## **IDENTIFYING INFORMATION:**

NAME: Escobar, Isabel

ORCID iD: https://orcid.org/0000-0001-9269-5927

POSITION TITLE: Professor

<u>PRIMARY ORGANIZATION AND LOCATION</u>: University of Kentucky, Lexington, Kentucky, United States

### **Professional Preparation:**

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ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
University of Central Florida, Orlando, FL, United States	DPHIL	05/2000	Environmental Engineering
US EPA STAR Fellowship, Orlando, Florida, United States	Fellow	01/1997 - 05/2000	Environmental Engineering
University of Central Florida, Orlando, Florida, United States	MS	12/1996	Environmental Engineering
University of Central Florida, Orlando, Florida, United States	BS	12/1995	Environmental Engineering

## **Appointments and Positions**

2015 - present	Professor, University of Kentucky, Lexington, Kentucky, United States
2022 - present	Chellgren Chair & Director of the Chellgren Center for Academic Excellence,
	University of Kentucky, Lexington, Kentucky, United States
2015 - present	Associate Director, Center of Membrane Sciences, University of Kentucky,
	Lexington, Kentucky, United States
2011 - present	Associate Editor, Environmental Progress and Sustainable Energy, AIChE, New
	York, New York, United States
2014 - 2015	Associate Dean of Research Development & Outreach, College of Engineering,
	University of Toledo, Toledo, Ohio, United States
2010 - 2015	Professor, University of Toledo, Toledo, Ohio, United States
2010 - 2014	Interim Assistant Dean of Research Development & Outreach, College of
	Engineering, University of Toledo, Toledo, Ohio, United States
2010 - 2011	Acting Director of Catharine S. Eberly Center for Women, University of Toledo,
	Toledo, Ohio, United States
2006 - 2010	Associate Professor, University of Toledo, Toledo, Ohio, United States
2000 - 2006	Assistant Professor, University of Toledo, Toledo, Ohio, United States
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### **Products**

# <u>Products Most Closely Related to the Proposed Project</u>

1. Leonard B, Loh H, Lu D, Ogbuoji E, Escobar I, Sierros K, Sanyal O. Sustainable additive manufacturing of polysulfone membranes for liquid separations. Journal of Physics: Energy. 2024 January 22; 6(1):015021-. Available from: https://iopscience.iop.org/article/10.1088/2515-7655/ad1ccc DOI: 10.1088/2515-7655/ad1ccc

- Ogbuoji E, Myers A, Haycraft A, Escobar I. Impact of common face mask regeneration processes on the structure, morphology and aerosol filtration efficiency of porous flat sheet polysulfone membranes fabricated via nonsolvent-induced phase separation (NIPS). Separation and Purification Technology. 2023 November; 324:124594-. Available from: https://linkinghub.elsevier.com/retrieve/pii/S1383586623015022 DOI: 10.1016/j.seppur.2023.124594
- 3. Fionah A, McLarney K, Judd A, Escobar I. Effects of the Applied Potential on the Performance of Polysulfone Membranes Functionalized with Sulfonated Polyether Ether Ketone Polymers. Membranes. 2023 July 18; 13(7):675-. Available from: https://www.mdpi.com/2077-0375/13/7/675 DOI: 10.3390/membranes13070675
- 4. Lu D, Babaniamansour P, Williams A, Opfar K, Nurick P, Escobar I. Fabrication and evaporation time investigation of water treatment membranes using green solvents and recycled polyethylene terephthalate. Journal of Applied Polymer Science. 2022 July 22; 139(35):-. Available from: https://onlinelibrary.wiley.com/doi/10.1002/app.52823 DOI: 10.1002/app.52823
- 5. Ogbuoji E, Stephens L, Haycraft A, Wooldridge E, Escobar I. Non-Solvent Induced Phase Separation (NIPS) for Fabricating High Filtration Efficiency (FE) Polymeric Membranes for Face Mask and Air Filtration Applications. Membranes. 2022 June 21; 12(7):637-. Available from: https://www.mdpi.com/2077-0375/12/7/637 DOI: 10.3390/membranes12070637

## Other Significant Products, Whether or Not Related to the Proposed Project

- 1. Chede S, Anaya N, Oyanedel-Craver V, Gorgannejad S, Harris T, Al-Mallahi J, Abu-Dalo M, Abu Qdais H, Escobar IC.. Desalination using low biofouling nanocomposite membranes: From batch-scale to continuous-scale membrane fabrication. Desalination. 2019; 451:81-91. Available from: 10.1016/j.desal.2017.05.007
- Dong XB., Shannon HD., Parker C, De Jesus S, Escobar IC.. Comparison of two low-hazard organic solvents as individual and cosolvents for the fabrication of polysulfone membranes. AIChE journal. American Institute of Chemical Engineers. 2019. Available from: 10.1002/aic.16790
- 3. Dong X, Shannon HD, Amirsoleimani A, Brion GM, Escobar IC. Thiol-Affinity Immobilization of Casein-Coated Silver Nanoparticles on Polymeric Membranes for Biofouling Control. Polymers (Basel). 2019 Dec 11;11(12) PubMed Central PMCID: <a href="mailto:PMC6961038">PMC6961038</a>.
- 4. Dong X, Lu D, Harris TAL, Escobar IC. Polymers and Solvents Used in Membrane Fabrication: A Review Focusing on Sustainable Membrane Development. Membranes (Basel). 2021 Apr 23;11(5) PubMed Central PMCID: PMC8146349.
- Wagh P, Zhang X, Blood R, Kekenes-Huskey PM, Rajapaksha P, Wei Y, Escobar IC. Increasing Salt Rejection of Polybenzimidazole Nanofiltration Membranes via the Addition of Immobilized and Aligned Aquaporins. Processes (Basel). 2019 Feb;7(2) PubMed Central PMCID: <u>PMC6550480</u>.

### **Synergistic Activities**

- 1. Escobar will co-chair the 2026 International Conference on Membranes (ICOM).
- 2. Escobar is guest-editing a Topical Collection on polymeric membranes for the open access

journal Membranes.

- 3. Escobar teaches a workshop on Membranes for Water Treatment Applications at the North American Membrane Society Annual Meeting.
- 4. Escobar is the Advisor of UKy SHPE and participates in the Noche de Ciencias to broaden participation.
- 5. Escobar is a panelist for NSF.

### **Certification:**

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Escobar, Isabel in SciENcv on 2024-02-07 12:52:22