ANGELO STATE UNIVERSITY

College of Science and Engineering Civil Engineering Program



1. Faculty Name

a. Soyoon Kum, Ph.D.

2. Education

- a. Ph.D., Civil Engineering, The University of Texas at Austin, 2019
- b. M.S., Civil and Environmental Engineering, Seoul National University, 2012
- c. B.S., Civil Engineering, Hongik University, 2010

3. Academic Experience

- a. Angelo State University, Assistant Professor (Tenure-track), 2021-present, full time
- b. University of California-Riverside, Postdoctoral Scholar, 2019-2021, full time
- c. The University of Texas at Austin, Graduate Research Assistant, 2017-2019, full time
- d. The University of Texas at Austin, Teaching Assistant, 2014-2017, full time
- e. University of Dar es Salaam, Dar es Salaam, Tanzania, Assistant Researcher, 2013, full time
- f. Seoul National University, Seoul, South Korea, Graduate Research Assistant, 2010-2012, full time

4. Non-Academic Experience

a. Clean Water Science Network (CWSN), Nonprofit Organization, Co-director, Coordinate Latin America Environmental Eng. undergraduate student mentoring program and research experience program, and support water-related research and community service, 2016-Present, part-time

5. Certifications or Professional Registrations

- a. Registered Engineer-In-Training, Texas, EIT No. 68023
- b. Korea Civil Engineer Certificate, South Korea

6. Current Membership in Professional Organizations

- a. American Water Works Association (AWWA), Membrane Technology Research Committee
- b. Korean-American Scientists and Engineers Association (KSEA), 50th administration publication director and Austin chapter staff
- c. American Membrane Technology Association (AMTA), Member
- d. Association of Environmental Engineering and Science Professors (AEESP), Member
- e. Korean American Society of Civil Engineer, Member

7. Honors and Awards

- f. Walter L. and Reta Mae Moore Graduate Fellowship in Water Resources, University of Texas at Austin, 2013 and 2018
- g. 2017/2018 AMTA-ADC Fellowship, The American Membrane Technology Association (AMTA), 2018
- h. 2017 KSEA-KUSCO Graduate Scholarship, Korean-American Scientists and Engineers Association (KSEA) and Korea Korea-U.S. Science cooperation Center (KUSCO), 2017
- i. S.K. Bhagat Endowed Graduate Fellowship in Engineering, University of Texas at Austin, 2014

8. Service Activities

- a. Co-advisor, Korean Student Association (KSA), Angelo State University
- b. Advisor, Clean Water Science Network-Summer Undergraduate Research Experience program

9. Publications and Presentations

- a. **Kum, Soyoon**; Lawler, D. F.; Katz, L. E. (2021). "The Performance of a Hybrid ED-NF Membrane System for NOM Removal in Freshwaters." ACS ES&T Engineering. 1, 10, 1420-1431.
- b. Tow, Emily W.; Hartman, Anna Letcher; Jaworowski, Aleksander; **Kum, Soyoon**; Zucker, Ines; AzadiAghdam, Mojtaba; Blatchley, Ernest R. III; Achilli, Andrea; Gu, Han; Urper- Bayram, Gulsum Melike, Warsinger, David M. (2021). "Energy Consumption of Potable Water Reuse". *Water research X.* 13, 100126.
- c. Tang, X.; **Kum, Soyoon**; Liu, H. (2021) "Inland Desalination Brine Disposal: a Baseline Study from Southern California on Brine Transport Infrastructure and Treatment Potential". *ACS ES&T Engineering*.
- d. Tow, Emily W.; Ersan, Mahmut Selim; **Kum, Soyoon**; Lee, Tae; Speth, Thomas F.; Owen, Christine; Bellona, Christopher; Nadagouda, Mallikarjuna N.; Mikelonis, Anne M.; Westerhoff, Paul; Mysore, Chandra; Frenkel, Val S.; deSilva, Viraj; Walker, W. Shane; Safulko, Andrew K.; Ladner, David A. (2021) "Managing and treating PFAS in membrane concentrates." AWWA Water Science. 3, 5, e1233
- e. **Kum, Soyoon**; Lawler, D. F.; Katz, L. E. (2020). "Separation Characteristics of Cations and Natural Organic Matter in Electrodialysis." Separation and Purification Technology
- f. Landsman, M. R.; Sujanani, R.; Brodfuehrer, S. H.; Cooper, C. M.; Darr, A. G.; Davis, R. J.; Kim, K.; **Kum, Soyoon**; Nalley, L. K.; Nomaan, S. M.; et al. (2020). "Water Treatment: Are Membranes the Panacea?" Annual Review of Chemical and Biomolecular Engineering
- g. Rowles, L. S.; Alcalde, R.; Bogolasky, F.; **Kum, Soyoon**; Diaz-Arriaga, F. A.; Ayres, C.; Mikelonis, A. M.; Toledo-Flores, L. J.; et al. (2018). "Perceived versus Actual Water Quality: Community Studies in Rural Oaxaca, Mexico." Science of the Total Environment

10. Professional Development Activities

a. Organizing Committee, KSEA 2021 and 2019 Scientists and Engineers Early Career Development (SEED) Workshop, December 14-15, 2021, and December 7-8, 2019.