

Lilit Yeghiazarian, PhD

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NSF Convergence Accelerator Center - The Urban Flooding Open Knowledge Network:
<http://ufokn.org>

Education and Professional Career

1987-1992 B.S. Electrical Engineering, Polytechnic Institute, Yerevan, Armenia
1993-1995 M.S. Industrial Engineering, American University of Armenia, Yerevan, Armenia
1996-2001 Ph.D. Biological & Environmental Engineering, Cornell University, Ithaca, NY, USA,
2001-2003 Postdoctoral Associate, Materials Science and Engineering, Cornell University
2004-2009 Research Associate, Lecturer, School of Public Health, UCLA
2009-2015 Assistant Prof., Chemical & Environmental Engineering, University of Cincinnati
2015-2021 Associate Prof., Chemical & Environmental Engineering, University of Cincinnati
2021-present Professor, Chemical & Environmental Engineering, University of Cincinnati

Commitment, Appointments and Scientific Volunteer Jobs

Since 2022 Founding Committee, InterPore MidWestern Chapter
Since 2020 Associate Editor, *Frontiers in Water* (Specialty section: Water and Human Health)
Since 2019 Principal Investigator, Urban Flooding Open Knowledge Network Center (\$6.33M, National Science Foundation, USA)
2016-2022 Chair of InterPore Membership Committee
Since 2016 Member of Kimberly-Clark InterPore Lectureship Award Committee
2019-2020 ACCelerated ENGINEering Degree (ACCEND) coordinator, Env. Engineering program, University of Cincinnati
2020, 2022 General Chair, American Water Resources Association's Specialty Conference. Geospatial Water Technologies – Complex Systems (2020 virtual, 2022 Austin TX)
2016-2018 Organizing Committee Member, AWRA Specialty Conference – GIS in Water Resources, 2018 (Orlando FL, USA) and 2016 (Sacramento CA, USA)
2016-2018 Member of InterPore 2018 Jubilee Committee
2016 Chair of Local Organizing Committee and Member of the Programme Committee, 8th International Conference on Porous Media and Annual Meeting of the InterPore, Cincinnati OH, USA, 2016
2014 Member of the Scientific Advisory Committee for The 6th International Conference on Porous Media and Annual Meeting of the International Society for Porous Media (InterPore), Milwaukee, WI, USA
2014-2016 Guest Editor for Special Issue of *Transport in Porous Media* on Thin Porous Media
Since 2013 InterPore Member
Since 2002 Executive Board Member and Research Committee Member, Armenian National Science and Education Fund (ANSEF)
Since 1996 AGU Member

Professional Awards, Offers and Recognitions

2022 Economic development initiatives in the Ohio River Basin. Panel Discussion at the Ohio River Basin Summit, Huntington WV
2022 Open Knowledge Networks. Panel Discussion, NSF Convergence Accelerator Session at Knowledge Discovery and Data Mining Conference, Washington DC

2022 InterPore elections

- 2020 Distinguished Researcher Award, College of Engineering & Applied Science, University of Cincinnati
- 2019 Plenary Lecture. InterPore Chapter Conference, Petropolis, Brazil.
- 2016 InterPore Rosette for Outstanding Service
- 2014 The National Science Foundation Faculty Early Career Development Award (CAREER)
- 2006 The National Institutes of Health Ruth L. Kirschstein National Research Service Award

Most important Publications (maximum 10)

(Peer reviewed journal articles / books / patents)

- [1] C. Baru, L. Campbell, W. Chang, T. DeBlanc-Knowles, J. George, M. Halbert, K. Albrecht L. Amaral, N. Ammar, T. Bacastow, S. Baaranzini, M. Bishop, M. Cafarella, S. Cucerzan, Y. Ding, B. Handspikcker, O. Hassanzadeh, P. Hitzler, F. Hudson, S. Israni, A. Rizk-Jackson, E. Jahn, K. Janowicz, B. Kar, S. Klein, M. Lange, O. Lassila, C. Li, R. McGranaghan, M. Omay, A. Pah, L. Raschid, G. Ricart, E. Sallinger, G. Seaton, C. Shimizu, A. Stathopoulos, P. Wormeli, L. Yeghiazarian, E. Young, P. Livingston, D. Maughan, S. Smith. Open Knowledge Network Roadmap: Powering The Next Data Revolution. The National Science Foundation, September 2022.
- [2] Paisley, B., M.S. Riasi, L. Yeghiazarian, M.D. Grigoriu. Fast Numerical Design of Porous Materials with Target Permeability, Porosity and Pore Size Distribution, *Journal of Porous Media*, DOI: 10.1615/JPorMedia.2020034996, 2020
- [3] Yeghiazarian, L. and V. Nistor. The HydroGrid as a Framework for Interconnected Water Systems: Emerging Technologies. *Water Resources Research*, 54(12), 2018
- [4] Riasi, M.S., L. Yeghiazarian. Controllability of surface water networks. *Water Resources Research*, 53(12), 2017
- [5] Riasi, M.S., G. Huang, C. Montemagno, L. Yeghiazarian. A feasibility study of the pore topology method (PTM), a medial surface-based approach to multi-phase flow simulation in porous media. *Transport in Porous Media*, 115(3), 519-539, 2016
- [6] Riasi, S., Yeghiazarian, L. Methods, Software, and apparatus for porous material or medium characterization, flow simulation and design (US Patent App. 62/351,346; UC Ref. 116-093), 2016
- [7] Nistor, V., J. Cannel, J. Gregory, L. Yeghiazarian. Peristaltic propulsion of a solid object inside a cylindrical hydrogel. *Soft Matter*, 12, 3582-3588, 2016
- [8] Yeghiazarian, L. and G. Samorodnisky. A fully stochastic approach bridging the microscopic behavior of individual microorganisms with macroscopic ensemble dynamics in surface flow networks. *Water Resources Research*, 49(11): 7820-7826, 2013
- [9] Yeghiazarian, L., Wiesner, U., Montemagno, C.D. Volume phase transition to induce gel movement. US7313917, US7600378, US20060001010, WO2006007476A2, WO2006007476A3, 2007
- [10] Yeghiazarian, L., S. Mahajan, C.D. Montemagno, C. Cohen, U. Wiesner. Directed motion and cargo transport through propagation of polymer gel volume phase transitions. *Advanced Materials*, 17, 1869-1873, 2005.