## Lilit Yeghiazarian, PhD

Associate Professor

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#### **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. Agricultural and Biological 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 Professor, Chemical&Environmental Engineering, University of Cincinnati
Since 2015	Associate Professor, Chemical&Environmental Engineering, University of Cincinnati

### Commitment, Appointments and Scientific Volunteer Jobs

Associate Editor, Frontiers in Water (Specialty section: Water and Human Health)
PI in Urban Flooding Open Knowledge Network Project (\$6M, National Science
Foundation, USA)
Chair of InterPore Membership Committee
Member of Kimberly-Clark InterPore Lectureship Award Committee
ACCelerated Engineering Degree (ACCEND) coordinator, Env. Engineering
program, University of Cincinnati
General Chair, American Water Resources Association's Specialty Conference.
Geospatial Water Technologies – Complex Systems
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, 8 <sup>th</sup>
	International Conference on Porous Media and Annual Meeting of the InterPore

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

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** 

2014-2016

#### **Professional Awards, Offers and Recognitions**

2020	Distinguished Researcher Award, College of Engineering&Applied Science,
0040	University of Cincinnati
2016	InterPore Rosette
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] Johnson, J.M., Saksena, S., <u>Yeghiazarian, L.</u>, Merwade, V., Arumugam, S., Back, S., Bales, J., Cai, X., Fils, D., Hahmann, T., Horsburgh, J.S., Huang, Z., Huang, R., Mazrooei, A., Onda, K., Ranjithan, R., Riasi, M. S., Rice, S., Shafiee-Jood, M., Shepherd, A., Singhofen, P., Stephan, S., Tarboton, D., and Tartakovsky, A. Moving from Information to Insight by Linking Urban and Hydrologic Systems through the Urban Flooding Open Knowledge Network. *American Water Resources Association IMPACT Magazine, 22 (2),* 2020
- [2] <u>Yeghiazarian, L.</u> and V. Nistor. The HydroGrid as a Framework for Interconnected Water Systems: Emerging Technologies. *Water Resources Research*, 54(12), 2018
- [3] Riasi, M.S., <u>L. Yeghiazarian</u>. Controllability of surface water networks. *Water Resources Research*, 53(12), 2017
- [4] Riasi, M.S., G. Huang, C. Montemagno, <u>L. Yeghiazarian</u>. 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
- [5] Riasi, S., <u>Yeghiazarian, L.</u> 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
- [6] Nistor, V., J. Cannel, J. Gregory, <u>L. Yeghiazarian</u>. Peristaltic propulsion of a solid object inside a cylindrical hydrogel. *Soft Matter*, 12, 3582-3588, 2016
- [7] <u>Yeghiazarian L.</u>, G. Samorodnitsky and C.D. Montemagno. A Poisson random field model of pathogen transport in surface water. *Water Resources Research* 45, W11415, 2009
- [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
- Yeghiazarian, L., Wiesner, U., Montemagno, C.D. Volume phase transition to induce gel movement. US7313917, US7600378, US20060001010, WO2006007476A2, WO2006007476A3, 2007
- [10] <u>Yeghiazarian, L.</u>, 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.