

VI. ACCEPTED PROPOSALS

NIST Center for Neutron Research (Gaithersburg, MD, USA)- 4 funded proposals

1. Neutron Spin Echo (2015); 2. SANS 1-2 shear cell (2015); 3. SANS/USANS 1-2 shear (2014); 4. SANS 1-2 shear (2014)
Discretionary beam time awards - November 2013 – present: 16+ discretionary time awards on 4 instruments

Institut Laue-Langevin (Grenoble, France)- 3 funded proposals

1. SANS 1-2 shear cell (6/2016); 2. SANS 1-2 shear cell (7/2016); 3. SANS 1-2 shear cell (6/2015)
Discretionary beam time awards – 4/2015 & 6/2013

VII. TEACHING EXPERIENCE

UNIVERSITY OF DELAWARE, Dept. of Chemical Engineering, Teaching Assistant (2014) – CHEG345: Junior Laboratory

- Head TA in charge of all grading/editing and giving large lectures on technical writing and error analysis
- Received student evaluation average of 4.86/5 over 6 categories from 90 students; Pigford TA Award from CHEG Dept.

UNIVERSITY OF PENNSYLVANIA, Teaching Assistant and Instructor (2012)

- Teaching assistant and lab instructor for summer course on biotechnology; research advisor for individual proposals
- Extensive instruction, office hours and proposal/research paper editing for 50 engineering students

LEE RESEARCH GROUP, Dept. of Chemical Engineering, UPenn, Research Assistant for lab curriculum development (2012)

- Designed experimental protocol for superhydrophobic/superoleophilic mesh for implementation in Penn curriculum
- Developed procedures and videos for mesh coatings, contact angle measurements and self-contained separations

VIII. SKILLS AND EXPERTISE

- **Rheometry:** TA Instruments ARES and AR series rheometers and related software. Anton Paar Physica MCR 501 rheometer and related software. Orthogonal superposition rheology, CaBER (extensional rheology measurements).
- **Neutron Methods:** Neutron spin echo; small angle neutron scattering (SANS): Static, rheo-SANS, and flow-SANS at the Gaithersburg, MD campus of NIST and the Institut Laue-Langevin (ILL) in Grenoble, France
- **Software/Programming:** Matlab, Igor, Origin, Aspen, Microsoft Office, Adobe Acrobat/Photoshop

IX. PROFESSIONAL MEMBERSHIPS, LEADERSHIP and ACTIVITIES

- **Memberships:** Society of Rheology (SOR), European Society of Rheology (ESR), American Physical Society (APS), Society of Women Engineers (SWE); Neutron Scattering Society of America (NSSA)
- **Gordon Research Seminar on Colloidal, Macromolecular & Polyelectrolyte Solutions** – Chair for 2016 meeting
- **Advancing Women in Engineering (UPenn); Women in Engineering (UD); Engineering Peer Advising (UD/UPenn); Theta Tau Professional Engineering Fraternity; American Cancer Society Relay for Life; Big Brothers Big Sisters; K-12 Science Outreach; Best Buddies**

X. SELECT CONFERENCE PRESENTATIONS

1. *The XVIIth International Congress on Rheology, Kyoto Japan, August 8-13, 2016*

‘The effects of branching in worm-like micelles (WLMs) on nonlinear flow properties’

2. *The 2016 American Conference on Neutron Scattering, Long Beach CA, July 10-14, 2016*

‘A Multi-Technique ‘Neutron Approach’ to Characterize Branching in Worm-Like Micelles (WLMs)’ (Poster presentation)

3. *The 90th ACS Colloids & Surface Science Symposium, Boston MA, June 5-8, 2016*

“Using advanced rheological and neutron scattering techniques to determine signatures of branching in wormlike micelles (WLMs)” (Langmuir Graduate Student Award Oral Presentation Session)

4. *The Gordon Research Conference in Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura CA, Feb 6-12, 2016*

“The effects of branching in worm-like micelles (WLMs) on nonlinear flow properties” (Poster presentation)

5. *The Society of Rheology 87th Annual Meeting, Baltimore, MD, October 11-15, 2015*

‘Effect of branching on shear banding in wormlike micelles (WLMs) under large amplitude oscillatory shear (LAOS)’

6. *The 89th ACS Colloids & Surface Science Symposium, Pittsburgh, PA, June 15-17, 2015*

‘The effect of branching on dynamic response of wormlike micelles (WLMs) under nonlinear shear flows’

7. *The 10th Annual European Rheology Conference, Nantes, France, April 14-17, 2015*

a) ‘The effect of branching on the shear rheology and microstructure of wormlike micelles (WLMs)’

b) ‘The effect of branching on dynamic response of wormlike micelles (WLMs) under nonlinear shear flows’

8. *The Society of Rheology 86th Annual Meeting, Philadelphia PA, October 5-9, 2014.*

‘The effect of branching on the nonlinear rheology of WLMs using SANS with spatial and temporal resolution’

9. *The 88th ACS Colloids and Surface Symposium, Philadelphia PA, June 22-25, 2014*

‘Spatiotemporal measurements of branched micellar solutions under LAOS using small angle neutron scattering (SANS)’

10. *The 2014 American Conference on Neutron Scattering, Knoxville TN, June 1-5, 2014*

‘Developing spatiotemporally-resolved SANS techniques to characterize branching in WLMs under nonlinear shear flows’

11. *The Gordon Research Conference in Colloidal, Macromolecular & Polyelectrolyte Solutions, Ventura CA, Feb 15-21, 2014*

a) ‘The effect of micellar topology (branching) on steady shear rheology’ (Gordon Research Seminar)

b) ‘The effect of micellar topology (branching) on steady shear rheology’ (Poster presentation)