



Samanvaya Srivastava

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Current Position

Associate Professor, Chemical and Biomolecular Engineering, University of California, Los Angeles (UCLA), July 2024 – *present*

Background

- Assistant Professor, Chemical and Biomolecular Engineering, University of California, Los Angeles (UCLA), November 2017 – June 2024
- Postdoctoral Scholar, The University of Chicago, and Visiting Resident Associate, Argonne National Laboratory, May 2014 – October 2017, *Advisor*: Matthew V. Tirrell
- Ph.D., Chemical Engineering, Cornell University, January 2014, *Advisor*: Lynden A. Archer
- Bachelor of Technology (B. Tech.) and Master of Technology (M. Tech.), Chemical Engineering, Indian Institute of Technology Kanpur (IIT Kanpur), Kanpur, India, May 2009; *Advisor*: Ashutosh Sharma

Honors and Activities

Selected Awards and Honors

Scialog Fellow, Sustainable Minerals, Metals, and Materials	2024
American Chemical Society PMSE Young Investigator	2021
NSF Faculty Early Career Development (CAREER) Award	2020
AIChE 35 Under 35	2020
RSC Researcher Mobility Grant, Royal Society of Chemistry	2017
Finalist, Frank J. Padden Award, DPOLY, American Physical Society	2014
Austin Hooey Graduate Research Excellence Recognition, Cornell University	2013
Outstanding Graduate Student Teaching Asst. Award, Cornell University, Chem. and Biomol. Eng.	2011
Aedunuthula Prasad Memorial Scholarship (top of the class, senior year), IIT Kanpur	2008
Ajay Agarwal Memorial Award (top of the class, end of junior year), IIT Kanpur	2007
Recognized as an Emerging Investigator by <i>Polymer Chemistry</i> (2025), <i>ChemComm</i> (2024), <i>Soft Matter</i> (2024), <i>ACS Polymers Au</i> (2023), <i>Mol. Sys. Des. Eng.</i> (2023), <i>AIChE J.</i> (Futures Scholar, 2021), and <i>J. Polym. Sci.</i> (2021).	

Activities

Review Activities

National Science Foundation (panels, online panels, and <i>ad hoc</i> reviews)	2018 – <i>present</i>
American Chemical Society, Petroleum Research Fund (<i>ad hoc</i> reviews)	2018 – <i>present</i>
Advanced Photon Source, Argonne National Laboratory (3 review panels/year)	2019 – <i>present</i>
Research Foundation – Flanders, Belgium (2 panels/year)	2023 – <i>present</i>
Oak Ridge National Laboratory (proposal review panel)	2024 – <i>present</i>

100+ reviews in the last five years for >15 journals including Science Advances, PNAS, Physical Review Letters, Nature Communications, ACS Macro Letters, Macromolecules and Soft Matter

Conference Organization

2nd SoCal Soft Matter Symposium, in September 2023 at UC Irvine.

September 2024

Co-organizer a day-long symposium to bring together the vibrant community of polymers and soft matter researchers in Southern California.

Inaugural SoCal Polymer and Soft Matter Symposium

June 2023

Organized a day-long symposium, bringing 100+ attendees together the vibrant community of polymers and soft matter researchers in Southern California.

Organized and chaired sessions at AIChE Meeting (2017 – 2024), APS March Meeting (2018 – 2024), ACS Colloids and Surface Science Symposium (2019 – 2021), Society of Rheology Meeting (2019 – 2021).

Membership in Professional Societies

American Institute of Chemical Engineers (AIChE), American Physical Society (APS), and Society of Rheology (SoR)

Select Professional Trainings

“Beyond Rg” Small Angle Scattering Short Course, Argonne National Laboratory, October 2015

Advances in Scattering Techniques: Theory and Applications in Polymer Physics, APS March Meeting, March 2011

Interests

Research in our group focuses on harnessing self-assembly as a tool for materials design. We are specifically interested in:

- Electrostatic interactions-driven self-assembly in soft materials
- Polyelectrolyte Complexation
- Hybrid inorganic-organic composites

I have published >60 papers to date, with >20 papers that include scattering-based research.

Goals

As a soft matter scientist, I have been a regular user at APS since 2011. I started working on SAXS and XPCS experiments in graduate school with multiple visits every year. During my postdoc at UChicago and Argonne, I developed even closer ties with APS. For the past seven years, I have been regularly visiting and bringing graduate students to the APS. Additionally, I have fostered many collaborations with groups at UCLA and outside, with no previous background in scattering, and have introduced scattering as a method to investigate structure in a wide variety of soft materials.

With these experiences, I would like to contribute to the APS UEC by:

- Increase awareness among soft matter scientists and engineers of diverse X-ray scattering techniques.
- Encourage and widen the participation of the next generation of scientists in scattering workshops and short courses.
- Promote communication between the user community and the APS management.