Engineering for Sustainable Word (EM3E-4SW) program, L'Université de Montpellier, France, September 29, 2018.
- A one-week intensive course in the Master program "Eau et Environnement", International Institute for Water and Environmental Engineering, Ouagadougou, Burkina Faso. Co-taught with Dr. Geoffroy Lesage (University of Montpellier), March 29 – April 2, 2016.
- Seminar series "Membrane science and technology: Fundamentals and applications to water treatment", Agricultural University of Georgia, Tbilisi, Georgia, November 19 – December 12, 2014
- Module "Materials for Chemical Reactions Heterogeneous Catalysis", European Master Erasmus Mundus Master in Membrane Engineering (EM3E), L'Université Montpellier 2 Sciences et Techniques, France, November 27 – December 19, 2013.
- CE280, Sec.750: Principles of Environmental Engineering and Science, MSU Study Abroad Program, Volgograd, Russia, May 2005.

Other teaching

- Guest lecturer in ENE806 (2015), ESP801 (2013, 2014), FW 893 (2013)

Workshops on effective teaching

- Attended ASME Excellence in Engineering Education (ExcEED) teaching workshop for engineering faculty, Boston, MA. September 16-19, 2004
- Attended ASEE National Effective Teaching Institute (NETI), Chicago, IL. May 15-17, 2006

Service (completed assignments)

Reviewing

Funding Agencies (USA)

American Association for the Advancement of Science; American Chemical Society Petroleum Research Fund; Cooperative Institute for Coastal and Estuarine Environmental Technology; National Institute for Water Research; Thiel Foundation; U.S. Department of Energy; U.S. Environmental Protection Agency; U.S.-Israel Binational Science Foundation; U.S. Geological Survey, Water Resources Research Institutes Program; Water Research Foundation

Funding agencies (International)

VEF 2.0 program, Vietnam; Canada Foundation for Innovation; Fonds québécois de la recherche sur la nature et les technologies, Canada ; Innovation and Technology Commission, Government of the Hong Kong; Institute for the Promotion of Innovation by Science and Technology in Flanders, Belgium; Nanyang Technological University Academic Research Fund, Singapore; Natural Sciences and

^F Environmental Engineering faculty consultant

^G Contributor on the following FE topics: Water and wastewater characteristics; Mass balance and loading rates; Physical processes; Chemical processes; Water conservation and reuse

Engineering Research Council, Canada; Ng Teng Fong Charitable Foundation, Singapore; Technology Foundation STW, Netherlands; U.S.-Israel Binational Science Foundation

Journals (last five years)

AIChE Journal; Catalysis Today; Chemical Engineering and Processing - Process Intensification; Environmental Pollution; Environmental Science: Nano; Environmental Science: Water Research and Technology; Environmental Science and Technology; Environmental Science and Technology Letters; Journal of the Royal Society Interface; Journal of Colloid and Interface Science; Journal of Environmental Engineering; Journal of Membrane Science; Membranes; Nature; RCS Advances; Separation and Purification Technology; Separation Science and Technology; Water Research

Service at conferences, symposia, other professional meetings

- International Organizing Committee member, 2nd International Congress on Separation and Purification Technology, Zhengzhou, China, July 7-11, 2024.
- "Water Treatment, Desalination, and Reuse" theme co-chair, 2nd International Congress on Separation and Purification Technology, Zhengzhou, China, July 7-11, 2024.
- Program committee, 22nd International Scientific conference "Resources of natural waters of the Carpathian region - Problems of protection and rational use", Lviv Polytechnic National University, Ukraine, May 2024.
- Chair, "Nanoparticles" session. Joint IWA Specialist Conference on Natural Organic Matter (NOM8) and IWA Particle Separation Conference, Johannesburg, South Africa, December 6, 2023.
- Chair, "Modelling of Membrane Processes" session, 7th MEMTEK International Symposium on Membrane Technologies and Applications (MEMTEK 2023), Istanbul, October 18, 2023.
- Scientific committee, 7th MEMTEK International Symposium on Membrane Technologies and Applications (MEMTEK 2023), Istanbul, October 17-19, 2023.
- International program committee, International Conference on Chemistry, Chemical Technology and Ecology, dedicated to the 125th anniversary of Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine, September 26-29, 2023.
- Scientific committee, 2nd Conference "Membrane Materials Modification and Separation" (M3-S), Toruń, Poland, September 26-28, 2023.
- Co-chair, "Biomedical / Bio separations / Drug delivery system 5" session, International Congress on Membranes & Membrane Processes 2023, Chiba, Japan, July 14, 2023.
- Chair, International track, 2023 World Environmental and Water Resources Congress, Henderson, NV, May 22-25, 2023.
- Co- chair (with O. Sanyal), "Emerging Materials for Liquid Separations" session, 2023 North American Membrane Society annual meeting, Tuscaloosa, Alabama, May 16, 2023.
- Co-organizer (with E. Goharian, R. Al Khaddar, J. Zhou), "International Collaborations in Environmental and Water Resources Engineering" session, 2021 World Environmental and Water Resources Congress, Milwaukee WI, May 23-27, 2021.
- Moderator, Session "Understanding Biological, Chemical, & Environmental Interactions & Transport of SARS-CoV-2", American Chemical Society national meeting, Atlanta Georgia, August 23, 2021.
- Co-chair (with R. Field). "Fouling 2" and "Fouling 3" sessions, International Congress on Membranes and Membrane Processes 2020, December 8, 2020.
- Co-organizer (with N. Graham), Roundtable "Network-of-Networks for Environmental Research and Education Collaboration in Central Eurasia", 69th Annual Meeting of the Midwest Conference on Asian Affairs, October 16-18, 2020.
- Program committee, 1st International Workshop on Cyber-Physical Security for Critical Infrastructures Protection, Guildford, UK, September 14 - 18, 2020.
- Scientific committee and session co-chair, Joint EWA/IWA conference "Water Management in Cold Climates", Harbin, China, January 12-14, 2020.
- Scientific committee, 6th Symposium on Membrane Technologies and Applications (MEMTEK 2019), Istanbul, Türkiye, November 27-30, 2019.
- Scientific committee, Techniques Séparatives et Procédés Membranaires (FRANCOFILT 2019), Hammamet, Tunisia, September 23-25, 2019.

- Co-chair (with E. Goodrich), "Innovations in MF and UF" session, 2019 North American Membrane Society meeting, Pittsburgh, PA, May 11-15, 2019.
- Co-chair, "Novel Materials and Configurations in Membrane Processes" session, 8th IWA Membrane Technology Conference and Exhibition for Water and Wastewater Treatment and Reuse, Singapore, September 7, 2017.
- Presentation evaluator/judge
 - International Congress on Membranes & Membrane Processes 2023, Chiba, Japan, July 9-14, 2023.
 - IWA Membrane Technology Conference and Exhibition for Water and Wastewater Treatment and Reuse, Singapore, September 5-9, 2017.
 - International Congress on Membranes and Membrane Processes, San Francisco, CA, August 1, 2017.
 - Environmental Nanotechnology Gordon Research Conference, Stoweflake, VT, June 20, 2017.
 - o North American Membrane Society meeting, Bellevue, WA, May 23, 2016.
 - American Chemical Society ENVR division, 250th American Chemical Society National Meeting, Boston, MA, August 16-20, 2015.
- Co-organizer, Workshop "Research needs in the area of physical methods of oil spill remediation: Lessons learned in remediating oil spills in the Gulf of Mexico and Michigan", 2017 Oil Spill and Ecosystem Science Conference, New Orleans, LA, February 6, 2017.
- Moderator, "Nanocarbon applications and mechanisms" session, 2016 IWA Nano & Water Specialist Conference "Addressing the Water-Food-Energy Nexus", Houston, TX, May 16-18, 2016.
- Student awards committee, 2016 AWWA/AMTA Membrane Technology Conference and Exposition, San Antonio, TX, February 2-4, 2016.
- Co-chair, "Microorganism-membrane interactions: Towards understanding pathogen removal and membrane biofouling" session, ACS-AEESP co-sponsored symposium, 250th ACS National Meeting, Boston, MA, August 16-20, 2015.
- Planning Committee, Borchardt Conference (2011, 2014)
- Co-chair, "Novel Membranes and Membrane Processes for Desalination and Water Treatment" session, 248th ACS National Meeting, San Francisco, CA (2014)
- Organizer and co-chair, "Novel membrane materials and processes for environmental applications" teleconference session, "Membrane and Sorption Processes and Technologies" conference, Kyiv, Ukraine (2010)
- Chair, "New Membrane Materials" session, International Water Association Joint Membrane Technology and Water Reuse conference, Istanbul, Türkiye (2010)
- Scientific committee, IWA Regional Conference "Membrane Technology and Water Reuse," Istanbul, Türkiye (2010)
- Scientific committee, IWA Particle Separations and Nanoparticles in Water conference, Durham, NC (2009)
- Chair, "Membrane fouling 3" session and co-chair of "Membrane fouling 2" session, 2009 North American Membrane Society annual meeting, Charleston, SC (2009)
- Co-organizer and chair, "International Collaborations in Environmental Research and Education" session, 2009 AEESP meeting
- International program committee, International Conference on Nanotechnology and Applications, Crete, Greece (2008)
- Co-chair, "Desalination" session, IWA North American Membrane Research Conference, Amherst, MA (2008)
- Organizer and chair, "Nanotechnology-enabled membranes for water quality control" session, IWA Regional Conference "Membrane Technologies in Water and Waste Water Treatment", Russia, Moscow (2008)
- Co-organizer, "Colloidal Fouling in Water Treatment Applications" session, AIChE National Meeting, Salt Lake City, UT (2007)
- Co-chair, "Environmental Nanotechnology: Sensors, Novel Applications, and Emerging Issues" session, 230th ACS National Meeting, Washington, DC (2005)

Other service to the profession

- External reviewer of promotion and tenure cases (2012, 2x2013, 2016, 2017, 2x2018; 3x2020, 7x2021, 2x2022, 2x2023)
- Association of Environmental Engineering and Science Professors (AEESP)
 - Mentor, AEESP global cross-institution mentorship network (2019 2021)
 - Program committee, 2017 AEESP conference, 2016
- International Water Association (IWA)
 - Member, Management committee, Nano and Water specialist group (2012 present)
- MSU liaison to a scientific program committee for seminar "All aboard? Water for inclusive health and food security", 2021 Stockholm International Water Institute (SIWI) World Water Week (2021)
- Membrane Technology Research committee, AWWA, 2009–2016
- External assessor of Ph.D. dissertations
 - Rapelang Patala. Metal-loaded nanostructured membranes for water purification, University of Johannesburg, South Africa, 2023
 - Yong Zen Tan. Material and flow engineering approach in improving the membrane distillation process, Nanyang Technological University, Singapore, 2018
 - Natali Sivchenko. Image analysis in coagulation process control. Norwegian University of Life Sciences, 2018
 - Bonani Seteni. Dechlorination of 3,3',4,4'-tetrachlorobiphenyl (pcb77) in water, by iron/nickel nanoparticles immobilized on I-lysine/PAA/PVDF membrane. University of Johannesburg, South Africa, 2014
- Project Advisory Committee, WRF (2009–2013)
- Working group, Defense Threat Reduction Agency (2011)
- Research and Technical Practices Committee, AWWA Michigan Section (2009-2011)
- Expert panel, "Nanotechnology for drinking water treatment and nanomaterials as contaminants", WRF (2008, 2009)
- Invited participant, Membrane Fouling: Research Needs workshop, Co-organized by WateReuse Foundation and HDR, Dallas, TX (2008)
- Invited participant, Nanotechnology-enabled Water Treatment (NeWT) workshop, Center for Biological and Environmental Nanotechnology, Rice University, Houston, TX (2007)

Service to the broader community (select examples)

- Panelist, "Scientific Networking" workshop. Digital platform "Ukrainian Science Diaspora". Online event. October 27, 2023.
- Organizer, Roundtable discussion "Oil spills in Michigan and Louisiana: What can scientists, engineers and affected communities in Michigan and Louisiana learn from each other and teach policy makers?" MSU Environmental Science and Policy program Research Colloquia Series. East Lansing, MI, November 5, 2015.
- Lab tours, demos, presentations
 - High School Engineering Institute, MSU College of Engineering (2013, 2018)
 - Preview Day, MSU College of Engineering (2013)
 - Visit by Lansing Community College students (2009, 2010)
 - Chemistry Club at the Sexton High School, Lansing, MI (2008)
 - WIMS for Teens Environmental Engineering program (2008)
 - NanoDay at Impression 5 Science Center (2009)
- MSU Frontiers in Science weekend workshop for high school teachers (2011)

University service

- Undergraduate Studies committee, Civil & Environmental Engineering (2021 2023)
- Awards ad-hoc committee, Civil & Environmental Engineering (2019 2023)
- Search committee service
 - Environmental Engineering faculty search committee (2021 2022)
 - Civil and Environmental Engineering faculty search committee (2020 2021)
 - Technician search committee, Civil and Environmental Engineering (2016–2017)

- Hannah Chair search committee (2011-2012)
- Environmental Engineering faculty search committee (2008-2009)
- Environmental Engineering faculty search committee (2005-2006)
- Internal proposal reviewer
 - Targeted Support Grant for Technology Development program (2020)
 - o MSU Strategic Partnership Grants program (2007-2009, 2011, 2012, 2013)
 - Website ad-hoc committee, Civil and Environmental Engineering (2018 2020)
- MSU campus water committee (2016 2020)
- Withrow Global Leadership Award committee, MSU College of Engineering (2019)
- Inquiry panel, MSU Research Integrity Office (2018)
- Faculty Advisory Committee, Center for European, Russian and Eurasian Studies (2016–2018)
- Referee for MSU Academy for Global Engagement (2016)
- Proposal reviewer and mentor, MSU Water Fountain Challenge design competition (2016)
- Lyman Briggs College Dean's Reappointment, Promotion, and Tenure Committee (2016)
- MSU Water committee (2015–2016)
- Faculty coordinator for hosting AEESP Distinguished Lecture (2013/14, 2016/17)
- Presentation evaluator/judge
 - Fate of the Earth Symposium (2019)
 - MSU College of Engineering graduate research symposium (2019)
 - Fate of the Earth Symposium (2018)
 - o UM-MSU Blue-Green Chemical Engineering seminar series, Ann Arbor, MI (2011)
 - University Undergraduate Research and Arts Forum (2011)
 - MSU Graduate Academic Conference (2009)
- Engineering research committee, MSU College of Engineering (2013 2015)
- Release policy ad hoc committee, Civil and Environmental Engineering (2013)
- Faculty advisory committee, MSU Global Water Initiative (2012)
- Faculty Advisory Council, MSU Environmental Science and Policy program (2011-2012)
- Water Action committee (2011–2012)
- Founding member of the advisory committee, MSU Center for Complex Materials (2009-2012)
- Computing Services advisory committee, MSU College of Engineering (2008-2010)
- Graduate studies committee, Civil and Environmental Engineering (2005-2007)
- Engineering research and graduate studies committee, MSU College of Engineering (2005)
- Guest presenter/panelist
 - Collaborative Research and Education Initiative, MSU Canadian Studies Center (2019)
 - NSF PIRE information session (2016)
 - o International Student Welcome, MSU College of Engineering (2016)
 - MSU Frontiers in Science weekend workshop series (2011)
 - MSU Environmental Journalism faculty expert panel (2009)
 - MSU Blue Water panel (2010-2011)
 - Pharmaceuticals in the Environment: Current Trends and Research Priorities workshop (2008)
- Faculty mentor in MSU High School Honors Science/Mathematics/Engineering program (2005-2009, 2011)
- Faculty adviser for MSU Environmental Engineering Student Society (2006-2008)
- Coordinator of Environmental Engineering seminar series, Civil and Environmental Engineering (2006-2009)

Service to the Fulbright program

- Executive board member, West and Mid-Michigan Chapter, Fulbright Association (2022-2023)
- Member, Fulbright campus advisory committee, MSU (2020/21, 2022/23)
- Alum mentor/panelist: "Alum-led country discussion -Georgia" session, "Identity abroad" session, and "Crisis scenarios" session. Fulbright Pre-Departure Orientation for Europe and Eurasia (July 2023, online)
- Chair, Environmental Science peer review committee, Washington, DC (November 2019)
- Area panel reviewer, Washington, DC (November 2018)
- Ad hoc reviewer, Fulbright Graduate Student Program, Ukraine (August 2016)

- Alumni representative, Fulbright Pre-Departure Orientation for Europe and Eurasia, Washington, DC, July 2015, July 2016
 Selection committee, Fulbright program in Georgia, Tbilisi, Georgia (November 2014)