

Oishi Sanyal, Ph.D.

Assistant Professor of Chemical Engineering □ West Virginia University
 431 Engineering Sciences Building, West Virginia University, Morgantown, WV 26506
 Phone: (517)388-6091 □ oishi.sanyal@mail.wvu.edu

PROFESSIONAL PREPARATION:

Manipal University, Manipal, KN (India)	Chemical Engineering	B.E., 2011
Michigan State University, East Lansing, MI	Chemical Engineering	Ph.D., 2016
Georgia Institute of Technology, Atlanta, GA	Chemical Engineering	02/2016-06/2020

APPOINTMENTS:

2020 – present	Assistant Professor of Chemical Engineering, West Virginia University
2016 – 2020	Postdoctoral Researcher, Georgia Institute of Technology

PRODUCTS:***Closely related products.***

1. **Sanyal, O***; Hays, S.S*(***equal contribution**); Leon, N.E.; Guta, Y.A.; Itta, A.K.; Lively, R.P.; Koros, W.J. “A self-consistent model for sorption and transport in polyimide-derived carbon molecular sieve membranes,” *Angewandte Chemie International Edition* (2020).
2. Hays, S.S*; **Sanyal, O***(***equal contribution**); Leon, N.E.; Arab, P.; Koros, W.J. “Envisioned role of slit bypass pores in physical aging of carbon molecular sieve membranes,” *Carbon*, 157, 385-394, (2020).
3. **Sanyal, O.**; Hicks, S.T.; Bhuwania, N.; Hays, S.; Kamath, M.J.; Karwa, S.; Swaidan, R.; Koros, W.J. “Cause and effects of hyperskin features on carbon molecular sieve (CMS) membranes,” *Journal of Membrane Science*, 551, 113-122, (2018).
4. **Sanyal, O.**; Liu, Z.; Yu, J.; Meharg, B. M.; Hong J. S; Liao, W.; Lee, I. “Design of fouling-resistant clay-embedded polyelectrolyte multilayer membranes for wastewater effluent treatment,” *Journal of Membrane Science*, 512, 21-28, (2016).
5. **Sanyal, O.**; Liu, Z.; Meharg, B. M.; Liao, W.; Lee, I. "Development of polyelectrolyte multilayer membranes to reduce the COD level of electrocoagulation treated high-strength wastewater," *Journal of Membrane Science*, 496, 259-266, (2015).
6. **Sanyal, O.**; Sommerfeld, A.N.; Lee, I. "Design of ultrathin nanostructured polyelectrolyte-based membranes with high perchlorate rejection and high permeability," *Separation and Purification Technology*, 145, 113-119, (2015).

Other significant products

1. Adams, J. S.; Itta, A. K.; Zhang, C.; Wenz, G. B.; **Sanyal, O.**; Koros, W. J. “New insights into structural evolution in carbon molecular sieve membranes during pyrolysis,” *Carbon*, 141, 238-246, (2019).
2. **Sanyal, O.**; Zhang, C.; Wenz, G. B.; Fu, S.; Bhuwania, N.; Xu, L.; Rungta, M.; Koros, W.J. “Next generation membranes-using tailored carbon,” *Carbon*, 127, 688-698, (2018).
3. Yu, J.; Han, S.; Hong, J.S.; **Sanyal, O.**; Lee, I. “Synchronous generation of nano and micro-scaled hierarchical porous polyelectrolyte multilayers for superwetable surfaces,” *Langmuir*, 32, 8494–8500, (2016).

4. Yu, J.; **Sanyal, O.**; Izbicki, A.P.; Lee, I. "Development of layered multi-scale porous thin films by tuning deposition time and molecular weight of polyelectrolytes," *Macromolecular Rapid Communication*, 36, 1669-1674, (2015).
5. **Sanyal, O.**; Lee, I. "Recent progress in the application of layer-by-layer assembly to the preparation of nanostructured ion-rejecting water purification membranes," *Journal of Nanoscience and Nanotechnology*, 14, 2178-2189, (2014).

SYNERGISTIC ACTIVITIES:

1. Serving as Topic Editor for Sustainability (a MDPI journal)
2. Selected review activities: Chemical Engineering Journal, Journal of Membrane Science, Carbon, Journal of Hazardous Materials, Chemical Engineering Research and Design, Membranes, Polymers, Processes, Bioresource Technology
3. Symposium and conference organization: 3rd Annual Postdoctoral Research Symposium (Georgia Tech)
–
co-organizer 2016; 3rd Annual Environmental Science and Policy Research Symposium (Michigan State University) – co-organizer 2015; AIChE Annual Meeting “Water treatment, desalination and reuse” session – co-chair 2017-2020.