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Position Title: R&D Staff
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Education:

Millsaps College, Jackson, MS, B.S. 2002 Chemistry
University of Southern Mississippi, Hattiesburg, MS., Ph.D. 2007 Polym. Sci. & Engineering
University of Tennessee, Knoxville, TN., 2014 MBA

Professional Experience:

2010-present Research Staff, Center for Nanophase Materials Sciences, Macromolecular Nanomaterials Group, Oak Ridge National Laboratory
2009-2010 Postdoctoral Research Associate, Center for Nanophase Materials Sciences, Macromolecular Nanomaterials Group, Oak Ridge National Laboratory, Oak Ridge, TN, Mentor: S. Michael Kilbey.
2007-2009 Postdoctoral Research Associate, Neutron Scattering Science Division, Oak Ridge National Laboratory, Oak Ridge, TN, Mentor: John F. Ankner.
2002-2007 Graduate Research Associate, The University of Southern Mississippi, Hattiesburg, MS, Research Advisor: Charles L. McCormick

Professional Activities, Honors, Awards:

ORNL Soft Matter Council Member
SNS-HFIR User Group (SHUG) Executive Committee Member 2013-present
Reviewer: *Langmuir*, *Macromolecules*, and *Australian Journal of Chemistry*, *Polymer Chemistry*
2007-present
Robert M. Hearin Fellow, University of Southern Mississippi, 2003-2007

Professional Memberships:

Member, American Chemical Society (ACS), 2002-present
Member, Materials Research Society (MRS), 2007-present
Member, Neutron Scattering Society of America (NSSA), 2012-present

Selected Peer-Reviewed Publications:

Microphase separation in thin films of lamellar forming polydisperse di-block copolymers. R. Kumar, BS Lokitz, S. Sides, J. Chen, W. Heller, J. Ankner, J. Browning, S. M. Kilbey II, B. Sumpter. *RSC ADVANCES*, 5 (27), 2015, 21336-21348.
Shape-persistent, thermoresponsive polypeptide brushes prepared by vapor deposition surface-initiated ring-opening polymerization of alpha-amino acid N-carboxyanhydrides. Y. Shen, S. Desseaux, B. Aden, BS Lokitz, S. M. Kilbey, Z. Li, H. Klok. *Macromolecules*, 48 (8), 2015, 2399-2406.
In situ infrared ellipsometry for protein adsorption studies on ultrathin smart polymer brushes in aqueous environment. A. Kroning, A. Furchner, D. Aulich, E. Bittrich, S. Rauch, P. Uhlmann, K. Eichhorn, M. Seeber, I. Luzinov, S. Kilbey, BS Lokitz, S. Minko, K. Hinrichs, *ACS Applied Materials & Interfaces*, 7 (23), 2015, 12430-12439
Addition of CFC13 to aromatic aldehydes via in situ Grignard reaction. B. Barkakaty, B. Talukdar, BS Lokitz, *Molecules*, 20(8), 2015, 15098-15107.

Thin film behavior of bottlebrush/linear polymer blends. Mitra, I.; Li, X.; Pesek, S.; Makarenko, B.; Lokitz, B.S.; Uhrig, D.; Ankner, J. F.; Verduzco, R.; Stein, G. *Macromolecules*, 2014, 47, 5269-5276.

Lectin-functionalized poly(glycidylmethacrylate)-block-poly(vinylidimethyl azlactone) surface scaffolds for high avidity microbial capture. Hansen, R.; Hinestrosa, J. P.; Schubert, K.; Morrell-Falvey, J.; Peltier, D.; Messman, J. M.; Kilbey, S. M.; Lokitz, B. S.; Retterer, S., *Biomacromolecules*, 2013, 14, 3742-3748.

Hydration in weak polyelectrolyte brushes. Deodhar, C.; Soto-Cantu, E.; Uhrig, D.; Bonnesen, P.; Lokitz, B. S.; Ankner, J. F.; Kilbey, S. M., *ACS Macro Lett.* 2013, 2, 398-402.

Spontaneous wrinkling in azlactone-based functional polymer thin films in 2d and 3d geometries for guided nanopatterning. Ramanathan, M; Lokitz, B. S.; Messman, J. M.; Stafford, C. M.; Kilbey, S. M., *J. Mater. Chem. C.* 2013, 1, 2097-2101.

Manipulating interfaces through surface confinement of poly(glycidyl methacrylate)-block-poly(vinylidimethylazlactone), a dually reactive block copolymer. Lokitz, B.S.; Wei, J.; Hinestrosa, J.P.; Ankner, J.F.; Kilbey II, S.M.; Messman, J.M., *Macromolecules* 2012, 45, 6438-6449.

Versatility of alkyne-modified poly(glycidyl methacrylate) layers for click reactions. Soto-Cantu, E.; Lokitz, B.S.; Hinestrosa, J.P.; Deodhar, C.; Messman, J.M.; Ankner, J.F.; Kilbey II, S.M., *Langmuir* 2011, 27, 5986–5996.

Dilute solution properties and surface attachment of RAFT polymerized 2-vinyl-4,4-dimethylazlactone (VDMA). Lokitz, B.S.; Messman, J.M.; Hinestrosa, J.P.; Alonzo, J.; Verduzco, R. Brown, R.; Osa, M.; Ankner, J.; Kilbey II, S.M *Macromolecules* 2009, 42, 9018-9026.

Collaborators: Mike Kilbey (U. Tenn); Gila Stein (U. Houston); Igor Luzinov (Clemson Univ.); Rafael Verduzco (Rice Univ.); Sarah Morgan (Southern Mississippi); Derik Patton (Southern Mississippi); Max Wolff (Uppsala Universitet); Harm Anton Klok (EPFL).

Graduate and Postdoctoral Advisors:

Graduate Advisor: Charles L. McCormick (University of Southern Mississippi)

Post-doctoral Advisors: John F. Ankner (SNS-ORNL) and S. Michael Kilbey II (CNMS-ORNL)

Total Graduate Students Advised: 0

Total Postdoctoral Scholars Advised: 3