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Assistant Professor

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Education and Training:

Institution	Major	Degree	Year
Tianjin University (TJU)	Civil Engineering	B.S.	1998
Tianjin University	Environmental Engineering	M.S.	2001
U of Ill. at Urbana-Champaign (UIUC)	Environmental Engineering	Ph.D.	2006
Yale University	Environmental Engineering	Postdoc	09/06-11/08 (2 years)

Research and Professional Experience:

Summer 2015	Assistant Professor , Department of Civil and Environmental Engineering, University of California, Berkeley
2011 - Present	Assistant Professor , Department of Civil and Environmental Engineering, University of Maryland at College Park (UMD)
2009 - 2011	Assistant Professor , Department of Civil and Environmental Engineering, The George Washington University (GW)
2006 - 2008	Postdoctoral Research Associate , Department of Chemical and Environmental Engineering, Yale University

Publications:

1. **Mi, B.** (2014). "Graphene oxide membranes for ionic and molecular sieving." *Science*, 343(6172), pp. 740–742.
2. Hu, M., **Mi, B.** (2014). "Layer-by-layer assembly of graphene oxide membranes via electrostatic interaction." *Journal of Membrane Science*, 469, pp. 80–87.
3. Gao, Y., Hu, M., **Mi, B.** (2014). "Membrane surface modification with TiO₂-graphene oxide for enhanced photocatalytic performance." *Journal of Membrane Science*, 455, pp. 349–356.
4. Kang, Y., Emdadi, L., Lee, M., Liu, D., **Mi, B.** (2014). "Layer-by-layer assembly of zeolite/polyelectrolyte nanocomposite membranes with high zeolite loading", *Environmental Science & Technology Letters*, 1 (12), pp. 504–509
5. Yu, H., Kang, Y., Liu, Y., **Mi, B.** (2014). "Grafting polyzwitterions onto polyamide by click chemistry and nucleophilic substitution on nitrogen: A novel approach to enhance membrane fouling resistance." *Journal of Membrane Science*, 449, pp. 50-57.
6. Liu, Y., **Mi, B.** (2014). "Effects of organic macromolecular conditioning on gypsum scaling of forward osmosis membranes." *Journal of Membrane Science*, 450, pp. 153–161.
7. Hu, M., **Mi, B.** (2013). "Enabling graphene oxide nanosheets as water separation membranes." *Environmental Science & Technology*, 47(8), pp. 3715-3723.
8. Xiang, Y., Liu, Y., **Mi, B.**, Leng, Y. (2013). "Hydrated polyamide membrane and its interaction with alginate: A molecular dynamics study." *Langmuir*, 29(37), pp. 11600-11608.
9. Liu, Y., Rosenfield, E., Hu, M., **Mi, B.** (2013). "Direct observation of bacterial deposition on and detachment from nanocomposite membranes embedded with silver nanoparticles." *Water Research*, 47(9), pp. 2949–2958.
10. Liu, Y., **Mi, B.** (2012). "Combined fouling of forward osmosis membranes: Synergistic foulant interaction and direct observation of fouling layer formation." *Journal of Membrane Science*, 407-408, pp. 136-144.

Synergistic Activities:

1. Professional services
 - Editorial board member: Chemosphere.
 - Committee member: Membrane Processes Committee of American Water Works Association.
 - Panel reviewer: ACS Petroleum Research Fund, EPA, Kuwait Foundation for the Advancement of Sciences, NRC, NSF CBET, NSF REU, USAID-MERC
 - Journal reviewer: *Advanced Materials* (Wiley), *Carbon* (Elsevier), *Environmental Science & Technology* (ACS), *Journal of Membrane Science* (Elsevier), *Nature Chemistry* (NPG), *Nature Communications* (NPG), *Science* (AAAS), *Water Research* (Elsevier)
 - Meeting/symposium organizer:
North American Membrane Society Annual Meeting (2009 & 2010)
246th & 248th ACS National Meeting (2013 & 2014)
10th International Congress on Membranes and Membrane Processes (2014)
2. Invited speaker
 - University of Iowa (2010); AIChE Annual Meeting (2011); National University of Singapore (2011); Jiangnan University (2011); Villanova University (2011); Johns Hopkins University (2011); NIST (2011); Penn State University at Harrisburg (2012); International Conference on Materials for Advanced Technologies (Singapore, 2013); International Forward Osmosis Summit (China, 2014); US-China Drinking Water Treatment Symposium (2014); ACS National Meeting (2014); ACS Polymer Division Biennial Meeting (2015); 3M Purification Inc. (2015).
3. Awards and honors
 - NSF CAREER Award, 2014
 - US EPA People, Prosperity and the Planet (P3) Student Competition Award, 2013
 - Most Cited Author Award from the *Journal of Membrane Science*, 2011
4. Patent
 - US patent application 14/658990 “Layer-by-Layer Assembly of Graphene Oxide Membranes via Electrostatic Interaction and Elucidation of Water and Solute Transport Mechanisms”, with Meng Hu (doctoral student, UMD)
5. New course materials development
 - “Environmental Nanotechnology” (GW, as part of an NSF/NUE project)
 - “Advanced Water Treatment Technologies” (UMD)
 - “Engineering for Sustainability” (UMD)