Curriculum Vitae

Dean C. Webster
January 3, 2024

Department of Coatings and Polymeric Materials
North Dakota State University
PO Box 6050, Dept 2760; Fargo, ND 58108
Office Phone: 701-231-8709
Cell Phone: 701-371-8670
dean.webster@ndsu.edu

EDUCATION

Ph.D., Materials Engineering Science, Virginia Polytechnic Institute and State University, March 1984.

B.S., Chemistry, Virginia Polytechnic Institute and State University, March 1979.

PROFESSIONAL APPOINTMENTS

March 2013 to present

Founder, Renuvix LLC, Fargo, North Dakota

January 2012 to present

Professor and Chair, Department of Coatings and Polymeric Materials, North Dakota State University.

July 2023 to present

Director, Center for Bioplastics and Biocomposites (CB2), a NSF Industry-University Cooperative Research Center (IUCRC).

January 2012 to June 2020

Director, Center for BioBased Materials Science and Technology (BiMAT), a North Dakota Center of Research Excellence (CORE).

August 2001 to January 2012

Professor, Department of Coatings and Polymeric Materials, North Dakota State University. Tenured 2007.

January 1993 to August 2001

Eastman Chemical Company, Kingsport, Tennessee.

August 1984 to December 1992

Sherwin-Williams Company, Chicago, Illinois.

March 1979 to August 1984

Graduate Research Assistant, Chemistry Department, Virginia Polytechnic Institute and State University.

TEACHING EXPERIENCE

North Dakota State University

CPM 474/674 Applied Polymer Science (Coatings I). Fall 2001 – 2023.

CPM 484/684 Coatings I Laboratory. Fall 2002 – 2022.

CPM 475/675 Coatings' Materials Science (Coatings II). Spring 2020 – 2023.

CPM 485/685 Coatings II Laboratory. Spring 2002, 2003, 2004, 2005, 2006.

CPM 778 Physical Chemistry of Polymers (portions). Spring 2002.

CPM 773 Organic Chemistry of Coatings. Spring 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2019, 2021, 2023.

NDSU Coatings Science Short Course, June 2002-2019, 2022.

Department of Chemistry, DePaul University, Chicago, Illinois.

CHE 462 Coatings Technology II. Fall 1985, 1987, 1989, and 1991.

Instructor in "Front Line Leadership" supervisory development program at Sherwin-Williams.

AWARDS

NDSU College of Science and Mathematics Excellence in Research Award, 2021.

James A. Meier Senior Professor, NDSU College of Science and Mathematics, 2019-2022.

Fellow, Division of Polymeric Materials: Science and Engineering, American Chemical Society, 2019.

Fellow, American Chemical Society, 2016.

Roon Foundation Award (best paper), 2016 American Coatings Conference.

Fred Waldron Research Award, NDSU Alumni Foundation, 2015.

Mattiello Memorial Lecture Award, American Coatings Association, 2013.

Roon Foundation Award (best paper), 2012 American Coatings Conference.

Roy W. Tess Award in Coatings, PMSE Division American Chemical Society, 2011.

Industry Achievement Award, National Paint and Coatings Association, 2009.

Roon Foundation Award (best paper), 2008 FutureCoat Conference.

Roon Foundation Award (best paper), 2006 International Coatings Exposition.

Roon Foundation Award (best paper), 2004 International Coatings Exposition.

Technical Focus Speaker (Invited keynote), 2004 International Coatings Exposition.

Roon Foundation Award (best paper), 2003 International Coatings Exposition.

Best Poster Presentation, 2003 International Coatings Exposition

OTHER PROFESSIONAL ACTIVITIES

2019 – Present	Editorial Board, *Progress in Organic Coatings*
2013-Present	Editorial Board, *Biofouling*
2011-2018	Editor-in-chief, *Progress in Organic Coatings*
2012-Present	Councilor, American Chemical Society, representing PMSE Division Divisional Activities Committee (DAC); Meetings and Expositions Committee
2012	International Scientific Committee, International Conference on Bioinspired and Biobased Chemistry and Materials, Nice, France, October 3-5, 2012.
2008-2014	Organizing Committee, Coatings Science International Conference, Netherlands (Annual).
2009	Past Chair, Division of Polymeric Materials: Science and Engineering, American Chemical Society
2008	Chair, Division of Polymeric Materials: Science and Engineering, American Chemical Society
2007	Chair Elect, Division of Polymeric Materials: Science and Engineering, American Chemical Society
2006	Vice-Chair, Division of Polymeric Materials: Science and Engineering, American Chemical Society
2003 - 2005	Board of Directors, NDSU Research Foundation

2002-2003, 2005-2006	NDSU University Senate
2005-2008	Mattiello Memorial Lecture Committee (FSCT) (Chair 2008)
2003 - 2010	Member, Faculty Advisory Group, NDSU Center for Nanoscale Science and Engineering
2002 - 2010	Professional Development Committee, Federation of Societies for Coatings Technology
2003 - 2006	Member At Large, Polymeric Materials: Science and Engineering Division, American Chemical Society.
1999 - 2000	Editor of *Organic Coatings Digest* for *Progress in Organic Coatings*.
1998 - 2000	Moderator of the *Organic Coatings Forum* e-mail discussion group sponsored by *Progress in Organic Coatings*.
1998 - 2011	Editorial board of *Progress in Organic Coatings*.
1998 - Present	Advisory Council, Chemistry Department, Virginia Polytechnic Institute and State University.
1998 - 2003	Dean's Roundtable, College of Arts and Sciences, Virginia Polytechnic Institute and State University.
1998 - 2001	Board of Directors, Skycrafters, Inc., Blountville, TN (1998-2001). President, 1999-2001. 501c(7) Corporation
1998	Technician of the Year selection committee, Northeast Tennessee Section, ACS.
1997 - 1998	Finance Chair, National Chemistry Week, Northeast Tennessee Section, ACS.
1994 - 2001	Public Outreach, NE Tennessee Section American Chemical Society/Eastman Chemical Company. Involved in educational outreach in local schools. Presented chemistry demonstrations to elementary school children, etc.
1991	Chair, Sherwin-Williams Technical Symposium.
1989	Organizing Committee, Sherwin-Williams Technical Symposium
1979	Organized the first Undergraduate Research Symposium at Virginia Tech.

MEMBERSHIPS IN ORGANIZATIONS

American Chemical Society

Polymer Chemistry Division, ACS
Polymeric Materials: Science and Engineering Division, ACS
Small Chemical Business, ACS
American Oil Chemists' Society
American Coatings Association (formerly Federation of Societies for Coatings Technology, FSCT)
RADTECH
Materials Research Society

FUNDING RECEIVED

Title	Agency	coPIs	Amount	Period
Using Artificial Intelligence (AI) and Machine Learning (ML) for Designing Functional Coatings	Office of Naval Research	Andrew Croll, Bakhtiyor Rasulev, Wenjie Xia, Anish Tuteja	$4,821,764	12/1/2023 – 11/30/2026
Fully Non-isocyanate Next-generation Polyurethane Topcoats	Luna Labs/SERDP	Adam Goff	$73,588	
Exploration of Bio-based functional building blocks for durable coatings	Center for Bioplastics/Biocomposites	Mukund Sibi	$84,084	01/01/2023 – 12/31/2023
Understanding the Principles of Solid Shedding Surfaces – Phase III	Office of Naval Research	Andrew Croll, Anish Tuteja	$4,536,000	01/01/2023 – 12/31/2025
Initial investigation of cotton plant derived synthetic leather	Cotton, Inc.	Long Jiang	$154,535	1/1/2022 – 12/31/2023
Synthesis of novel biomass-derived plastics using photoenergy	USDA/NIFA/Sungrant	Qianli Chu (UND)	$108,280	8/1/2021 – 7/31/2023
Understanding the Principles of Solid Shedding Surfaces – Phase II	Office of Naval Research	Andrew Croll, Bakhtiyor Rasulev, Wenjie Xia, Anish Tuteja	$4,726,763	01/01/2022 – 12/31/2024
Exploration of Bio-based functional building blocks for durable coatings	Center for Bioplastics/Biocomposites	Mukund Sibi	$77,395.50	01/01/2022 – 12/31/2022
Expanded use of soy-based oil pretreatment of recycled rubber crumb in automotive parts	United Soybean Board		$45,267	12/01/2021 – 11/30/2022
Preliminary exploration of polylignin biomass for non-isocyanate rigid foams	Plain Sight Innovations	Chad Ulven	$9998	09/15/2021 – 03/14/2022
Soy-based biodegradable agricultural mulching materials	ND Soybean Council/SBARE		$34,310	7/1/2021 – 6/30/2022
Cottonseed oil based vitrimers for 3D printing and other applications	Cotton, Inc.	Long Jiang (PI)	$56,383	01/01/2021-12/31/2021
Glycidyl carbamate resin systems for coatings	Elinor Specialty Coatings		$51,000	11/01/2020-04/30/2022
Modified high oleic soybean oil to increase the use of recycled crumb rubber	Ford/USB		$57,273	10/1/2020-09/30/2021

Understanding the Principles of Solid Shedding Surfaces	Office of Naval Research	Andrew Croll, Anish Tuteja	$5,792,117	08/20/2020 – 08/19/2023
Soybean oil-based additives for low-friction rubber compounds	ND Soybean Council		$31,661	07/01/2020 – 06/30/2021
Production and characterization of epoxidized sucrose and maltose esters of corn oil	ND Corn Council	Ewumbua Monono (PI)	$89,954	07/01/2020-06/30/2022
Robust coatings with amphiphilic surfaces for control of biofouling	Office of Naval Research		$460,000	03/01/2020 – 02/28/2023
Comprehensive biological laboratory efficacy testing of marine coatings	Office of Naval Research	Shane Stafslien	$300,000	01/01/2020 – 12/31/2022
Cottonseed Oil based UV Curable Resins for Composites and 3D Printing	Cotton, Inc.	Long Jiang (PI)	$43,414	01/01/2020 – 12/31/2020
Soybean oil in automotive EPDM rubber applications	Ford/USB		$51,093	10/1/2019 – 09/30/2020
High performance bio-based polymers for coatings & additive manufacturing	Army Research Laboratory	Chad Ulven (PI), Mukund Sibi	$5,177,264	04/10/2019 – 04/09/2022
High oleic soybean oil industrial uses and properties	Ford/USB		$62,664	10/1/2018 – 9/30/2019
High oleic soybean oil as a plasticizer for crumb rubber for new rubber compounds	United Soybean Board	Olena Shafranska	$98,086	10/1/2018 – 09/30/2019
Polymers & Adhesives for stone conservation	National Center for Preservation Technology and Training		$83,000	8/06/2018 – 12/31/2022
High oleic soybean oil in automotive rubber applications	Ford/USB		$61,684	10/1/2017 – 9/30/2018
High oleic soybean oil as a plasticizer for crumb rubber for tire tread compounds	United Soybean Board		$97,525	10/1/2017 – 9/30/2018
New uses for polymers in stone conservation	National Center for Preservation Technology and Training		$41,144	8/18/2017 – 12/31/2018
Glycidyl carbamate resin technology	Covestro LLC		$152,169	7/1/2017 – 12/31/2019
Amphiphilic, siloxane-based fouling-release coatings for oil boom applications and comprehensive, biological laboratory efficacy testing	Office of Naval Research	Shane Stafslien	$500,000	1/1/2017 – 12/31/2018
Modified soybean oil in Automotive Rubber Applications	Ford/United Soybean Board		$77,851	10/1/2016 – 9/30/2017
BioBased Monomer and Polymer Systems for Coatings	AkzoNobel	Mukund Sibi	$150,000	10/1/2016 – 6/30/2020

		Dean Webster		
Novel tough and durable AF/FR coatings via self-stratification	Office of Naval Research		$497,124	9/30/2016 – 10/1/2019
High Performance Bio-based Non-isocyanate Polymer Material Systems	U. S. Army	Chad Ulven Dean Webster, Mukund Sibi	$480,000	9/27/2016 – 9/26/2019
Development of Coating Formulation for Stone Conservation	National Center for Preservation Technology and Training		$41,000.45	9/14/2016 – 12/31/2017
Highly flexible primer for aircraft	Luna Innovations/Air Force		$20,000	7/1/2016 – 3/1/2017
Screening Latex Coatings Formulations	Sherwin-Williams	Xiaoning Qi	$50,000	2/1/2016 – 5/31/2017
Exploration of Novel Biobased Chemicals in Coatings Systems	Zymergen, Inc./DARPA		$360,000	9/23/2015 – 7/17/2020
Center for Sustainable Materials Science – Subaward	NSF-EPSCoR		$795,767	8/1/2014 – 7/31/2019 (in fourth year of a five-year program)
Dakota Bioprocessing Consortium – Subaward	NSF		$384,556	8/2/2014 – 7/31/2016
BiMAT: Center for Biobased Materials Science and Technology	North Dakota Department of Commerce		$1,132,500	7/1/2013 – 6/30/2018
Scale-up of novel soybean based materials – Subaward	ND Soybean Council		$30,462	7/1/2013 – 6/30/2014
High Performance Soybean-based Thermosetting Materials	renewal, United Soybean Board		$77,458	1/1/13 – 12/31/13
Sustainable Materials Science – Subaward	NSF-EPSCoR		$436,023	9/1/2012 – 8/31/2014
Tailoring the surface properties of coatings through self-stratification	Office of Naval Research		$480,954	5/15/2012 – 5/14/2015
Succinic acid based polyester polyols and their applications	BioAmber		$104,214	3/12/2012 – 8/31/2014
High Performance Soybean-based Thermosetting Materials	renewal, United Soybean Board		$63,308	1/1/12 – 12/31/12
Doctoral Dissertation Fellowship for Erin Pavlacky	ND EPSCoR		$9680	8/16/2011 – 2/15/2012
Structural composites with high biobased content	National Science Foundation	Chad Ulven	$300,000	8/15/2011 – 7/31/2014
High Performance Soybean-based Thermosetting Materials	United Soybean Board		$69,560	1/1/11-12/31/11
Marine Coatings Productization	Office of Naval Research	Larry Pederson,	$2,715,650	10/1/2010 – 12/31/2011

		Bret Chisholm, Partha Majumdar, Shane Stafslien		
Durable Soy-based Thiol-ene and Thiol-urethane Thermoset Coatings	North Dakota Soybean Council		$40,000	7/1/2010 – 6/30/2011
Development of Biobased Raw Materials into Composites	ND Centers of Excellence	Wayne Seames, Chad Ulven	$140,000	1/1/2009 – 12/31/2011
Synthesis and Characterization of Polyurethane Dispersions based on Novel Polyols	Novomer		$35,597	9/28/2009 – 9/30/2010
State EPSCoR Product Design Center Award	ND EPSCoR		$6,000	8/1/2009 – 4/1/2010
ND DOE EPSCoR IIP Phase 2: Performance impacts of impurities in Clean Coal Systems Equipped with Carbon Capture Technologies	DOE EPSCoR		$102,288	7/15/2009-7/14/2012
EPSCoR DOE Match Award	ND ESPCoR		$13,500	7/1/2009 – 7/14/2012
Binder System for High Flexibility Primers based on Glycidyl Carbamate Resins	Luna Innovations/Air Force (STTR Phase II)		$225,000	7/1/2009 – 6/30/2011
Doctoral Dissertation Fellowship for Samali Datta	ND EPSCoR		$29,115	8/16/2008 – 8/15/2009
Novel Soybean Oil Based Thiol-Urethane Coatings	North Dakota Soybean Council		$58,740	7/1/2009 – 6/30/2010
Marine Coatings Optimization, Phase II	Office of Naval Research	Gregory McCarthy, Bret Chisholm	$1,535,000	9/1/2009 – 12/31/2010
Scientific Research Training Program for Ahn Hee Cheol	Kumgang Korea Chemical Co., Ltd.		$35,107	8/16/2008 – 8/15/2009
Novel Soybean Oil based Ultraviolet Light Curable Coatings Materials	North Dakota Soybean Council	Zhigang Chen, Bret Chisholm	$82,073	7/1/2008 – 6/30/2009
Marine Coatings Optimization	Office of Naval Research	Gregory McCarthy, Bret Chisholm	$1,707,892	9/1/2008 – 12/31/2009
Doctoral Dissertation Fellowship for Ankit Vora	ND EPSCoR		$9,033	7/1/2005 – 6/30/2008
Thermosetting Antifouling Coatings Binder Systems – Phase 2	Jotun Group Worldwide		$174,813	11/1/2008 – 10/31/2009
Advanced Marine Coatings for Naval Vessels Phase VI	Office of Naval Research	Gregory McCarthy, Bret Chisholm	$6,550,000	7/1/2007 – 12/31/2009

Advanced Marine Coatings for Naval Vessels Phase V	Office of Naval Research	Gregory McCarthy, Bret Chisholm	$5,099,910	7/2006 – 12/2007
Smart Coatings Systems for Aerospace Applications	National Aeronautics and Space Administration (NASA)	Victoria Gelling, Stuart Croll	$75,000	6/2006 – 7/2007
Corrosion Protection of Al Alloys for Aircraft by Coatings with Advanced Properties and Enhanced Performance	Air Force Office of Scientific Research	Gordon Bierwagen (PI), Stuart Croll	$295,630 (Webster portion)	7/2005 – 6/2008
Novel Biobased Materials for Environmentally Compliant Protective Coating Systems	United States Department of Agriculture	Stuart G. Croll	$464,079	9/15/2007 – 9/14/2010
Thermosetting Antifouling Coatings Binder System	Jotun Group Worldwide		$180,382	5/1/2007 – 10/31/2008
Synthesis and characterization of flexible glycidyl carbamate functional polymers	Luna Innovations/Air Force (STTR Phase I Project)		$31,778	
Spintronics	ND EPSCoR		$117,853	8/1/2005 – 4/15/2008
Single-coat, zero VOC, non-skid system for ships, Phase II	Luna Innovations/US Navy (SBIR),		$114,339	5/31/2005-9/1/2006
Single-coat, zero VOC, non-skid system for ships	Luna Innovations/US Navy (SBIR)		$24,992	2/16/2004 – 9/26/2004
Chromium-free zero VOC primer	Luna Innovations/US Marines (SBIR)		$17,498	3/25/2004 – 8/25/2004
Advanced Marine Coatings for Naval Vessels, Phase III. Antifouling and fouling-release coatings for naval vessels	Office of Naval Research	Philip Boudjouk, Thomas Ready, S.-B. Choi, Gregory McCarthy	$5,200,600	4/1/2004 – 12/31/2005
Advanced Marine Coatings for Naval Vessels, Phase II. Antifouling and fouling-release coatings for naval vessels	Office of Naval Research	Philip Boudjouk, Thomas Ready, S.-B. Choi, Gregory McCarthy	$4,455,000	5/1/2003 – 6/30/2004
Development and understanding of the FSA Receptor Layer Polymer Material	NDSU Center for Nanoscale Science and Engineering	Stuart G. Croll	$338,084	10/1/2002 – 6/30/2004
Doctoral Dissertation Fellowship for Heather Nash	ND EPSCoR		$8,378	8/13/2003 – 12/31/2003

PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. AliReza Rahimi, Joseph Dahlgren, Kinza Faiyaz, Shane J. Stafslien, Lyndsi VanderWal, James Bahr, Maryam Safaripour, John A. Finlay, Anthony S. Clare, Dean C. Webster, “Amphiphilic Balance: Effect of the HydrophilicHydrophobic Ratio on Fouling-Release Surfaces,” *Langmuir*, (2023) https://doi.org/10.1021/acs.langmuir.3c03478
2. Ivan Hevus, Prakash Kannaboina, Yiqiu Qian, Jingbo Wu, Melody Johnson, Luke R. Gibbon, John J. La Scala, Chad Ulven, Mukund P. Sibi, Dean C. Webster, Furanic (Meth)acrylate Monomers as Sustainable Reactive Diluents for Stereolithography, *ACS Applied Polymer Materials*, (2023). https://doi.org/10.1021/acsapm.3c02207
3. Kurt R. VanDonselaar, Daniel A. Bellido-Aguilar, Maryam Safaripour, Hyemin Kim, James J. Watkins, Alfred J. Crosby, Dean C. Webster, Andrew B. Croll; Silicone elastomers and the Persson-Brener adhesion model. *J. Chem. Phys*.; 159 (18): 184708 (2023). https://doi.org/10.1063/5.0172415
4. Marta-Ievheniia Vonsul, Dean C. Webster, “Investigation of cottonseed oil as renewable source for the development of highly functional UV-curable materials,” *Progress in Organic Coatings*, 185, 107883 (2023). https://doi.org/10.1016/j.porgcoat.2023.107883
5. Raj Shankar Hazra, Jayanta Roy, Long Jiang, Dean C. Webster, Md. Mukhlesur Rahman, Mohiudding Quadir, “Biobased, macro- and nanoscale fungicide delivery approaches for plant fungi control,” *ACS Applied BioMaterials*, 6, 2698-2711, (2023). https://doi.org/10.1021/acsabm.3c00171
6. Ivan Hevus, Dean C. Webster, "Short-chain polyols from bio-based carboxylic acids for high-performance polyurethane coatings." *Progress in Organic Coatings*, 183, 107825 (2023). https://doi.org/10.1016/j.porgcoat.2023.107825
7. Olena Shafranska, Joseph Dahlgren, Alexander Jones, Janice Tardiff, Dean C. Webster, “Differing Unsaturation Levels of Soybean Oils Impact the Properties of Peroxide-Vulcanized Carbon Black-Filled EPDM Rubber,” *Journal of Applied Polymer Science*, 140, e53872 (2023). https://doi.org/10.1002/app.53872
8. Deep J. Kalita, Ihor Tarnavchyk, Harjyoti Kalita, Bret J. Chisholm, and Dean C. Webster, “Novel bio-based epoxy resins from eugenol derived copolymers as an alternative to DGEBA resin,” *Progress in Organic Coatings*, 178, 107471 (2023). https://doi.org/10.1016/j.porgcoat.2023.107471
9. Deep J. Kalita, Ihor Tarnavchyk, Harjyoti Kalita, Bret. J. Chisholm, Dean C. Webster, “Bio-Based Coating Resins Derived From Cardanol Using Carbocationic Polymerization And Their Evaluation As One-Component Alkyd-Type Coatings,” *Progress in Organic Coatings*, 174, 107252 (2023). https://doi.org/10.1016/j.porgcoat.2022.107252
10. Jackson Benda, Hayato Narikiyo, Shane J. Stafslien, Lyndsi J. VanderWal, John A. Finlay, Nick Aldred, Anthony S. Clare, Dean C. Webster, “Studying the effect of pre-polymer composition and incorporation of surface modifying amphiphilic additives on the fouling-release performance of amphiphilic siloxane-polyurethane coatings,” *ACS Applied Materials & Interfaces*, 14, 37229-37247 (2022). https://doi.org/10.1021/acsami.2c10983
11. Deep J. Kalita, Ihor Tarnavchyk, Sermadurai Selvakumar, Bret. J. Chisholm, Mukund Sibi, “Poly (Vinyl Ethers) Based on the Biomass-Derived Compound, Eugenol, and Their One-Component, Ambient-Cured Surface Coatings,” *Prog. Org. Coat.*, 170, 106996 (2022). https://doi.org/10.1016/j.porgcoat.2022.106996

12. Joseph Dahlgren, Lauren Foy, Kelli Hunsucker, Harrison Gardner, Geoff Swain, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, "Grooming of Fouling-Release Coatings to Control Marine Fouling and Determining how Grooming Affects the Surface," *Biofouling*, 4, 384-400 (2022). http://dx.doi.org/10.1080/08927014.2022.2084389
13. Jayaraman Sivaguru, Ravichandranath Singathi, Ramya Raghunathan, Retheesh Krishnan, Saravana kumar Rajendran, Sruthy Baburaj, Mukund P. Sibi, and Dean C. Webster, "Towards Upcycling Biomass-Derived Crosslinked Polymers with Light," *Angew. Chem. Int. Ed.* 2022, e202203353. https://doi.org/10.1002/anie.202203353
14. Teluka Galhenage, Shane J. Stafslien, Allen Skaja, Dean Webster, "Durable siloxane-polyurethane coatings for mitigating freshwater mussel fouling," *Biofouling*, 38, 260-270 (2022). https://doi.org/10.1080/08927014.2022.2056033
15. Karan Bansal, Dean Webster, Mohiuddin Quadir, "Self-assembled nanostructures from amphiphilic sucrose-soyates for solubilizing hydrophobic guest molecules," *Langmuir*, 38, 2066-2075 (2022). https://doi.org/10.1021/acs.langmuir.1c03033
16. Deep Kalita, Ihor Tarnavchyk, Dean C. Webster, Bret J. Chisholm, "Synthesis and evaluation of novel plant oil-based polymers as binders for artist paints: controllable drying behavior and low yellowness," *Prog. Org. Coat.*, 163, 106607 (2022). https://doi.org/10.1016/j.porgcoat.2021.106607
17. AliReza Rahimi, Morgan Murphy, Kinza Faiyaz, Shane J. Stafslien, Lyndsi Vanderwal, Madhura Pade, John A. Finlay, Anthony S. Clare, Dean C. Webster, "Amphiphilic marine coating systems of self-stratified PDMS-PEG surfaces with an epoxy-polyurethane matrix," *J. Coat. Technol. Res.*, 19, 795-812 (2022). https://doi.org/10.1007/s11998-021-00561-2
18. Jingbo Wu, Yiqiu Qian, Catherine A. Sutton, John J. La Scala, Dean C. Webster and Mukund P. Sibi, "Bio-based furanic di(meth)acrylates as reactive diluents for UV curable coatings: Synthesis and coating evaluation," *ACS Sustainable Chem. Eng.*, 9, 15537-15544 (2021). https://doi.org/10.1021/acssuschemeng.1c05588
19. Deep J. Kalita, Ihor Tarnavchyk, Bret J. Chisholm, Dean C. Webster, "Novel bio-based epoxy resins from eugenol as an alternative to BPA epoxy and high throughput screening of the cured coatings," *Polymer*, 233, 124191 (2021). https://doi.org/10.1016/j.polymer.2021.124191
20. Rawan Omar, Muneer Shaik, Chloe Griggs, Jevin D. Jensen, Robert Boyd, Nuri Oncel, Dean C. Webster, Guodong Du, "Star-shaped poly(hydroxybutyrate)s from bio-based polyol cores via zinc catalyzed ring-opening polymerization of β-butyrolactone," *Eur. Polym. J.,* 160, 110756 (2021) https://doi.org/10.1016/j.eurpolymj.2021.110756
21. Olena Shafranska, Alexander Jones, Alex Perkins, Joseph Dahlgren, Janice Tardiff, Dean C. Webster, "Low-unsaturation soybean oils in EPDM rubber compounds," *J. Appl. Polym. Sci.*, 139, 51499 (2021). https://doi.org/10.1002/app.51499
22. Jackson Benda, Shane Stafslien, Lyndsi Vanderwal, John A. Finlay, Anthony S. Clare, Dean C. Webster, "Surface modifying amphiphilic additives and their effect on fouling-release performance in siloxane-polyurethane coatings," *Biofouling*, 37, 309-326 (2021). http://dx.doi.org/10.1080/08927014.2021.1901891
23. Ivan Hevus, John McNamara, Nicole G. Ricapito, Stepan Tymoshenko, Dean C. Webster, "Parallel Esterification of Bio-based Dicarboxylic Acids in Small Scale Film Reactors: A High-Throughput Study," *J. Polymer Science*, 59, 665-674 (2021). http://doi.org/10.1002/pol.20210059

24. AliReza Rahimi, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Maryam Safaripour, John A. Finlay, Anthony S. Clare, Dean C. Webster, "Critical amphiphilic concentration: Effect of the extent of amphiphilicity on marine fouling-release performance," *Langmuir*, 37, 2728-2739 (2021). https://doi.org/10.1021/acs.langmuir.0c03446
25. Raul Setien, Shokoofeh Ghasemi, Ghasideh Pourhashem, Dean C. Webster, "Comparison of epoxidation methods for bio-based oils: Dioxirane intermediates generated from oxone vs. peracid derived from hydrogen peroxide," *Polymer International*, 70, 594-603 (2021). https://doi.org/10.1002/pi.6193
26. Pengfei Liu, Fengfen Mao, Dean C. Webster, Xiaoya Liu, Ren Liu, "Curing and performance stability of urethane acrylates with different main chains under electron beam irradiation," *Progress in Organic Coatings*, 152, 106119 (2021). https://doi.org/10.1016/j.porgcoat.2020.106119
27. Olena Shafranska, Andrey Chernykh, Bret J. Chisholm, Ihor Tarnavchyk, Dean C. Webster, "Derivatization of soybean oil to enhance performance as a processing oil in SBR-based rubber compounds," *Rubber Chemistry and Technology*, 94, 234-247 (2021). https://doi.org/10.5254/rct.20.79990
28. Catherine A. Sutton, Alexander Polykarpov, Kiempe Jan van den Berg, Alexander Yahkind, Linda J. Lea, Dean C. Webster, Mukund P. Sibi, "Novel biobased furanic diols as potential alternatives to BPA: Synthesis and endocrine activity screening," *ACS Sustainable Chem. Eng.*, 8, 18824-18829 (2020). https://doi.org/10.1021/acssuschemeng.0c08207
29. AliReza Rahimi, Shane J. Stafslien, Lyndsi Vanderwal, John A. Finlay, Anthony S. Clare, Dean C. Webster, "Amphiphilic zwitterionic-PDMS-based surface-modifying additives to tune fouling-release of siloxane-polyurethane marine coatings," *Progress in Organic Coatings*, 149, 105931 (2020). https://doi.org/10.1016/j.porgcoat.2020.105931
30. Dean C. Webster, "Glycidyl Carbamate Functional Resins and their Applications: A Review," *Polymer International*, 70, 710-719 (2021). https://doi.org/10.1002/pi.6107
31. Deep Kalita, Ihor Tarnavchyk, Shanti Swarup, Caroline Harris, Chad Landis, Bret J. Chisholm, Dean C. Webster, "Use of High Throughput Screening Methods to Study Dual-Functional Crosslinkable Latexes," *Progress in Organic Coatings*, 149, 105898 (2020). https://doi.org/10.1016/j.porgcoat.2020.105898
32. AliReza Rahimi, Morgan Murphy, Vinod Upadhyay, Kinza Faiyaz, Dante Battocchi, Dean C. Webster, "Amphiphilically-Modified Self-Stratified Siloxane-Glycidyl Carbamate Coatings for Anti-Icing Applications," *J. Coatings Techn. and Research*, 18, 83-97 (2021). https://doi.org/10.1007/s11998-020-00402-8
33. Samantha D. Silbert, Patrick Simpson, Raul Setien, Michael Holthaus, John J. LaScala, Chad Ulven, Dean C. Webster, "Exploration of bio-based functionalized sucrose ester resins for additive manufacturing via stereolithography," *ACS Appl. Polym. Mater.*, 2, 2910-2918 (2020). https://doi.org/10.1021/acsapm.0c00417
34. Shokoofeh Ghasemi, Mukund P. Sibi, Chad A. Ulven, Dean C. Webster, Ghasideh Pourhashem, "A Preliminary Environmental Assessment of Epoxidized Sucrose Soyate (ESS)-Based Biocomposite," *Molecules*, 25, 2797 (2020). https://doi.org/10.3390/molecules25122797
35. Ivan Hevus, Nicole G. Ricapito, Stepan Tymoshenko, Shilpa N. Raja, Dean C. Webster, "Biobased carboxylic acids as components of sustainable and high-performance coating systems," *ACS Sustainable Chem. Eng.*, 8, 5750-5762 (2020). 10.1021/acssuschemeng.0c01046

36. Karan Bansal, John A. Pojman, Dean Webster, Mohiuddin Quadir, “Frontal polymerization of a thin film on a wood substrate,” *ACS Macro Lett.* 9, 169-173 (2020). DOI: 10.1021/acsmacrolett.9b00887
37. Pengfei Liu, Jing Luo, Xiaoya Liu, Ren Liu, Dean C. Webster, “Effect of the nature of the reactive group on the electron beam curing of model urethane di(meth)acrylates,” *Prog. Org. Coat.*, 138, 105371 (2020). DOI: 10.1016/j.porgcoat.2019.105371
38. Samantha D. Silbert, Eric M. Serum, John LaScala, Mukund P. Sibi, Dean C. Webster, “Biobased, nonisocyanate, 2K polyurethane coatings produced from polycarbamate and dialdehyde cross-linking,” *ACS Sustainable Chem. Eng.,* 7, 19621-19630 (2019). DOI: 10.1021/acssuschemeng.9b04713
39. Olena Shafranska, Dean C. Webster, Bret J. Chisholm, Sean McFarlane, Janice Tardiff, “Modified soybean oil as a processing oil for styrene-butadiene rubber tire tread compounds,” *Tire Science and Technology*, 47 (4), 280-291 (2019). DOI: 10.2346/tire.18.470105
40. Arvin Z. Yu, Raul A. Setien, Jonas M. Sahouani, James Docken, Jr., Dean C. Webster, “Catalyzed non-isocyanate polyurethane (NIPU) coatings from bio-based poly(cyclic carbonates), *J. Coat. Technol. Res*., 16, 41-57 (2019). DOI: 10.1007/s11998-018-0135-7
41. Ruvimbo P. Chitemere, Shane J. Stafslien, Bakhtihor Rasulev, Dean C. Webster, Mohiuddin Quadir, “Soysome: A surfactant-free, fully biobased, self-assembled platform for nanoscale drug delivery applications,” *ACS Appl. Bio Mater.*, 1, 1830-1841 (2018). DOI: 10.1021/acsabm.8b00317
42. Deep Joyti Kalita, Ihor Tarnavchyk, Mukund Sibi, Bryan R. Moser, Dean C. Webster, Bret J. Chisholm, “Biobased poly(vinyl ether)s derived from soybean oil, linseed oil, and camelina oil: Synthesis, characterization, and properties of crosslinked networks and surface coatings, *Prog. Org. Coat.*, 125, 453-462 (2018). DOI: 10.1016/j.porgcoat.2018.09.033
43. Arvin Z. Yu, Eric M. Serum, Anna C. Renner, Jonas M. Sahouani, Mukund P. Sibi, Dean C. Webster, “Renewable reactive diluents as practical styrene replacements in biobased vinyl ester thermosets,” *ACS Sust. Chem. Eng.,* 6, 12586-12592 (2018). DOI: 10.1021/acssuschemeng.8b03356
44. Zijun D. Wang, Quintin Elliott, Zhihan Wang, Raul A. Setien, Jenna Puttkammer, Angel Ugrinov, Joseph Lee, Dean C. Webster, and Qianli R. Chu, “Furfural-derived diacid prepared by photoreaction for sustainable materials synthesis, *ACS Sust. Chem. Eng.*, 6, 8136-8141 (2018). DOI: 10.1021/acssuschemeng.8b02415
45. Arvin Z. Yu, Jonas M. Sahouani, Dean C. Webster, “Highly functional methacrylated bio-based resins for UV-curable coatings,” *Prog. Org. Coat.* 122, 219-228 (2018). DOI: 10.1016/j.porgcoat.2018.05.035
46. Ruvimbo Chitemere, Shane Stafslien, Long Jiang, Dean Webster, Mohiuddin Quadir, “Soy-based soft matrices for encapsulation and delivery of hydrophilic compounds,” *Polymers*, 10 (6), 583 (2018). DOI: 10.3390/polym10060583
47. Arvin Z. Yu, Jonas M. Sahouani, Raul A. Setien, Dean C. Webster, “Effect of nature and extent of functional group modification on properties of thermosets from methacrylated epoxidized sucrose soyate,” *React. Funct. Polym.*, 218, 29-39 (2018). DOI: 10.1016/j.reactfunctpolym.2018.05.003
48. Eric M. Krall, Eric M. Serum, Mukund P. Sibi, Dean C. Webster, “Catalyst-free lignin valorization by acetoacetylation. Structural elucidation by comparison with model compounds,” *Green Chem.*, 20, 2959-2966 (2018). DOI: 10.1039/C8GC01071D

49. Vamshi K. Chidara, Samuel Stadem, Dean C. Webster, Guodong Du, “Survey of several catalytic systems for the epoxidation of a biobased ester sucrose soyate,” *Catalysis Comm.*, 111, 31-35 (2018). DOI: 10.1016/j.catcom.2018.03.027

50. Arvin Z. Yu, AliReza Rahimi, Dean C. Webster, “High performance bio-based thermosets from dimethacrylated epoxidized sucrose soyate (DMESS),” *Eur. Polym. J.*, 99, 202-211 (2018). DOI: 10.1016/j.eurpolymj.2017.12.023

51. Songqi Ma, Dean C. Webster, “Degradable thermosets based on labile bonds or linkages: a review,” *Prog. Polym. Sci*., 76, 65-110 (2018). DOI: 10.1016/j.progpolymsci.2017.07.008

52. Adlina Paramarta, Dean C. Webster, “Curing kinetics of bio-based epoxy-anhydride thermosets with zinc catalyst,” *J. Thermal Analysis and Calorimetry*, 130, 2133-2144 (2017). DOI: 10.1007/s10973-017-6704-7

53. Vinod Upadhyay, Teluka Galhenage, Dante Battocchi, Dean Webster, “Amphiphilic icephobic coatings,” *Prog. Org. Coat.*, 112, 191-199 (2017). DOI: 10.1016/j.porgcoat.2017.07.019

54. Evan D. Sitz, Dilpreet S. Bajwa, Dean C. Webster, Ewumbua M. Monono, Dennis P. Wiesenborn, Sreekala G. Bajwa, “Epoxidized sucrose soyate – A novel green resin for crop straw based low density fiberboards,” *Ind. Crop. Prod.,* 107, 400-408 (2017). DOI: 10.1016/j.indcrop.2017.04.057

55. Adlina Paramarta, Dean C. Webster, “The exploration of Michael-addition reaction chemistry to create high performance, ambient cure thermoset coatings based on soybean oil,” *Prog. Org. Coatings*, 108,59-67 (2017). DOI: 10.1016/j.porgcoat.2017.04.004

56. Claudia Isola, Heidi L. Sieverding, Ramya Raghunathan, Mukund P. Sibi, Dean C. Webster, Jayaraman Sivaguru, James, J. Stone, “Life cycle assessment of photodegradable polymeric material derived from renewable bioresources,” *J. Cleaner Production*, 142 (4), 2935-2944 (2017). DOI: 10.1016/j.jclepro.2016.10.177

57. Christopher Taylor, Ali Amiri, Adlina Paramarta, Chad Ulven, Dean Webster, “Development and weatherability of bio-based composites of structural quality using flax fiber and epoxidized sucrose soyate,” *Materials & Design*, 113, 17-26 (2017). DOI: 10.1016/j.matdes.2016.10.002

58. Teluka Galhenage, Dylan Hoffman, Samantha Silbert, Shane Stafslien, Justin Daniels, Tatjana Miljkobic, John Finlay, Sofia Franco, Anthony Clare, Brian Nedved, Michael Hadfield, Dean Wendt, Grant Waltz, Lenora Brewer, Serena Teo, Chin-Sing Lim, Dean Webster, "Fouling-release performance of silicone oil-modified siloxane-polyurethane coatings,” *ACS Applied Materials and Interfaces*, 8, 29025–29036 (2016). DOI: 10.1021/acsami.6b09484

59. Songqi Ma, Curtiss S. Kovash, Jr., Dean C. Webster, “Effect of solvents on the curing and properties of fully bio-based thermosets for coatings,” *J. Coat. Tech. Res.*, 14, 367-375 (2017). DOI: 10.1007/s11998-016-9863-8

60. Teluka P. Galhenage, Dean C. Webster, Augusto M. S. Moreira, Ryan J. Burgett, Shane J. Stafslien, Lyndsi Vanderwal, John A. Finlay, Sofia C. Franco, Anthony S. Clare, “Poly (ethylene) glycol-modified, amphiphilic, siloxane polyurethane coatings and their performance as fouling-release surfaces,” *J. Coat. Tech. Res*., 14, 307-322 (2017). DOI: 10.1007/s11998-016-9862-9

61. Shane J. Stafslien, Stacy Sommer, Dean C. Webster, Rajan Bodkhe, Robert Pieper, Justin Daniels, Lyndsi Vander Wal, Rhiannon David, Maureen C. Callow, James A Callow, Emily Ralston, Geoff Swain, Lenora Brewer, Dean Wendt, Gary H. Dickinson, Chin-Sing Lim, Serena Lay-Ming Teo, “Comparison of laboratory and field testing performance evaluations

of siloxane-polyurethane fouling-release marine coatings," *Biofouling*, 32, 949-968 (2016). DOI: 10.1080/08927014.2016.1211269

62. Adlina Paramarta, Dean C. Webster, "Bio-based high performance epoxy-anhydride thermosets for structural composites: The effect of composition variables," *Reactive and Functional Polymers*, 105, 140-149 (2016). DOI: 10.1016/j.reactfunctpolym.2016.06.008
63. Songqi Ma, Dean C. Webster, Farukh Jabeen, "Hard and flexible, degradable thermosets from renewable bioresources with the assistance of water and ethanol," *Macromolecules*, 49, 3780-3788 (2016). DOI: 10.1021/acs.macromol.6b00594
64. Ali Amiri, Arvin Yu, Dean Webster, Chad Ulven, "Bio-based resin reinforced with flax fiber as thermorheologically complex materials," *Polymers*, 8(4), 153 (2016). DOI: 10.3390/polym8040153
65. Nassibeh Hosseini, Dean C. Webster, Chad Ulven, "Advanced biocomposite from highly functional Methacrylated Epoxidized Sucrose Soyate (MAESS) resin derived from vegetable oil and fiberglass fabric for composite applications," *Eur. Polym. J.*, 79, 63-71 (2015). DOI: 10.1016/j.eurpolymj.2016.04.012
66. Songqi Ma, Dean C. Webster, "Naturally occurring acids as cross-linkers to yield VOC-free, high performance, fully bio-based, degradable thermosets," *Macromolecules*, 48, 7127-7137 (2015). DOI: 10.1021/acs.macromol.5b01923
67. Ewumbua Monono, James Bahr, Scott Pryor, Dean Webster, Dennis Wiesenborn, "Optimizing process parameters of epoxidized sucrose soyate synthesis for industrial scale production," *Org. Process Res. Dev.*, 19, 1683-1692 (2015). DOI: 10.1021/acs.oprd.5b00251
68. Erin Pavlacky, Dean C. Webster, "An in situ intercalative polymerization method for preparing UV curable clay-polymer nanocomposites," *J. Appl. Polym. Sci*., 132, 42601 (2015). DOI: 10.1002/app.42601
69. Nassibeh Hosseini, Samad Javid, Ali Amiri, Chad Ulven, Dean C. Webster, Ghodrat Karami, "Micromechanical viscoelastic analysis of flax fiber reinforced bio-based polyurethane composites," *J. Renewable. Materials*, 3, 205-215 (2015). DOI: 10.7569/JRM.2015.634112
70. Ewumbua M. Monono, Dean C. Webster, Dennis P. Wiesenborn, "Pilot scale (10 kg) production and characterization of epoxidized sucrose soyate," Ind. Crops and Prod., 74, 987-997 (2015). DOI: 10.1016/j.indcrop.2015.06.035
71. Chin-Sing Lim, Serena Lay-Ming Teo, Gary H. Dickinson, Stacy Sommer, Rajan B. Bodkhe, Dean C. Webster, Young Ying Loo, "A small-scale waterjet test method for screening novel foul-release coatings," *J. Coat. Tech. Res.*, 12, 533- 542 (2015). DOI: 10.1007/s11998-014-9648-x
72. Saravanakumar Rajendran, Ramya Raghunathan, Ivan Hevus, Retheesh Krishnan, Angel Ugrinov, Mukund P. Sibi, Dean C. Webster, Sivaguru Jayaraman, "Programmed photodegradation of polymeric/oligomeric materials derived from renewable bioresources," *Angewandte Chemie, International Edition*, 54, 1159-1163 (2015). DOI: 10.1002/anie.201408492
73. Rajan B. Bodkhe, Shane J. Stafslien, Justin Daniels, Nicholas Cilz, Andrew J. Muelhberg, Stephanie E. M. Thompson, Maureen E. Callow, James A. Callow, Dean C. Webster, "Zwitterionic siloxane-polyurethane fouling-release coatings," *Prog. Org. Coat.*, 78, 369-380 (2015). DOI: 10.1016/j.porgcoat.2014.07.011

74. Curtiss Kovash, Erin Pavlacky, Sermadurai Selvakumar, Mukund P. Sibi, Dean C. Webster, "Thermoset coatings from epoxidized sucrose soyate and blocked, biobased dicarboxylic acids," *ChemSusChem*, 7, 2289-2294 (2014). DOI: 10.1002/cssc.201402091
75. Jingling Yan, Dean C. Webster, "Thermosets from highly functional methacrylated epoxidized sucrose soyate," *Green Materials*, 2, 132-143 (2014). DOI: 10.1680/gmat.14.00002
76. Thomas J. Nelson, Bryan Masaki, Zachary Morseth, Dean C. Webster, "Highly functional bio-based polyols and their use in melamine-formaldehyde coatings," *J. Coat. Tech. Res.*, 10, 757-767 (2013). DOI: 10.1007/s11998-013-9524-0
77. Vinod Upadhyay, Umesh D. Harkal, Dean C. Webster, Gordon P. Bierwagen, "Preliminary investigation of the impact of polymer composition on electrochemical properties of coatings as determined by electrochemical impedance spectroscopy," *J. Coat. Tech. Res.*, 10, 865-878 (2013). DOI: 10.1007/s11998-013-9497-z
78. Rajan B. Bodkhe, Dean C. Webster, "Synthesis and characterization of novel polysiloxane based ABA-type triblock copolymers using ATRP," *e-Polymers*, 13, 124-134 (2014). DOI: 10.1515/epoly-2013-0112
79. Thomas J. Nelson, Teluka Galhenage, Dean C. Webster, "Catalyzed crosslinking of highly functional biobased epoxy resins," *J. Coat. Tech. Res.*, 10, 589-600 (2013). DOI: 10.1007/s11998-013-9488-0
80. Thomas J. Nelson, Dean C. Webster, "Monomer-grafted sucrose ester resins," *J. Coat. Tech. Res.*, 10, 515-525 (2013). DOI: 10.1007/s11998-013-9486-2
81. Thomas J. Nelson, Lindsey Bultema, Neal Eidenschink, Dean C. Webster, "Bio-based high functionality polyols and their use in 1K polyurethane coatings," *J. Renewable Materials*, 1, 141-153 (2013). DOI: 10.7569/JRM.2013.634113
82. Erin Pavlacky, Dean C. Webster, "Polymer-clay nanocomposite plasticization: Elucidating the influence of quaternary alkyl ammonium organic modifiers," *J. Appl. Polym. Sci.*, 129, 324-333 (2012). DOI: 10.1002/app.38732
83. Umesh D. Harkal, Andrew J. Muehlberg, Dean C. Webster, "Linear glycidyl carbamate (GC) resins for highly flexible coatings," *J. Coat. Tech. Res.*, 10(2), 141-151 (2012). DOI: 10.1007/s11998-012-9415-9
84. Shane Stafslien, Justin Daniels, James Bahr, Bret Chisholm, Abdullah Ekin, Dean Webster, Beatriz Orihuela, Daniel Rittschof, "An improved laboratory reattachment method for the rapid assessment of adult barnacle adhesion strength to fouling-release marine coatings," *J. Coat. Tech. Res.*, 9, 651-665 (2012). DOI: 10.1007/s11998-012-9409-7
85. Rajan B. Bodkhe, Shane J. Stafslien, Nicholas Cilz, Justin Daniels, Stephanie E. M. Thompson, Maureen E. Callow, James A. Callow, Dean C. Webster, "Polyurethanes with amphiphilic surfaces made using telechelic functional PDMS having orthogonal acid functional groups," *Prog. Org. Coat.*, 75, 28-38 (2012). DOI: 10.1016/j.porgcoat.2012.03.006
86. Erin Pavlacky, Neena Ravindran, Dean C. Webster "Novel in situ synthesis in the preparation of UV-curable nanocomposite barrier coatings," *J. Appl. Polym. Sci.,* 125, 3836-3848 (2012). DOI: 10.1002/app.36716
87. Jingling Yan, Sharonie Ariyasivam, Dimuthu Weerasinghe, Jie He, Bret Chisholm, Zhigang Chen, Dean Webster, "Thiourethane thermoset coatings from bio-based thiols," *Polymer International*, 61, 602-608 (2012). DOI: 10.1002/pi.3215

88. Rajan B. Bodkhe, Stephanie E.M. Thompson, Carolyn Yehle, Nicholas Cilz, Justin Daniels, Shane J. Stafslien, Maureen E. Callow, James A. Callow, and Dean C. Webster, "The effect of formulation variables on fouling-release performance or stratified siloxane-polyurethane coatings," *J. Coat. Tech. Res.*, 9, 235-249 (2012). DOI: 10.1007/s11998-011-9362-x
89. Xiao Pan, Dean C. Webster, "New biobased high functionality polyols and their use in polyurethane coatings," *ChemSusChem*, 5, 419-429 (2012). DOI: 10.1002/cssc.201100415
90. Xiao Pan, Thomas J. Nelson, Dean C. Webster, "Novel biobased dual-cure coating system," *Prog. Org. Coat.*, 73, 344-354 (2012). DOI: 10.1016/j.porgcoat.2010.11.020
91. Umesh D. Harkal, Andrew J. Muehlberg, Dean C. Webster, "UV curable glycidyl carbamate resins," *Prog. Org. Coat.*, 73, 19-25 (2012). DOI: 10.1016/j.porgcoat.2011.08.014
92. Umesh D. Harkal, Andrew J. Muehlberg, Peter A. Edwards and Dean C. Webster, "Novel Water Dispersible Glycidyl Carbamate (GC) Resins and Waterborne Amine-Cured Coatings," *J. Coat. Tech. Res.*, 8, 735-747 (2011). DOI: 10.1007/s11998-011-9356-8
93. Stacy A. Sommer, Joseph R. Byrom, Hanna D. Fischer, Rajan B. Bodkhe, Shane J. Stafslien, Justin Daniels, Carolyn Yehle, Dean C. Webster, "Effects of pigmentation on siloxane-polyurethane coatings and their performance as fouling-release marine coatings," *J. Coat. Tech. Res.*, 8, 661-670 (2011). DOI: 10.1007/s11998-011-9340-3
94. Jennifer F. Wu, Shashi Fernando, Dimuthu Weerasinghe, Zhigang Chen, Dean C. Webster, "Synthesis of Soybean Oil-based Thiol Oligomers," *ChemSusChem*, 4, 1135-1142 (2011). DOI: 10.1002/cssc.201100071
95. Xiao Pan, Dean C. Webster, "Impact of Structure & Functionality of Core Polyol in Highly Functional Biobased Epoxy Resins," *Macro. Rapid Comm.*, 32, 1324-1330 (2011). DOI: 10.1002/marc.201100215
96. Xiao Pan, Partha Sengupta, Dean C. Webster, "High Biobased Content Epoxy-anhydride Thermosets from Epoxidized Sucrose Esters of Fatty Acids," *Biomacromolecules*, 12, 2416-2428 (2011). DOI: 10.1021/bm200549c
97. Xiao Pan, Partha Sengupta, Dean C. Webster, "Novel Biobased Epoxy Compounds: Epoxidized Sucrose Esters of Fatty Acids," *Green Chemistry*, 13, 965-975 (2011). DOI: 10.1039/C0GC00882F
98. F. Sarwar, Z. Chen, J. Wu, D. C. Webster, V. R. Marinov, "Excimer laser ablation of high aspect ratio microvias using a novel sensitizer-enhanced photopolymer," *J. Microelec. and Electron. Packaging*, 8, 66-71 (2011). DOI: 10.4071/imaps.294
99. Mohammed J. Nasrullah, Ankit Vora, Dean C. Webster, "Block copolymer synthesis via a combination of ATRP and RAFT using click chemistry," *Macromol. Chem. & Phys.* 212, 539-549 (2011). DOI: 10.1002/macp.201000628
100. Samali Datta, Kristen Keller, Douglas L. Schulz, Dean C. Webster, "Conductive adhesives from low-VOC silver inks for advanced microelectronics applications," *IEEE Trans. Components, Packaging and Manufacturing Technology*, 1, 69-75 (2011). DOI: 10.1109/TCPMT.2010.2101390
101. Samali Datta, Dean C. Webster, "Cationic UV curable conductive composites from exfoliated graphite," *Macromol. Mater. & Engr.*, 296, 70-82 (2011). DOI: 10.1002/mame.201000240
102. Stacy Sommer, Abdullah Ekin, Dean C. Webster, Shane Stafslien, Justin Daniels, Lyndsi Vander Wal, Stephanie E.M. Thompson, Maureen E. Callow, James A. Callow, "A

preliminary study on the properties and fouling-release performance of siloxane-polyurethane coatings prepared from PDMS macromers," *Biofouling*, 26, 961-972 (2010). DOI: 10.1080/08927014.2010.531272

103. Umesh D. Harkal, Aaron J. Muehlberg, Jung Li, James T. Garrett, Dean C. Webster, "The influence of structural modification and composition of glycidyl carbamate (GC) resins on their viscosity and coating performance," *J. Coat. Tech. & Res.*, 7(5) 531-546 (2010). DOI: 10.1007/s11998-010-9262-5

104. Zhigang Chen, Bret J. Chisholm, Radhika Patani, Jennifer F. Wu, Shashi Fernando, Katie Jogodzinski, Dean C. Webster, "Soy-based UV curable thiol-ene coatings," *J. Coat. Tech. & Res.*, 7(5) 603-613 (2010). DOI: 10.1007/s11998-010-9241-x

105. Neena Ravindran, Dipak K. Chattopadhyay, Autumn Zakula, Dante Battocchi, Dean C. Webster, Gordon P. Bierwagen, "Thermal stability of magnesium-rich primers based on glycidyl carbamate resins," *Polym. Degr. and Stab.*, 95(7), 1160-1166 (2010). DOI: 10.1016/j.polymdegradstab.2010.04.015

106. Ankit Vora, Mohammed J. Nasrullah, Dean C. Webster, "Novel Tailor-Made Diols for Polyurethane Coatings Using a Combination of Controlled Radical Polymerization, Ring Opening Polymerization and Click Chemistry," *J. Coat. Tech. & Res.*, 7(4), 409-417 (2010). DOI: 10.1007/s11998-009-9210-4

107. D. K. Chattopadhyay, Dean C. Webster, "Thermal stability and flame retardancy of polyurethanes," *Progress in Polymer Science*, **34**(10), 1068-1133 (2009). DOI: 10.1016/j.progpolymsci.2009.06.002

108. D. K. Chattopadhyay, Dean C. Webster, "Hybrid coatings from novel silane-modified glycidyl carbamate resins and amine crosslinkers," *Progress in Organic Coatings*, **66**(1), 73-85 (2009). DOI: 10.1016/j.porgcoat.2009.06.004

109. Ankit Vora, Kunal Singh, Dean C. Webster, "A new approach to 3-miktoarm star polymers using a combination of reversible addition-fragmentation chain transfer (RAFT) and ring-opening polymerization (ROP) via "click" chemistry," *Polymer*, **50**(13), 2768-2774 (2009). DOI: 10.1016/j.polymer.2009.03.054

110. Zhigang Chen, Bret J. Chisholm, Dean C. Webster, Ying Zhang, Sandeep Patel, "Study of epoxidized-cardanol containing cationic UV curable materials," *Prog. Org. Coat.*, **65**(2), 246-250 (2009). DOI: 10.1016/j.porgcoat.2008.11.008

111. Mohammed J. Nasrullah, Dean C. Webster, "Parallel synthesis of polymer libraries using atom transfer radical polymerization (ATRP)," *Macromol. Chem. Phys.,* **210**(8), 640-650 (2009). DOI: 10.1002/macp.200800578

112. Alex J. Kugel, Laura E. Jarabek, Justin W. Daniels, Lyndsi J. Vander Wal, Scott M. Ebert, Michael J. Jepperson, Shane J. Stafslien, Robert J. Pieper, Dean C. Webster, James Bahr, Bret J. Chisholm, "Combinatorial materials research applied to the development of new surface coatings XII: Novel, environmentally friendly antimicrobial coatings derived from biocide-functional acrylic polyols and isocyanates," *J. Coat. Tech & Res.,* **6**(1), 107-121 (2009). DOI: 10.1007/s11998-008-9124-6

113. D. K. Chattopadhyay, Autumn D. Zakula, Dean C. Webster, "Organic–inorganic hybrid coatings prepared from glycidyl carbamate resin, 3-aminopropyl trimethoxy silane and tetraethoxyorthosilicate," *Progress in Organic Coatings*, **64**(2-3) 128-137 (2009). DOI: 10.1016/j.porgcoat.2008.09.008

114. Bret J. Chisholm, Shane J. Stafslien, Partha Majumdar, Dean C. Webster, "Fast-moving solutions: automated processes speed up development of marine antifouling coatings," *European Coatings Journal*, (11), 32, 34, 36-37 (2008).

115. D. K. Chattopadhyay, Aaron J. Muehlberg, Dean C. Webster, "Organic-inorganic hybrid coatings prepared from glycidyl carbamate resins and amino-functional silanes," *Progress in Organic Coatings*, **63**(4) 405-415 (2008). DOI: 10.1016/j.porgcoat.2008.06.009

116. Mohammed J. Nasrullah, James A. Bahr, Christy Gallagher-Lein, Dean C. Webster, Richard R. Roesler, Peter Schmitt, "Automated parallel polyurethane dispersion synthesis and characterization," *J. Coat. Tech. & Res.*, **6**(1), 1-10 (2009). DOI: 10.1007/s11998-008-9102-z

117. Eraldo Ribeiro, Shane J. Stafslien, Franck Casse, James A. Callow, Maureen E. Callow, Robert J. Pieper, Justin W. Daniels, James A. Bahr, Dean C. Webster, "Automated image-based method for laboratory screening of coating libraries for adhesion of algae and bacterial biofilms," *J. Combi. Chem.*, **10**(4), 586-594 (2008). DOI: 10.1021/cc800047s

118. Zhigang Chen, Ying Zhang, Bret J. Chisholm, Dean C. Webster, "A humidity blocker approach to overcoming the humidity interference with cationic photopolymerization," *J. Polym. Sci. Part A: Polym. Chem.*, **46**(13) 4434-4351 (2008). DOI: 10.1002/pola.22754

119. Dean C. Webster, "Combinatorial and high throughput methods in macromolecular materials research and development," *Macromol. Chem. Phys.,* **209**(3), 237-246 (2008). Invited trend article. DOI: 10.1002/macp.200700558

120. Partha Majumdar and Dean C. Webster, "Surface Microtopography in Siloxane-Polyurethane Thermosets: The Influence of Siloxane and Extent of Reaction," *Polymer*, **48**(26), 7499-7509 (2007). DOI: 10.1016/j.polymer.2007.10.044

121. Ankit Vora, Mohammed Nasrullah, Dean C. Webster, "Synthesis and characterization of novel epoxy and oxetane functional reversible addition fragmentation transfer agents," *Macromolecules*, **40**(24), 8586-8592 (2007). DOI: 10.1021/ma071065q

122. Somnath Singh, Dean C. Webster, Jagdish Singh, "Thermosensitive Polymers: Synthesis, characterization, and delivery of proteins," *International Journal of Pharmaceutics*, **341**, 68-77 (2007). DOI: 10.1016/j.ijpharm.2007.03.054

123. Robert J. Pieper, Abdullah Ekin, Dean C. Webster, Franck Casse, James A. Callow, Maureen E. Callow, "A Combinatorial Approach to Study the Effect of Acrylic Polyol Composition on the Properties of Crosslinked Siloxane-Polyurethane Fouling-Release Coatings," *J. Coatings Tech. & Res.*, 4(4), 453-461 (2007). DOI: 10.1007/s11998-007-9032-1

124. Abdullah Ekin, Dean C. Webster, Justin W. Daniels, Shane J. Stafslien, Franck Casse, James A. Callow, Maureen E. Callow, "Synthesis, Formulation and Characterization of Siloxane-Polyurethane Coatings for Underwater Marine Applications Using Combinatorial High-Throughput Experimentation," *J. Coatings Tech. & Res.*, 4(4),435-451 (2007). DOI: 10.1007/s11998-007-9039-7

125. Dean C. Webster, Bret J. Chisholm, Shane J. Stafslien, "Mini-Review: Combinatorial approaches for the design of novel coatings systems," *Biofouling*, **23** (3/4), 179-192 (2007). DOI: 10.1080/08927010701250948

126. Bret J. Chisholm, Dean C. Webster, James W. Bennett, Melissa Berry, David A. Christianson, Jongsoo Kim, Bret Mayo, Nathan J. Gubbins, "Combinatorial Materials Research Applied to the Development of New Surface Coatings VII: An Automated System for Adhesion Testing," *Rev. Sci. Instr.*, 78, 072213 (2007). DOI: 10.1063/1.2755505

127. Neena Ravindran, Ankit Vora, Dean C. Webster, "Properties of Nanocomposites based on Maleate-Vinyl Ether Donor-Acceptor UV-curable systems," *J. Appl. Polym. Sci.,* **105** (6), 3378-3390 (2007). DOI: 10.1002/app.25971

128. Franck Casse, Eraldo Ribeiro, Abdullah Ekin, Dean C. Webster, James A. Callow, Maureen E. Callow, "Laboratory Screening of Coating Libraries for Algal Adhesion," *Biofouling*, 23 (3/4), 267-276 (2007). DOI: 10.1080/08927010701288336

129. Partha Majumdar, Dean C. Webster, "High-throughput combinatorial characterization of thermosetting siloxane-urethane coatings having spontaneously formed microtopographical surfaces," *J. Coatings Tech. & Res.*, 4(2), 131-138 (2007). DOI: 10.1007/s11998-007-9015-2

130. Bret J. Chisholm, Dean C. Webster, "The development of coatings using combinatorial/high throughput methods: a review of the current status," *J. Coatings Tech. & Res.*, 4(1), 1-12 (2007). DOI: 10.1007/s11998-007-9000-9

131. Zhigang Chen, Dean C. Webster, "Study of the Effect of Hyperbranched Polyols on Cationic UV Curable Coating Properties," *Polym. Int*., 56(6), 754-763 (2007). DOI: 10.1002/pi.2202

132. Shane J. Stafslien, Justin Daniels, Bret Mayo, David A. Christianson, Bret J. Chisholm, Abdullah Ekin, Dean C. Webster, Geoffrey Swain, "Combinatorial materials research applied to the development of new surface coatings. IV: A high-throughput bacterial retention and retraction assay for screening fouling-release performance of coatings." *Biofouling*, **23** (1), 45-54 (2007). DOI: 10.1080/08927010601137856

133. Abdullah Ekin, Dean C. Webster, "Combinatorial and High-Throughput Screening of the Effect of Siloxane Composition on the Surface Properties of Crosslinked Siloxane-Polyurethane Coatings," *J. Combinatorial Chemistry,* **9**, 178-188 (2007). DOI: 10.1021/cc060115k

134. Zhigang Chen, Dean C. Webster, "Carrier Gas UV Laser Ablation Sensitizers for Photopolymerized Thin Films," *J. Photochem. & Photobiol. A: Chemistry,* **185**, 115-126 (2007). DOI: 10.1016/j.jphotochem.2006.05.015

135. Abdullah Ekin, Dean C. Webster, "Synthesis and Characterization of Novel Hydroxyalkyl Carbamate and Dihydroxyalkyl Carbamate Terminated Poly(dimethylsiloxane) Oligomers and Their Block Copolymers with Poly(ε-caprolactone)," *Macromolecules,* **39**, 8659-8668 (2006). DOI: 10.1021/ma061629a

136. Partha Majumdar, David A. Christianson, Dean C. Webster, "Automated Determination of Pot Life of Two-Component Reactive Coatings," *Prog. Org. Coat.,* **57**, 210-214 (2006). DOI: 10.1016/j.porgcoat.2006.08.012

137. Fawn M. Uhl, Dean C. Webster, Siva P. Davuluri, Shing-chung Wong, "UV Curable Epoxy Acrylate-Clay Nanocomposites," *Eur. Polym. J.,* **42**, 2596-2605 (2006). DOI: 10.1016/j.eurpolymj.2006.06.016

138. Peter A. Edwards, Grant Striemer, Dean C. Webster, "Synthesis, Characterization And Self-Crosslinking Of Glycidyl Carbamate Functional Resins," *Prog. Org. Coat.,* **57**, 128-139 (2006). DOI: 10.1016/j.porgcoat.2006.08.002

139. Bret J. Chisholm, David A. Christianson, Dean C. Webster, "Combinatorial Materials Research Applied to the Development of Surface Coatings. II. Process Capability Analysis of the Coating Formulation Workflow," *Prog. Org. Coat.*, **57**, 115-122 (2006). DOI: 10.1016/j.porgcoat.2006.07.003

140. Abdullah Ekin, Dean C. Webster, “Library Synthesis and Characterization of 3-aminopropyl Terminated Poly(dimethylsiloxane)s and Poly(ε-caprolactone)-b-Poly(dimethylsiloxane)s,” *J. Polym. Sci. Part A: Polym. Chem.,* **44**(16), 4880-4894 (2006). DOI: 10.1002/pola.21593

141. Partha Majumdar, David A. Christianson, Richard R. Roesler, Dean C. Webster, “Optimization of coating film deposition when using an automated high-throughput coating application unit,” *Prog. Organic Coat.*, **56**, 169-177 (2006). DOI: 10.1016/j.porgcoat.2006.03.006

142. Zhigang Chen, Dean C. Webster, “Synthesis and Study of Novel Polyol Bound Photosensitizers for Cationic UV Curable Systems,” *J. Polym. Sci. Part A: Polym. Chem.*, **44**(15), 4435-4449 (2006). DOI: 10.1002/pola.21523

143. Zhigang Chen, Dean C. Webster, “Study of cationic UV curing and UV laser ablation behavior of coatings sensitized by novel sensitizers,” *Polymer*, **47**, 3715-3726 (2006). DOI: 10.1016/j.polymer.2006.03.091

144. Partha Majumdar, Dean C. Webster, “Influence of solvent composition and degree of reaction on the formation of surface microtopography in a thermoset siloxane–urethane system,” *Polymer*, **47**, 4172-4181 (2006). DOI: 10.1016/j.polymer.2006.02.085

145. Neena Ravindran and Dean C. Webster, “Effect of polymer composition on performance properties of maleate-vinyl ether donor-acceptor UV-curable systems,” *JCT Research,* 3(3), 213-219 (2006). DOI: 10.1007/BF02774510

146. Partha Majumdar, Dean C. Webster, “Preparation of siloxane-urethane coatings having spontaneously formed biphasic microtopographical surfaces,” *Macromolecules*, **38**, 5857-5859 (2005). DOI: 10.1021/ma050967t

147. Peter A. Edwards, Grant Striemer, Dean C. Webster, “Novel Polyurethane Coating Technology through Glycidyl Carbamate Chemistry,” *JCT Research,* **2**(7), 517-528 (2005). DOI: 10.1007/s11998-005-0011-0

148. Dean C. Webster, “Radical Change in Research and Development: The Shift from Conventional Methods to High Throughput Methods,” *JCT CoatingsTech,* **2**(15), 24-29 (2005).

149. Sibao Chen, Robert Pieper, Dean C. Webster, Jagdish Singh, "Triblock copolymers: synthesis, characterization, and delivery of a model protein." *International Journal of Pharmaceutics*, **288**, 207-218 (2005). DOI: 10.1016/j.ijpharm.2004.09.026

150. Fawn M. Uhl, Siva Prashanth Davuluri, Shing-Chung Wong, Dean C. Webster, “Organically modified montmorillonites in UV curable urethane acrylates,” *Polymer*, **45**, 6175-6187 (2004). DOI: 10.1016/j.polymer.2004.07.001

151. Dean C. Webster, James W. Bennett, Sigrid C. Keubler, Mary Beth Kossuth, and Sigridur Jonasdottir, “High throughput workflow for the development of coatings,” *JCT CoatingsTech,* **1** (6), 34-39 (2004).

152. Heather A. Nash, Heidi J. Docktor, and Dean C. Webster, “Effect of composition on performance properties in cationic UV-curable coating systems,” *JCT Research,* **1** (3), 153-161 (2004). DOI: 10.1007/s11998-004-0010-6

153. Fawn M. Uhl, Prashanth Siva Davuluri, Shing-Chung Wong, Dean C. Webster, “Polymer Films Possessing Nanoreinforcements via Organically Modified Layered Silicate,” *Chem. Mater.*, **16**(6), 1135-1142 (2004). DOI: 10.1021/cm035137d

154. Dean C. Webster, "Cyclic Carbonate Functional Polymers and their Applications," *Prog. Org. Coatings,* **47**(1), 77-86 (2003). DOI: 10.1016/S0300-9440(03)00074-2

155. Dean C. Webster and Allen L. Crain, "Synthesis of latexes containing diesters of 3-butene-1,2-diol," *Prog. Org. Coatings*, **45**(1), 43-48 (2002). DOI: 10.1016/S0300-9440(02)00099-1

156. Dean C. Webster and Allen L. Crain, "Synthesis and applications of cyclic carbonate functional polymers in thermosetting coatings," *Prog. Org. Coatings*, **40**, 275-282 (2000). DOI: 10.1016/S0300-9440(00)00114-4

157. Dean C. Webster, "Cyclic Carbonate Functional Polymers: Synthesis and Applications," *Polymer News*, **23**(6), 187-192 (1998). (Invited)

158. Dean C. Webster, Allen L. Crain, "Synthesis of Cyclic Carbonate Functional Polymers," *ACS Symposium Series 704* (Functional Polymers), 303-320 (1998). DOI: 10.1021/bk-1998-0704.ch021

159. James C. Scanlan, Dean C. Webster, Allen L. Crain, "Correlation Between Network Mechanical Properties and Physical Properties in Polyester-urethane Coatings," *ACS Symposium Series 648* (Film Formation in Waterborne Coatings), 222-234 (1996). DOI: 10.1021/bk-1996-0648.ch014

160. Niranjan M. Patel, David W. Dwight, James L. Hedrick, Dean C. Webster, and James E. McGrath, "Surface and Bulk Phase Separation in Block Copolymers and their Blends. Polysulfone/Polysiloxane," *Macromolecules*, **21**, 2689-2696 (1988). DOI: 10.1021/ma00187a007

161. D. Tyagi, J. L. Hedrick, D. C. Webster, J. E. McGrath, and G. L. Wilkes, "Structure-Property Relationships in Perfectly Alternating Segmented Polysulfone/Polydimethylsiloxane Copolymers," *Polymer*, **29**, 833-844 (1988). DOI: 10.1016/0032-3861(88)90142-5

162. P. J. Andolino Brandt, D. C. Webster, J. E. McGrath, "Multiple Damping Materials I. Polysiloxane-Polyarylester Block Copolymers: Synthesis and Characterization," *Natl. SAMPE Symp. Exhib.*, 30 (Adv. Technol. Mater. Processes), 959-970 (1985).

163. Dean C. Webster, James L. Hedrick, and James E. McGrath, "Engineering Homopolymer - Block Copolymer Blends. I. Polysulfone with Polysulfone Dimethylsiloxane Block Copolymers," Natl. SAMPE Symp. Exhib., 29th (Technology Vectors), 1085-1094 (1984).

164. Dean C. Webster, "Instrument Automation using the Sinclair ZX-81," *American Laboratory*, February 1983.

165. Ajit K. Banthia, David Lunsford, Dean C. Webster, and J. E. McGrath, "Interfacial Synthesis Part I. Phase Transfer Catalyzed Synthesis of Polyhydroxyethers," *J. Macromol. Sci., - Chem.*, **A15**(5), 943-966 (1981). DOI: 10.1080/00222338108056777

Book Chapters

1. D. C. Webster, "Bio-based Polymers and Resins in Paints and Coatings," in Bioplastics and Biocomposites: A Practical Introduction, ed. D. Grewell, Royal Society of Chemistry, 2023, 79, ch. 10, pp. 249-273. https://doi.org/10.1039/BK9781788010085-00249

2. Dean C. Webster, "Paints, Varnishes, and Related Products," Bailey's Industrial Oil and Fat Products (7th Edition), F. Shahidi, ed., John Wiley & Sons, in press (2020). https://doi.org/10.1002/047167849X.bio076.pub2

3. Madhura Pade, Dean C. Webster, "Self-stratified siloxane-polyurethane fouling-release marine coating strategies: A review," in Marine Coatings and Membranes, V. Mittal, ed., Central West Publishing, Australia, 1-36 (2019).

4. Ali Amiri, Victoria Burkart, Arvin Yu, Dean Webster, Chad Ulven, "13-The potential of natural composite materials in structural design," in Sustainable Composites for Aerospace Applications, Woodhead, 269-291 (2018). DOI: 10.1016/B978-0-08-102131-6.00013-X

5. D. K. Chattopadhyay, Dean C. Webster, "Nanomaterials for Coatings Applications," *Encyclopedia of Nanoscience and Nanotechnology*, H. S. Nalwa, ed., (2010).

6. Dean C. Webster, Michael A. R. Meier, "Polymer Libraries: Preparation and Application," *Advances in Polymer Science* (M.A.R. Meier and D. C. Webster, eds.,) 225, 1-15 (2010). DOI: 10.1007/12_2009_15

7. Dean C. Webster, Bret J. Chisholm, Shane J. Stafslien, "High throughput methods for the design of fouling control coatings," in *Advances in Marine Antifouling Coatings and Technologies* (Claire Hellio and Diego Yebra, eds.) Woodhead Publishing Ltd (Cambridge, UK), 2009. DOI: 10.1533/9781845696313.2.365

8. Dean C. Webster, Bret J. Chisholm, "New Directions in Antifouling Technology," in *Biofouling* (Simone Dürr and Jeremy Thomason, eds), Blackwell Publishing (Oxford, UK), 366-387, (2010). DOI: 10.1002/9781444315462.ch25

9. Partha Majumdar, Abdullah Ekin, Dean C. Webster, "Thermoset Siloxane-Urethane Fouling Release Coatings," ACS Symposium Series 957 (Smart Coatings), 61-75, (2007). DOI: 10.1021/bk-2007-0957.ch005

10. Fawn M. Uhl, Christine M. Gallagher-Lein, David A. Christianson, James A. Bahr, Bret J. Chisholm, Nathan J. Gubbins and Dean C. Webster, "A combinatorial approach to rapid structure-property screening of UV-curable cycloaliphatic epoxies," *Combinatorial and High-Throughput Discovery and Optimization of Catalysts and Materials* (R. Potyrailo and W. F. Maier, eds.), CRC Press, 221-238 (2006).

11. J. M. Lambert, D. C. Webster, J. E. McGrath, "Synthesis of Segmented Poly(Arylene Ether Sulfone)-Poly(arylene Terephthalate) Copolymers," in "Advances in Polymer Synthesis" (B.M. Culbertson and J.E. McGrath, eds.), 93-112 (1985). DOI: 10.1007/978-1-4613-2121-7_4

12. D. C. Webster and J. E. McGrath, "Poly(arylether)-Poly(arylate) Block Copolymers: I. Polysulfone - Bis-A Terephthalate Systems," in "Contemporary Topics in Polymer Science, Vol 4," W. J. Bailey and T. Tsuruta, eds., Plenum, NY, 1984, pp. 959-975. DOI: 10.1007/978-1-4615-6743-1_61

13. J. E. McGrath, T. C. Ward, R. Viswanathan, and D. C. Webster, "Engineering Thermoplastic Block Copolymers," Natl. SAMPE Tech. Conf., 12th (Materials 80), 305-318 (1980).

Books

Michael A. R. Meier and Dean C. Webster, eds., "Polymer Libraries," *Advances in Polymer Science*, vol. 225, (2010).

PATENTS

1. Dean C. Webster, Alireza Rahimi, “Curable Coating Compositions Containing Glycidyl Carbamate Resins and Amphiphilic Glycidyl-Carbamate-Functional Prepolymers having Fouling-Release and Anti-Icing Properties,” U. S. Pat. No. 11,827,804 (2023).

2. Dean C. Webster, Mukund P. Sibi, Catherine A. Sutton, Deep J. Kalita, Eric M. Serum, “Bio-based diols from sustainable raw materials, uses therof to make diglycidyl ethers, and their coatings,” U. S. Pat. No. 11,691,956 (2023).

3. Dean C. Webster, Mukund P. Sibi, Samantha D. Silbert, Eric M. Serum, “Biobased, non-isocyanate, 2K polyurethane coatings produced from polycarbamate and dialdehyde crosslinking,” U. S. Pat. No. 11,639,450 (2023).

4. Dean C. Webster, Jackson Benda, “Use of amphiphilic surface modifying additives to improve performance of siloxane – polyurethane fouling - release coatings,” U. S. Pat. No. 11,560,493 (2023).

5. Sivaguru Jayaraman, Akila Iyer, Mukund Sibi, Dean Webster, Saravana Kumar Rajendran, Ramya Raghunathan, Ravichandanath Singathi, Retheesh Krishnan, Anthony Clay, “Eco-friendly materials and methods for renewable and sustainable applications in material chemistry,” U. S. Pat. No. 10,919,866 (2021).

6. Dean C. Webster, Partha P. Sengupta, Zhighang Chen, Xiao Pan, Adlina Paramarta, “Highly functional epoxidized resins and coatings,” U. S. Pat. No. 10,907,008 (2021).

7. Dean C. Webster, Eric Krall, Kelly M. Sutko, “Acetoacetylated and (meth)acrylated lignin and thermosets therefrom,” U. S. Pat. No. 10,851,244 (2020).

8. Dean C. Webster, Madhura Pade, “Non-isocyanate siloxane-modified glycidyl carbamate resins and coatings containing them,” U. S. Pat. No. 10,759,950 (2020).

9. Dean C. Webster, Songqi Ma, “Bio-based thermosets,” U. S. Pat. No. 10,730,998 (2020).

10. Dean C. Webster, Teluka Galhenage, “Amphiphilic siloxane-polyurethane fouling-release coatings and uses thereof,” U. S. Pat. No. 10,647,878 (2020).

11. Dean C. Webster, Partha P. Sengupta, Zhighang Chen, Xiao Pan, Adlina Paramarta, “Highly functional epoxidized resins and coatings,” U. S. Pat. No. 10,329,377 (2019).

12. Dean C. Webster, Lindsey Bultema, Jingling Yan, “Bio-based resins with high content of ethylenically unsaturated functional groups and thermosets thereof,” U. S. Pat. No. 10,323,119 (2019).

13. Dean C. Webster, James A. Docken, Jr., Satyabrata Samanta, James A. Bahr, “Biobased cyclic carbonate functional resins and polyurethane thermosets therefrom,” U. S. Pat. No 10,072,178 (2018).

14. Dean C. Webster, Arvin Yu, “Biobased highly functional oligomers and thermosets therefrom,” U. S. Pat. No. 9,765,233 (2017).

15. Jayaraman Sivaguru, Mukund P. Sibi, Dean C. Webster, Sarvana Kumar Rajendran, Ramya Raghunathan, “Programmed degradation of polymers derived from biomass,” U. S. Pat. No. 9,738,753 (2017).

16. Dean C. Webster, Erin Pavlacky, Curtiss Kovash, Jr., “Blocked bio-based carboxylic acids and their use in thermosetting materials,” U. S. Pat. No. 9,718,987 (2017).

17. Umesh D. Harkal, Andrew J. Muehlberg, Peter A. Edwards, Dean C. Webster, “Water dispersible epoxy urethane compounds and coating compositions,” U. S. Pat. No. 9,676,895 (2017).

18. Dean C. Webster, Umesh Harkal, James Garrett, “Modified glycidyl carbamate resins,” U. S. Pat. No. 9,593,258 (2017).

19. Dean C. Webster, Thomas J. Nelson, Xiao Pan, “Acetoacetoxy and enamine compounds and coatings therefrom,” U. S. Pat. No. 9,567,422 (2017).

20. Dean C. Webster, Rajan B. Bodkhe, “Functionalized silicones with polyalkylene oxide side chains,” U. S. Pat. No. 9,169,359 (2015).

21. Dean C. Webster, Partha P. Sengupta, Zhigang Chen, Xiao Pan, Adlina Paramarta, “Highly functionalized epoxidized resins and coatings,” U. S. Pat. No. 9,096,773 (2015).

22. Dean C. Webster, Umesh Harkal, James Garrett, “Modified glycidyl carbamate resins,” U. S. Pat. No. 9,051,413 (2015).

23. Dean C. Webster, Roopashree Suryanarayana, “Glycidyl carbamate coatings having improved corrosion resistance,” U. S. Pat. No. 8,852,458 (2014).

24. Dean C. Webster, Zhigang Chen, “Polyol photosensitizers, carrier gas UV laser ablation sensitizers and other additives and methods for making and using same,” U. S. Pat. No. 8,704,348 (2014).

25. Dean C. Webster, Neena Ravindran, Ankit Vora, “UV-curable low surface energy coatings,” U. S. Pat. No. 8,703,838 (2014).

26. Dean C. Webster, Robert J. Pieper, Mohammed J. Nasrullah, “Zwitterionic/amphiphilic pentablock copolymers and coatings therefrom,” U. S. Pat. No. 8,629,210 (2014).

27. Dean C. Webster, Abdullah Ekin, Stacy Sommer, “Anchored polysiloxane-polyurethane coatings and uses thereof,” U. S. Pat. No. 8,604,152 (2013).

28. Dean C. Webster, Zhigang Chen, “Polyol photosensitizers, carrier gas UV laser ablation sensitizers, and other additives and methods for making and using same,” U.S. Pat. No. 8,445,174 (2013).

29. Dean C. Webster, Abdullah Ekin, Stacy Sommer, “Anchored polysiloxane-polyurethane coatings and uses thereof,” U. S. Pat. No. 8,299,200 (2012).

30. Dean C. Webster, Zhigang Chen, “Polyol photosensitizers, carrier gas UV laser ablation sensitizers, and other additives and methods for making and using same,” U. S. Pat. No. 8,114,567 (2012).

31. Dean C. Webster, Dipak Chattopadhyay, “Hybrid coatings prepared from glycidyl carbamate resins,” U. S. Pat. No. 8,097,741 (2012).

32. Dean C. Webster, Partha S. Majumdar, “Polymeric material with surface microdomains,” U. S. Pat. No. 8,062,729 (2011).

33. Dean C. Webster, Zhigang Chen, Neena Ravindran, “Radiation curable polymer films having improved laser ablation properties and radiation curable sensitizers therefor,” U. S. Pat. No. 8,017,795 (2011).

34. Dean C. Webster, Robert J. Pieper, Abdullah Ekin, “Thermoset siloxane-urethane fouling release coatings,” U. S. Pat. No. 7,989,074 (2011).

35. Dean C. Webster, Abdullah Ekin, “Functionalized polysiloxane polymers,” U. S. Pat. No. 7,799,434 (2010).

36. Dean C. Webster, Peter A. Edwards, “Water dispersible epoxy urethane compounds and coating compositions,” U. S. Patent No. 7,776,956 (2010).

37. Kevin W. McCreight, Dean C. Webster, Lisa K. Kemp, “Aqueous dispersions of carboxylated cellulose esters, and methods of making them,” U. S. Patent No. 7,052,540 (2006).

38. Dean C. Webster, Allen L. Crain, “Carbamate functional oligomers and coatings therefrom,” U. S. Patent No. 6,465,679 (2002).

39. Dean C. Webster, Allen L. Crain, Chadwick E. Marlow, “Polymers of 3-butene esters, their preparation and use,” U. S. Patent No. 6,348,623 (2002).

40. Dean C. Webster, “Powder coatings from cyclic carbonate functional polymers and amine carbamate salts,” U. S. Patent No. 6,339,129 (2002).

41. Dean C. Webster, Allen L. Crain, Chadwick E. Marlow, “Polymers of 3-butene esters, their preparation and use,” U. S. Patent No. 6,228,949 (2001).

42. Dean C. Webster, Allen L. Crain, Chadwick E. Marlow, “Polymers of 3-butene esters, their preparation and use,” U. S. Patent No. 6,160,157 (2000).

43. Dean C. Webster, Allen L. Crain, Chadwick E. Marlow, “Polymers of 3-butene esters, their preparation and use,” U. S. Patent No. 6,121,400 (2000).

44. Dean C. Webster, Allen L. Crain, Chadwick E. Marlow, “Polymers of 3-butene esters, their preparation and use,” U. S. Patent No. 6,121,399 (2000).

45. Dean C. Webster, Chih-Herng James Su, Charles H. Foster, “Coating Compositions Containing Acrylic Copolymers having 1,3-Dioxolane-2-one-4-yl Groups,” U. S. Pat. No. 5,567,527 (1996).

PUBLISHED PATENT APPLICATIONS (not up to date)

1. Dean C. Webster, Rajan B. Bodkhe, “Functionalized silicones with polyalkylene oxide side chains,” U. S. Pat. Appl. Pub. 20140221549 (2014).

2. Dean C. Webster, Zhigang Chen, “Polyol photosensitizers, carrier gas UV laser ablation sensisizers, and other additives and methods for making and using same,” U.S. Pat. Appl. Pub. 20140061905 (2014).

3. Tara J. Shedlosky, Gordon P. Bierwagen, Dean C. Webster, Andrew, M. Huovinen, “Protective Coating,” U.S. Pat. Appl. Pub. 20130302628 (2013).

4. Dean C. Webster, Mohammed J. Nasrullah, Richard R. Roesler, Scott, D. Allen, “Aqueous polyurethane dispersions,” PCT Int. Appl. WO 2011163250 (2011).

5. Dean C. Webster, Thomas J. Nelson, “Monomer-grafted alkyd resin compositions and coatings,” PCT Int. Appl. WO 2011159909 (2011).

6. Umesh D. Harkal, Andrew J. Muehlberg, Peter A. Edwards, Dean C. Webster, “Water dispersible epoxy urethane compounds and coating compositions,” U.S. Pat. Appl. Pub. 20110263753 (2011).

7. Dean C. Webster, Thomas J. Nelson, Xiao Pan, “Acetoactoxy and enamine compounds and coatings therefrom,” PCT Int. Appl. WO 2011097512 (2011).

8. Dean C. Webster, Partha Sengupta, Zhigang Chen, Xiao Pan, Adlina Paramarta, “Highly functional epoxidized resins and coatings,” PCT Int. Appl. WO 2011097484 (2011).

9. Bret J. Chisholm, Dean C. Webster, Alexander J. Kugel, “Antimicrobial compositions comprising biocides bound to polyurethanes for medical and other surfaces,” PCT Int. Appl. WO 2010042395 (2010).

10. Dean C. Webster, Robert J. Pieper, Mohammed J. Nasrullah, “Zwitterionic/amphiphilic pentablock copolymer used in antifouling marine coatings,” PCT Intl. Appl. WO 2010042804 (2010).

11. Dean C. Webster, Neena Ravindran, Ankit Vora, “UV curable low surface energy coatings,” PCT Int. Appl. WO 2009105625 (2009).

12. Dean C. Webster, Roopashree Suryanarayana, “Glycidyl carbamate coatings having improved corrosion resistance,” PCT Int. Appl. WO 2009076609 (2009).

13. Dean C. Webster, Umesh Harkal, James Garrett, “Modified glycidyl carbamate resins,” PCT Int. Appl. WO 2009042999 (2009).

14. Dean C. Webster, Abdullah Ekin, Stacy Sommer, “Anchored polysiloxane-modified polyurethane coatings and uses thereof,” PCT Int. Appl. WO 2009025924 (2009).

15. Dean C. Webster, Partha S. Majumdar, “Block polysiloxane-polyurethane material with surface microdomains,” U.S. Pat. Appl. 20090017288 (2009).

16. Dean C. Webster, Dipak Chattopadhyay, “Hybrid coatings prepared from glycidyl carbamate resins,” PCT Int. Appl. WO 2008150568 (2008).

17. Dean C. Webster, Robert J. Pieper, Abdullah Ekin, “Thermoset siloxane-urethane fouling release coatings,” US Pat. Appl. 2008213599 (2008).

18. Dean C. Webster, Abdullah Ekin, “Polysiloxane polymers terminated with one or more hydroxy functional carbamate groups,” PCT Int. Appl. WO 2008008077 (2008).

19. Dean C. Webster, Zhigang Chen, “Polyol photosensitizers, carrier gas uv laser ablation sensitizers, and other additives and methods for making and using same,” PCT Int. Appl. WO 2007124073 (2007).

20. Dean C. Webster, Samali Datta, Douglas L. Schulz, “Conductive ink compositions containing thermoplastics and conductive particles,” PCT Int. Appl. WO 2007062131 (2007).

21. Dean C. Webster, Zhigang Chen, Neena Ravindran, “Radiation curable polymer films having improved laser ablation properties and radiation curable sensitizers therefor,” PCT Int. Appl. WO 2006116032 (2006).

22. Dean C. Webster, Partha Majumdar, “Crosslinked polysiloxane-polyurethane materials capable of forming surface microdomains,” PCT Int. Appl. WO 2006086092 (2006).

23. Tara J. Shedlosky, Gordon P. Bierwagen, Dean C. Webster, Andrew M. Houvinen, “Protective coatings with good removability for metals,” PCT Int. Appl. WO 2005123275 (2005).

24. Dean C. Webster, Allen L. Crain, “Beta-hydroxyl butenyl carbamate, functional oligomers and coatings therefrom,” PCT Int. Appl. WO0149658 (2001).

25. Dean C. Webster, Allen L. Crain, “Carbamate functional polymers and coatings thereof,” PCT Int. Appl. WO0149749 (2001).

26. Douglas W. Carico, Jr., Dean C. Webster, William R. Darnell, Sara S. Wells, David L. Murray, Allan S. Jones, “Modified condensation polymer with good impact strength,” Can. Pat. Appl. CA 2298047 (2001).

27. Dean C. Webster, “Soluble cyclic carbonate functional polymers for coatings applications,” PCT Int. Appl. WO 0035972 A1 (2000).

28. David L. Murray, Allan S. Jones, Sara S. Wells, Douglas W. Carico Jr., William R. Darnell, Dean C. Webster, “Modified condensation polymers and their manufacture,” PCT Int. Appl. WO 9910398 A2 (1999).

INVITED PRESENTATIONS

1. “Functional coatings to reduce adhesion of contaminants,” DoD Energy and Environment Innovation Symposium, November 28-December 1, 2023, Alexandria, VA. Oral Presentation.

2. “Lignin-based thermosets via direct functionalization using an efficient and solvent-free valorization method,” Materials Research Society Fall Meeting, November 27-December 1, 2023, Boston, MA. Oral Presentation.

3. “Designing Coatings that Resist Adhesion of Marine Fouling and Ice,” 8th KU-NDSU Joint Symposium, November 6-7, 2023, Kagoshima, Japan. Virtual presentation.

4. “Alternative Crosslinking Polyurethanes (ACPU): Epoxy functional polyurethanes made with a “green” synthesis route,” National Meeting of the American Chemical Society, August 12-17, 2023, San Francisco, CA. Oral Presentation.

5. “Furan-based diols and their (meth)acrylate and epoxy derivatives for coatings,” Coatings Science International, Noordwijk, Netherlands, June 27 – 30, 2023. Oral Presentation.

6. “The transition to bio-based polymer materials: Challenges and Opportunities,” 2023 Red River Valley ACS Research Conference, January 27-28, 2023. Oral presentation.

7. “Soy-based oils in rubber compounds for automotive parts,” Workshop on “Improve Rubber Processability and performance with sustainable U.S. Soy,” United Soybean Board, September 22, 2022. Virtual Presentation.

8. "Sustainable Polymer Coatings – Developments and the future,” (with David Grewell), American Coatings Conference, April 5-7, 2022, Indianapolis, Indiana. Oral Presentation.

9. “Alternative Crosslinking Polyurethanes (ACPU): Novel synthesis of epoxy functional polyurethanes,” Sidney Lauren Memorial Lecture, 49th Annual International Waterborne High-solids and Powder Coatings Symposium, New Orleans, Louisiana, February 21-23, 2022.

10. “Surfaces that resist adhesion: are there common features?” National Meeting of the American Chemical Society (Virtual), August 22-26, 2021.

11. “Exploration of amphiphilic additives in a siloxane-polyurethane fouling-release coating system,” Coatings Science International (Virtual), June 29 – July 1, 2021.

12. “Using agriculture to make materials,” AgBiotechAcademy, Fargo, ND, June 17, 2021.

13. “Use of agricultural and forestry products in thermosetting polymers,” ARPA-E Carbon Negative Building Materials Workshop, virtual, March 23, 25, 2021.

14. “High modulus thermosets from highly functionalized biobased resins,” NICE conference (Nature Inspires Creativity Engineers), Nice, France, (virtual presentation) October 12-14, 2020.

15. “Exploration of surface modifying amphiphilic additives in polyurethane coatings to mitigate bioadhesion of marine fouling organisms,” National Meeting of the American Chemical Society (Virtual), August 17-20, 2020.

16. “High performance bio-based thermosets from high functionality resins,” 43rd Annual Meeting of the Adhesion Society, Charleston, South Carolina, February 23-26, 2020.

17. “Toward sustainability in coatings technology: Progress, Opportunities, Barriers,” The Waterborne Symposium, New Orleans, Louisiana, February 16 – 21, 2020. Plenary Lecture.

18. “Approaches to functional and high-performance bio-based materials,” Seminar at Sherwin-Williams, Minneapolis, Minnesota, November 7, 2019.

19. “Thermosets from highly functionalized bio-based resins,” The 9th ACS-PMSE/CCS-PD Joint Symposium on Polymers and Workshop, Xi'an, China, October 16-19, 2019.

20. “Approaches to non-isocyanate polyurethane coatings,” The 9th ACS-PMSE/CCS-PD Joint Symposium on Polymers and Workshop, Xi'an, China, October 16-19, 2019.

21. “Thermosets from highly functionalized bio-based resins,” Joint meeting of Northeast Tennessee Section of the American Chemical Society and American Institute of Chemical Engineering, September 17, 2019.

22. “Designing durable coatings with low surface adhesion for mitigation of fouling and ice adhesion,” National Meeting of the American Chemical Society, San Diego, CA, August 25-29, 2019.

23. “Thermosets from highly functionalized bio-based resins,” Seminar at Jiangnan University, Wuxi, China, July 22, 2019.

24. “Designing coatings to have low adhesion surfaces through self-stratification,” Seminar at Jiangnan University, Wuxi, China, July 17, 2019.

25. “Highly functional bio-based resins for use in thermosets for coatings and composites,” Seminar at KTH Royal Institute of Technology, Stockholm, Sweden, May 28, 2019.

26. “Combinatorial and High Throughput Methods to accelerate the development of coatings systems, National Meeting of the American Chemical Society, Washington, DC March 31 – April 4, 2019.

27. “Epoxidized sucrose esters as a platform technology for high performance thermosets,” 10th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe Institute of Technology, Germany, March 17-19, 2019.

28. “Approaches to functional and high performance bio-based materials,” Dow Chemical Company, Collegeville, Pa., March 7, 2019.

29. “Amphiphilic siloxane-polyurethane self-stratified coatings for low fouling and ice adhesion,” Silicon-containing Polymers and Composites, San Diego, Ca., December 16-19, 2018.

30. “Designing coatings to have low adhesion surfaces through self-stratification,” 4th KU-NDSU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Kagoshima, Japan, October 31 – November 1, 2018.

31. “Thermosets from highly functionalized bio-based resins,” N.I.C.E. Conference 2018, Nice, France, October 15-17, 2018.

32. “Designing coatings to have low adhesion surfaces through self-stratification, Harvard University, Cambridge, Mass., August 21, 2018.

33. “Designing coatings to have low adhesion surfaces through self-stratification,” European Technical Coatings Congress, Amsterdam, Netherlands, June 26-29, 2018.

34. “Amphiphilic siloxane-polyurethane coatings for low fouling and ice adhesion,” 19th International Congress on Marine Corrosion and Fouling, Melbourne, Fl., June 24-29, 2018.

35. “Epoxidized sucrose ester systems as a platform for sustainable thermosets,” Polymers and Organic Chemistry Conference, Palavas Les Flots, France, June 3-7, 2018.

36. “Sustainable thermosets from highly functional bio-based resins,” The Waterborne Symposium, New Orleans, LA, February 4-9, 2018.

37. “Highly functional bio-based resins for high performance thermosets,” The Fiber Society 2017 Fall Meeting and Technical Conference and International Symposium on Materials from Renewables, Athens, GA, November 8-10, 2017.

38. “Coatings with amphiphilic surfaces via self-stratification for marine fouling-release applications,” AVS International Symposium and Exhibition, Tampa, FL, October 31-November 3, 2017.

39. “Polymers and Coatings from Plants: Replacing petrochemicals with renewables,” College of St. Benedict-St. John’s University, St. Joseph, MN, October 24, 2017.

40. “Coming Full Circle: From linseed oil to alkyds to petrochemical resins and back again, National Meeting of the American Chemical Society, Washington, DC August 20-24, 2017.

41. “Impact of reactive group functionality on the properties of thermosets derived from vegetable oils,” National Meeting of the American Chemical Society, Philadelphia, Pa., August 21-25, 2016.

42. “Optimizing surface properties of coatings through self-stratification,” Forum for Future Coatings Science and Technology in memory of Professor Zeno Wicks, Nanchang, China, July 12-14, 2017.

43. “New approaches to bio-based polymer systems,” Forum for Future Coatings Science and Technology in memory of Professor Zeno Wicks, Nanchang, China, July 12-14, 2017.

44. “Bio-based thermosets from star-like highly functional reactive resins,” 3rd International Conference and Exhibition on Biopolymers & Bioplastics, San Antonio, Texas, September 12-14, 2016. Keynote talk.

45. “High performance, high bio-content thermosets for composites and coatings,” 3rd International Conference and Exhibition on Biopolymers & Bioplastics, San Antonio, Texas, September 12-14, 2016. Workshop talk.

46. “Coatings from renewables: achieving performance,” Coatings Science International 2016, Noordwijk, Netherlands, June 27 – July 1, 2016.

47. “Tough and durable amphiphilic fouling-release coatings,” 18th International Congress on Marine Corrosion and Fouling, Toulon, France, June 19-24, 2016.

48. “Approaches to tough coatings that resist adhesion by marine fouling organisms,” Keynote lecture, 39th Annual Meeting, The Adhesion Society, San Antonio, Texas, February 21-24, 2016.

49. “Tough and cleanable fouling-release marine coatings via self-stratification,” Pacific Polymer Conference 14, Kawai, Hawaii, December 9 – 13, 2015.

50. “High-value bioproducts,” NSF Food-Energy-Water Nexus Workshop, Rapid City, SD, October 19-20, 2015.

51. “High performance bio-based thermosets from highly functional reactive resins,” NDSU-KU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Fargo, ND, October 15-16, 2015.

52. “Glycidyl carbamate functional resins: polyurethanes through epoxy chemistry,” National meeting of the American Chemical Society, Boston, Ma., August 16-20, 2015.

53. “So we made all these polymers (materials), now what do we do with the data?”, National meeting of the American Chemical Society, Boston, Ma., August 16-20, 2015.

54. “Lignin as a source of aromatic building blocks for materials Synthesis,” ACS Green Chemistry and Engineering Conference, Bethesda, Md., July 14-16, 2015.

55. “High performance bio-based materials,” Seminar at Jiangnan University, Wuxi, China, May 12, 2015.

56. “Marine Coatings,” “Self-stratified Polyurethanes,” “Non-isocyanate polyurethanes,” Weg Paints, Brazil, February 24, 2015.

57. “Coatings Technology Short Course,” Eastman Chemical Company, Kingsport, Tenn., January 19-21, 2015.

58. “Polymers from Plants: Replacing petrochemicals with renewables,” Department of Chemistry Seminar, South Dakota State University, Brookings, South Dakota, February 18, 2015.

59. “Designing high performance biobased resin systems,” Plenary Lecture at 3rd National Coatings Science and Technology Conference, Nanchang, China, October 26-28, 2014.

60. “Towards 100% Biobased Thermosets,” Nice Conference on Bioinspired and Biobased polymers, Nice, France, October 15-17, 2014.

61. “Polymers and thermosets from renewable resources,” CNRS, Charles Gerhardt Institute, University of Montpellier, Montpellier, France, October 13, 2014.

62. “Polymers and thermosets from renewable resources,” Eastman Chemical Company, July 30, 2014.

63. “High modulus, high performance thermosets from renewable resources,” From Anionic Polymerization to Aerospace Materials to Membranes workshop, June 29-July 2, 2014, Cetraro, Italy.

64. “Coatings Technology Short Course”, Benjamin Moore Paints, May 19-23, 2014.

65. “High modulus thermosets from highly functional vegetable oil resins,” Center for Sustainable Polymers Annual Meeting, University of Minnesota, Minneapolis, Minn., April 22, 2014.

66. “High functionality reactive resins based on vegetable oils,” The 3rd International Symposium of Green MAP Institute and Life 3D-Printing Innovation Center, Yamagata University, Yonezawa, Japan, January 24-25, 2014.

67. “Improving the sustainability of thermosets using renewables, Thermoset Resin Formulators Associating, 2013 Annual Meeting, Newport, Rhode Island, September 29-October 1, 2013.

68. “High performance, high biocontent thermosets for composites and coatings,” Green Chemistry and Engineering, Bethesda, Maryland, June 18-20, 2013.

69. “Fouling-release marine coatings via self-stratification,” ANZPAC Workshop, Melbourne, Australia, May 6-9, 2013.
70. “Coatings based on renewables: the promise, potential, and pitfalls,” CoatingsTech, Rosemont, Ill., March 12-13, 2013. Mattiello Memorial Lecture.

71. “High crosslink density biobased thermosets for coatings and composites,” National meeting of the American Chemical Society, Philadelphia, Pa., August 19-23, 2012.

72. “Towards tough fouling-release coatings with tailorable surface composition,” Plenary Lecture, International Congress on Marine Corrosion and Fouling, Seattle, Wa., June 24-28, 2012.

73. “Marine Coatings,” Tutorial Lecture, American Coatings Conference, Indianapolis, In, May 7-9, 2012.

74. “Biobased high performance resins,” American Coatings Conference, Indianapolis, In, May 7-9, 2012.

75. “Surface modification of coatings through self-stratification,” Marine Coatings Conference, Berlin, Germany, February 28-29, 2012.

76. “Design and optimization of complex functional coatings systems,” Evonik, Essen Germany, March 1, 2012.

77. “Novel biobased epoxy compounds: Epoxidized sucrose esters of fatty acid,” Webinar for Akzo-Nobel, January 25, 2012.

78. “Novel approaches to protective and functional coatings systems,” Evonik meets Science, Pittsburgh, Pa., December 8, 2011.

79. “Approaches to robust coatings with amphiphilic surfaces via self-stratification,” National meeting of the American Chemical Society, Denver, Co., August 28 – September 1, 2011.

80. “Coatings Technology Short Course,” Eastman Chemical Company, Kingsport, Tenn., October 17-20, 2011.

81. “Alkyd Resins,” Webinar for Bayer MaterialScience, July 2011.

82. “Design and optimization of complex functional coating systems,” FreeSlate Forum, San Francisco, Ca., April 2011.

83. “Epoxidized sucrose ester resins: a new highly functional biobased epoxy resin for thermosets,” 4th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe Institute of Technology, Germany, March 20-22, 2011.

84. “Correlation between lab assays and field testing results for siloxane-polyurethane fouling-release coatings,” International Congress on Marine Corrosion and Fouling, Newcastle-Gateshead, UK, July 25-29, 2010.

85. “Tough fouling-release coatings based on self-stratification,” International Congress on Marine Corrosion and Fouling, Newcastle-Gateshead, UK, July 25-29, 2010.

86. “Control over polymer structure, morphology and surface properties,” American Coatings Conference, Charlotte, N.C., April 12-14-, 2010.

87. “Reducing the environmental impact of protective and functional coatings,” American Chemical Society National Meeting, San Francisco, Ca., March 21-25, 2010.

88. “Tailoring the surface properties of coatings through self-stratification,” American Chemical Society National Meeting, San Francisco, Ca., March 21-25, 2010.

89. “Self-stratified fouling-release coatings,” European Coatings Conference – Marine Coatings II, Berlin, Germany, February 9-10, 2010.

90. “The use of glycidyl carbamate chemistry in coatings and other applications,” 2009 Baekeland Symposium, Antalya, Turkey, November 22-25, 2009.

91. “Marine Coatings,” Virtual Learning Conference, Federation of Societies for Coatings Technology, April 2, 2009.

92. “Accelerating the pace of research: The potential and challenges of high throughput experimentation in polymer science,” The University of Iowa, February 26, 2009.

93. “Combinatorial and high throughput methods for the development of polymers and formulations,” Procter & Gamble, Cincinnati, Oh., February 23, 2009.

94. “Approaches to Environmentally-Friendly Underwater Marine Coatings,” Kyoto University, Kyoto, Japan, July 2008.

95. “Combinatorial and High Throughput Methods for the Development of Protective Coating Materials,” Dow Corning Corporation, Midland, Mich., July 2008.

96. “The High-Throughput Approach to Designing New Functional Coating Systems,” Symyx Global Symposium, Prague, Czech Republic, May 2008.

97. “Generation of experimental polymer structure-property data using combinatorial and high throughput methods,” SPE Annual Technical Meeting, Milwaukee, Wis., May 2008.

98. “Coating Formulation Libraries,” NIST NCMC Workshop, Gaithersburg, Md., April, 2008.

99. “Incorporation of Nanoparticles into Photopolymerized Polymer Films,” NDSU Nanodays, Fargo, N.D., April 2008.

100. “Combinatorial and High Throughput Methods for the Development of Protective Coating Materials,” Lord Corporation, Cary, N. C., March 2008.

101. “Chemistry with Robots: A new paradigm for research,” Red River Valley Section of the American Chemical Society, Grand Forks, N. D., February 2008.

102. “Combinatorial and High Throughput Methods for the Development of Protective Coating Materials,” L’Oreal, Paris, France, February 2008.

103. “High Performance, Low Surface Energy Polyurethanes for Underwater Marine Coatings,” European Coatings Conference on Polyurethanes, Berlin, Germany, February 2008.

104. “High Throughput Methods for the Discovery and Optimization of Marine Coatings Systems,” Bayer MaterialScience, Pittsburgh, Penn., October 2007.

105. “High Throughput Methods for the Discovery and Optimization of Marine Coatings Systems,” Flanders Materials Science Center (FLAMAC) Workshop, Ghent, Belgium, September 2007.

106. “High Throughput Methods for the Discovery and Optimization of Marine Coatings Systems,” BASF, Ludwigshafen, Germany, September 2007.

107. “Combinatorial and High Throughput Methods for the Development of Protective Coating Materials,” Naval Research Laboratory, Washington, D.C., August 2007.

108. “Combinatorial and High Throughput Methods for the Development of Protective Coating Materials,” IBM Almaden Research Labs, June 2007.

109. “Approaches to Environmentally-Friendly Underwater Marine Coatings,” IUMACRO-07 Macromolecules for a Safe, Sustainable, and Healthy World, Brooklyn, NY, June 2007.

110. “Combinatorial and High Throughput Methods for the Development of Protective Coating Systems,” Sherwin-Williams Company, Cleveland, Ohio, May 2007.

111. “Design of laser ablatable photopolymerizable polymer films,” Materials Research Society Annual Meeting, San Francisco, Ca., April 2007.

112. “High throughput screening of compositional variables in a siloxane-urethane coatings systems for marine applications,” Polymer Division, American Chemical Society Annual Meeting, Chicago, Illinois, March 2007.

113. "High Throughput Methods for Discovery and Optimization of Protective Coatings Systems," abc Technologies 2007, Basel, Switzerland, January 2007.

114. "New Developments in Anti-Fouling Marine Coatings," Polycondensation 2006, ACS Division of Polymer Chemistry, Koc University, Istanbul, Turkey, August 2006.

115. "Development Of Siloxane-Urethane Fouling-Release Coatings: Initial Screening Studies," 13th International Congress on Marine Corrosion and Fouling, Rio de Janeiro, Brazil, July 25, 2006.

116. "High Throughput Workflow For Developing New Antifouling And Fouling-Release Coating Systems," 13th International Congress on Marine Corrosion and Fouling, Rio de Janeiro, Brazil, July 24, 2006.

117. "The use of High Throughput Methods for the Development of Marine Coatings," 5th DPI Workshop on Combinatorial and High Throughput Approaches in Polymer Science, Technical University of Eindhoven, Eindhoven, Netherlands, June 27, 2006.

118. "High throughput experimentation in an academic environment," Symyx Symposium, Baltimore, Md., June 20, 2006.

119. "Non-Isocyanate Polyurethane Coatings Via Glycidyl Carbamate Chemistry," European Coatings Conference on Polyurethanes, Berlin, Germany, March 24, 2006.

120. "The Use Of High Throughput Methods To Design Fouling-Release Siloxane Urethane Coatings," NACE International (National Association of Corrosion Engineers), San Diego, Ca., March 13, 2006.

121. "High Throughput Synthesis and Screening Methods for the Design of Complex Coating Systems for Marine Applications," Materials Research Society Fall Meeting, Boston, Mass., November 29, 2005.

122. "Alternative Crosslinking Chemistry" and "High Throughput Methods in Coatings Science," YTC America, Camarillo, Ca., November 15, 2005.

123. "Increased R&D Productivity through High Throughput Methods," Virtual (Internet) Lecture, Federation of Societies of Coatings Technology, September 29, 2005.

124. "Performance of UV-Curable Nanocomposite Films from Organomodified Clays and Donor-Acceptor Matrix Resins," Gordon Research Conference on Coatings and Films, New London, New Hampshire, July 10-15, 2005.

125. "Use of High Throughput Methods in the Design of Coatings Having Minimally Adhesive Surfaces," Coatings Science International, Nordwijk, Netherlands, June 27-July1, 2005.

126. "High Throughput System for the Development of Novel Marine Coatings," Research Methods for the 21st Century, New Orleans, May 18-20, 2005.

127. "Combinatorial and High Throughput Methods for the Development of Marine Coatings," General Electric, Niskayuna, New York, December 15, 2004.

128. “Combinatorial and High Throughput Approaches to Coatings and Polymers,” ExxonMobil, Baytown, Texas, December 2, 2004.

129. “Advanced Polymer Chemistry for Coatings,” REPORT 2004, sponsored by the Sociedad Argentina de Technólogos en Recubrimientos (SATER), Buenos Aries, Argentina, September 3, 2004.

130. “Combinatorial and High Throughput Approaches for Marine Coating Discovery,” BASF, Ludwigschafen, Germany, May 24, 2004.

131. “Combinatorial and High Throughput Approaches to Polymer Materials and Formulations,” Eastman Chemical Company, February 16, 2004.

132. “Property Enhancement through Incorporation of Organomodified Clays in UV-Cured Polymers,” *Polymers for Advanced Technologies,* Fort Lauderdale, FL, September 2003.

133. “High Throughput Workflow in Coatings Development,” Rohm and Haas, Spring House, Pa., July 21, 2003.

134. “Preparation and characterization of UV-curable clay nanocomposites,” Northwestern Coatings Society Technical Symposium, Minneapolis, March 2003.

135. “Development of UV-curable polymer systems for flexible electronic devices,” University of Southern Mississippi, February 2003.

136. “Evolution of Paint Technologies,” PolyMillenial 2000, ACS Division of Polymer Chemistry, Waikoloa, Hawaii, December 2000.

137. “Applications of epoxybutene derivatives in polymers and coatings,” J. E. McGrath Symposium, Virginia Tech, Blacksburg, Virginia, September 1999.

138. “Synthesis and applications of cyclic carbonate functional polymers in thermosetting coatings,” XXVI International Conference on Coatings, Athens, Greece, July 1999.

CONTRIBUTED PRESENTATIONS/POSTERS (Exclusive of Preprints)

1. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, John A. Finlay, Anthony S. Clare, Dean C. Webster, “Incorporation of Amphiphilic PDMS-based Hyperbranched Polyglycerol Polymers to Tune Fouling-Release Properties,” American Chemical Society National Meeting, New Orleans, LA, March 17-21, 2024. Oral Presentation.

2. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, John A. Finlay, Anthony S. Clare, Dean C. Webster, “Incorporation of Amphiphilic PDMS-based Hyperbranched Polyglycerol Polymers to Tune Fouling-Release Properties,” American Chemical Society National Meeting, New Orleans, LA, March 17-21, 2024. Oral Presentation.

3. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, “Comparison of Zwitterionic Polymers in Amphiphilic PDMS-based Surface Modifying

Additives to Tune Fouling-Release Properties," NDSU-KU Symposium, Kagoshima, Japan, November 6-8, 2023. Poster Presentation.

4. Michael Odegaard, Solomiia Kapatsila, Dean Webster "Synthesis and characterization of novel bio-based methacrylated and dimethacrylated epoxidized hempseed oils" Western Coatings Societies Symposium and Show, Las Vegas, NV, October 15-18, 2023. Poster Presentation.

5. Ivan Hevus, Sandip Tiwari, Luke R. Gibbon, Mukund P. Sibi, Dean C. Webster, "Vanillin-derived veratrole monomers for stereolithography," Photopolymerization Fundamentals, Boulder, CO, September 19-22, 2023. Poster Presentation.

6. Ivan Hevus, Sandip Tiwari, Md Atikur Rahman, Melody C. Johnson, Luke R. Gibbon, Mukund P. Sibi, Dean C. Webster, "Vanillin-derived monomers for additive manufacturing," ACS Fall 2023 National Meeting and Exposition, San Francisco, CA, August 13-17, 2023. Oral Presentation.

7. Iryna Bon, Dean C. Webster, "Novel biobased anhydrides as a sustainable curing agents for epoxy resins: Kinetics and coatings properties study", ACS Fall 2023 National Meeting and Exposition, San Francisco, CA, August 13-17, 2023. Poster.

8. Maryam Safaripour, David Boucher and Dean C. Webster, "Compatibility of phenyl silicone oils and model silicones for anti-biofouling surfaces", ACS Fall 2023 National Meeting and Exposition, San Francisco, CA, August 13-17, 2023. Oral Presentation.

9. Shikhin Nadkarni, Prakash Kannaboina, Sagar Thorat, Mukund Sibi, Dean C. Webster, "Investigation of the carbamate-aldehyde reaction for non-isocyanate polyurethanes for coating applications", American Chemical Society Meeting Fall 2023, San Francisco, CA, August 13-17, 2023, Poster Presentation.

10. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, "Comparison of Zwitterionic Polymers in Amphiphilic PDMS-based Surface Modifying Additives to Tune Fouling-Release Properties," American Chemical Society National Meeting, San Francisco, CA, August 13-17, 2023. Oral Presentation.

11. Michael Odegaard, Dean Webster "Waterborne non-isocyanate polyurethane coating using carbamate-aldehyde chemistry" American Chemical Society National Meeting, San Francisco, CA August 13-17, 2023. Oral Presentation.

12. Ramsharan Pandey, Jiayue Huang, Anish Tuteja, Dean C. Webster, "Effect of silicone oil additives on urea-siloxane coating for anti-icing applications", Coatings Tech Conference 2023, Cleveland, OH, June 26-28, 2023. Poster Presentation.

13. Iryna Bon, Dean C. Webster, "Curing Behavior and Properties of Biobased Epoxy-Anhydride Coatings", 2023 CoatingsTech Conference, Cleveland, OH, June 26-28, 2023. Poster.

14. Michael Odegaard, Md. Sanaul Huda, Ewumbua Monono, Dean Webster "Synthesis and Characterization of Novel Bio-based Epoxidized Sucrose Cornate" CoatingsTech Conference 2023, Cleveland, OH, June 26-28, 2023. Poster Presentation.

15. Hannah A. Booher, Dean C. Webster, “An Exploratory Study of a Bio-based Acetoacetylated Methoxylated Sucrose Soyate Polyol Crosslinked with Multifunctional Amines,” American Chemical Society National Meeting, San Fransico, CA, August 13-17, 2023. Poster Presentation.

16. Shikhin Nadkarni, Prakash Kannaboina, Sagar Thorat, Mukund Sibi, Dean C. Webster, “Model studies to investigate carbamate-aldehyde non-isocyanate polyurethane system for coating applications”, American Coatings Association CoatingsTech Conference 2023, Cleveland, OH, June 26-28, 2023, Poster Presentation.

17. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, “Critical Amphiphilic Concentration: Varying the Amphiphilicity of the Prepolymer and how it Affects Marine Fouling-Release Performance with Detailed Surface Characterization,” American Coatings Technical Conference, Cleveland, OH, June 26-28, 2023. Poster Presentation.

18. Ivan Hevus, Sandip Tiwari, Prakash Kannaboina, Jingbo Wu, Mukund P. Sibi, Dean C. Webster, “Bio-based monomers as sustainable reactive diluents for stereolithography,” ACS Spring 2023 National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023. Oral Presentation.

19. Achiya Khanam, Geraldo Casanola-Martin, Maryam Safaripour, Dean C. Webster and Bakhtiyor Rasulev, “Development of Linear and Non-Linear QSAR Models to Predict Fouling-Release Performance of Silicone Oil-Modified Siloxane Elastomer-based Coatings”, ACS Spring 2023 National Meeting and Exposition, Indianapolis, IN, March 26-30, 2023. Poster Presentation.

20. Ramsharan Pandey, Jiayue Huang, Anish Tuteja, Dean C. Webster, “Moisture curable urea-siloxane coating for anti-icing applications”, American Chemical Society National Meeting Spring 2023, Indianapolis, IN, March 26-30, 2023. Poster Presentation.

21. Kurt VanDonselaar, Daniel Angel Bellido-Aguilar, Maryam Safaripour, Dean C. Webster and Andrew B. Croll, “Adhesion in Several Model Anti-Fouling and Anti-Icing Coatings”, Adhesion Society Annual Meeting. Orlando, FL, February 19-22, 2023. Poster Presentation.

22. Ivan Hevus, Prakash Kannaboina, Jingbo Wu, Mukund P. Sibi, Dean C. Webster, “Novel Bio-Based Reactive Diluents for Stereolithography,” 7th NDSU-KU Annual Symposium, Fargo, ND, October 6-7, 2022. Poster Presentation.

23. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, “Critical Amphiphilic Concentration: Varying the Amphiphilicity of the Prepolymer and how it Affects Marine Fouling-Release Performance,” NDSU-KU Symposium, Fargo, ND, October 6-7, 2022. Poster Presentation.

24. Ramsharan Pandey, Dean C. Webster, Ghasideh Pourhashem, “Sustainability assessment of lignin valorization into rigid foams”, NDSU-KU 7th Annual Symposium, Fargo, ND, October 6-7, 2022. Poster Presentation.

25. Maryam Safaripour, John. Finlay and Dean C. Webster, “Model silicone elastomers containing silicone oils for reduced fouling and ice adhesion”, NDSU-KU Joint Symposium

on Biotechnology, Nanomaterials and Polymers. Fargo, ND, October 6-7, 2022. Poster Presentation.

26. Michael Odegaard, Md. Sanaul Huda, Ewumbua Monono, Dean Webster "Synthesis and Characterization of Novel Bio-based Epoxidized Sucrose Cornate" NDSU-KU 7th Annual Symposium, Fargo, ND, October 6-7, 2022. Poster Presentation.

27. Maryam Safaripour and Dean C. Webster, "Incorporation of free silicone oils into PDMS-based coating for anti-biofouling and anti-icing surfaces", ACS Fall 2022 National Meeting and Exposition. Chicago, IL, August 21-25, 2022. Poster Presentation.

28. Hannah A. Booher, Shokoofeh Ghasemi, Gassideh Pourashem, Dean C. Webster, "Synthesis of Acetoacetylated Methoxylated Sucrose Soyate Polyol and Crosslinking with Multifunctional Acrylates at Ambient Conditions," American Chemical Society National Meeting, Chicago, IL, August 20-25, 2022. Poster Presentation.

29. Joseph Dahlgren, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, "Critical Amphiphilic Concentration: Varying the Amphiphilicity of the Prepolymer and how it Affects Marine Fouling-Release Performance," American Chemical Society National Meeting, Chicago, IL, August 21-25, 2022. Poster Presentation.

30. Michael Odegaard, Md. Sanaul Huda, Ewumbua Monono, Dean Webster "Synthesis and Characterization of Novel Bio-based Epoxidized Sucrose Cornate" American Chemical Society National Meeting, Chicago, IL, August 21-25, 2022. Poster Presentation.

31. Dean C. Webster, Raul Setien, Samantha Silbert, Arvin Yu, "Coatings binder systems from high functionality bio-based seed-oil derived resins," European Technical Coatings Conference, Krakow, Poland, July 12-14, 2022. Oral Presentation.

32. Joseph Dahlgren, Lauren Foy, Kelli Hunsucker, Harrison Gardner, Geoff Swain, Shane J. Stafslien, Lyndsi Vanderwal, James Bahr, Dean C. Webster, "Grooming of Fouling-Release Coatings and Determining the Impact on Surface Properties," American Coatings Conference, Indianapolis, IN, April 5-7, 2022. Poster Presentation.

33. Maryam Safaripour, Daniel Angel Bellido-Aguilar, Andrew B. Croll, and Dean C. Webster, "PDMS-based coatings for anti-biofouling and anti-icing surfaces", American Coatings Conference, Indianapolis, IN, April 5-7, 2022. Poster Presentation.

34. Daniel Angel Bellido-Aguilar, Maryam Safaripour, Dean C. Webster, and Andrew B. Croll, "Fundamental adhesion studies on PDMS-based coatings for anti-icing applications", Adhesion Society Annual Meeting. San Diego, CA, February 20-23, 2022. Oral Presentation.

35. Olena Shafranska, Ryan Burgett, Dean C. Webster, "Soybean oil as a plasticizer for micronized recycled crumb rubber," 196th Technical Meeting of the ACS Rubber Division, Cleveland, Ohio, October 8-10, 2019. Oral Presentation.

36. Jackson Benda, Dean C. Webster, "Effect of surface modifying amphiphilic additives (SMAAs) on siloxane-polyurethane (SiPU) Fouling-release coatings," NDSU-KU Joint Symposium on Biotechnology, Nanomaterials, and Polymers, October 3-5, 2019. Poster presentation.

37. Raul A. Setien, Dean C. Webster, “Epoxidation of soybean oil utilizing dioxirane intermediates generated from oxone,” NDSU-KU Joint Symposium on Biotechnology, Nanomaterials, and Polymers, October 3-5, 2019. Poster presentation.

38. AliReza Rahimi, Dean C. Webster, “Design of surface modifying amphiphilic polymeric additives to tune properties of a hydrophobic marine paint against biofouling,” NDSU-KU Joint Symposium on Biotechnology, Nanomaterials, and Polymers, October 3-5, 2019. Poster presentation.

39. Jackson Benda, Dean C. Webster, “Novel surface modifying amphiphilic additives (SMAAs) with varying architecture: Effect on fouling-release properties of siloxane-polyurethane (SiPU) fouling-release coatings,” American Chemical Society National Meeting, San Diego, Ca., August 25-29, 2019. Oral Presentation.

40. AliReza Rahimi, Dean C. Webster, “Design of surface-modifying polymeric additives to improve performance of fouling-release marine coatings to combat biofouling,” American Chemical Society National Meeting, San Diego, Ca., August 25-29, 2019. Oral Presentation.

41. Raul Setien, Dean C. Webster, “Epoxidation of Soybean Oil Utilizing Dioxirane Intermediates Generated from Oxone,” American Chemical Society National Meeting, San Diego, Ca., August 25-29, 2019. Poster presentation.

42. Dean C. Webster, “Glycidyl carbamate functional polymers: a non-isocyanate polyurethane,” American Chemical Society National Meeting, Orlando, FL, March 31-April 4, 2019. Oral Presentation.

43. Samantha D. Silbert, Eric M. Serum, Mukund P. Sibi, Dean C. Webster, “Ambiently cured, bio-based, non-isocyanate polyurethane produced from polycarbamate-dialdehyde crosslinking,” American Chemical Society National Meeting, Orlando, FL, March 31-April 4, 2019. Oral Presentation.

44. Samantha D. Silbert, Eric M. Serum, Mukund P. Sibi, Dean C. Webster, “Ambiently cured, bio-based, non-isocyanate polyurethane produced from polycarbamate-dialdehyde crosslinking,” Red River Valley ACS Young Investigator Award Competition, Mayville State University, Fargo, ND, February 2, 2019. Oral Presentation Received Excellent Presentation Award.

45. Jackson Benda, Dean C. Webster, “The effect of surface modifying additives (SMAAs) on siloxane-polyurethane fouling-release coatings,” 4th KU-NDSU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Kagoshima, Japan, October 31 – November 1, 2018. Poster.

46. Eric Krall, Mitchell Maw, Dean C. Webster, “Novel synthesis of acetoacetate resin derived from kraft lignin,” 4th KU-NDSU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Kagoshima, Japan, October 31 – November 1, 2018. Poster.

47. Alison Rohly, Mary Striegel, Jason Church, Dean Webster, “Alkoxysilane sol-gel consolidants for calcareous stone,” 4th KU-NDSU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Kagoshima, Japan, October 31 – November 1, 2018. Poster.

48. Olena Shafranska, Ryan Burgett, Lyndsi Vanderwal, Dean C. Webster, "High oleic soybean oil as a plasticizer for recycled crumb rubber," Third International Symposium on Materials from Renewables, Fargo, ND, July 17-18, 2018. Poster.

49. Eric Krall, Mitchell Maw, Dean C. Webster, "Novel synthesis of Acetoacetate Resins Derived from Kraft Lignin." Third International Symposium on Materials from Renewables, Fargo, ND. July 17-18, 2018. Poster.

50. Raul Setien, Dean C. Webster, "Synthesis of Acrylated and Methacrylated Resins from Epoxidized Sucrose Soyate" Third International Symposium on Materials from Renewables, Fargo, ND, July 17-18, 2018. Poster.

51. Jackson Benda, Dean C. Webster, "The effect of surface modifying additives on the fouling-release properties of siloxane-polyurethane coatings, 19th International Congress on Marine Corrosion and Fouling, Melbourne, Florida, June 24-29, 2018. Poster.

52. Eric Krall, Dean C. Webster, "Coatings composites and foams: A novel approach to creating functionalized kraft lignin resins," 22nd Annual Green Chemistry and Engineering Conference, Portland, Oregon, June 18-20, 2018. Poster.

53. Eric M. Serum, Eric Krall, Dean C. Webster, Mukund P. Sibi, "Structural elucidation of valorized lignin: Acetoacetylation of simple model compounds and lignin," 22nd Annual Green Chemistry and Engineering Conference, Portland, Oregon, June 18-20, 2018. Poster.

54. Alison Rohly, Dean C. Webster, "Alkoxysilane sol-gel consolidants for calcareous stones," American Institute for Conservation of Historic and Artistic Works (AIC) 46th Annual Meeting, Houston, Texas, May 29-June 3, 2018. Oral.

55. Ruvimbo Chitemere, Dean Webster, Mohiuddin Quadir, "Soy-based nanoparticles for customized molecule transport," North Dakota EPSCoR State Conference, Grand Forks, ND, April 17, 2018. Poster.

56. Eric Krall, Mitchell Maw, Dean Webster, "Novel synthesis of acetoacetate resin derived from kraft lignin," North Dakota EPSCoR State Conference, Grand Forks, ND, April 17, 2018. Poster.

57. Raul Setien, Zhihan Wang, Zijun Wang, Qianli Chu, Dean Webster, "Comparison of polymeric properties of phthalic acid and CBDA-2 as a monomer for utilization in polyester synthesis and as curing agents," North Dakota EPSCoR State Conference, Grand Forks, ND, April 17, 2018. Poster.

58. Jackson Benda, Dean C. Webster, "The effect of surface modifying additives in fouling-release siloxane-polyurethane coatings," American Coatings Conference, Indianapolis, In., April 9-11, 2018. Poster.

59. Ivan Hevus, Dean C. Webster, "Biobased carboxylic acids as components of sustainable coating systems," National Meeting of the American Chemical Society, New Orleans, La., March 17-22, 2018. Oral.

60. Dean C. Webster, Arvin Yu, Songqi Ma, Adlina Paramarta, “High performance bio-based thermosets from highly functional vegetable oil-based resins,” ECO-BIO 2018, Dublin, Ireland, March 4-7, 2018. Oral.

61. Eric Krall, Dean C. Webster, “Development and polymerization of methacrylate functionalized kraft lignin resin,” The Fiber Society 2017 Fall Meeting and Technical Conference and International Symposium on Materials from Renewables, Athens, GA, November 8-10, 2017. Poster.

62. Arvin Yu, Raul Setien, James Docken, Jr., Dean C. Webster, “Catalyzed non-isocyanate polyurethane (NIPU) coatings from bio-based cyclic carbonates,” The Fiber Society 2017 Fall Meeting and Technical Conference and International Symposium on Materials from Renewables, Athens, GA, November 8-10, 2017. Poster.

63. Eric Krall, Kelly Sutko, Dean C. Webster, “Development of methacrylate functionalized resin derived from kraft lignin,” National Meeting of the American Chemical Society, Washington, DC, August 20-24, 2017. Poster.

64. Eric Krall, Dean C. Webster, “Novel development of bio-based resin derived from kraft lignin,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017. Poster.

65. Samantha Silbert, Dean C. Webster, “Investigating the improvement of metal adhesion of cationic, UV-curable, bio-based epoxy coatings,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017. Poster.

66. Anthony Clay, Dean Webster, Mukund Sibi, Jayaraman Sivaguru, “Biomass derived photoinitiators,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017.

67. Ruvimbo, Chitemere, Mohiuddin Quadir, Dean Webster, “Soy-based soft matrices for customizable cargo delivery,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017.

68. Olena Shafranska, Bret Chisholm, Dean Webster, “Polystyrene modified soybean oil for SBR-based rubber processing,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017.

69. Arvin Yu, Dean Webster, “Organocatalyzed non-isocyanate polyurethane (NIPU) coatings from bio-based cyclic carbonates,” Great Lakes Regional Meeting 2017, Fargo, ND, June 27-30, 2017.

70. Arvin Yu, Raul Setien, James Docken, Jr., Dean C. Webster, “Catalyzed non-isocyanate polyurethane (NIPU) coatings from bio-based cyclic carbonates,” 21st Annual Green Chemistry & Engineering Conference, Reston, VA, June 13-15, 2017.

71. Dean C. Webster, Teluka Galhenage, Augusto M.S. Moreira, Ryan Burgett, Shane J. Stafslien, Lyndsi Vanderwal, John A. Finlay, Sofia Franco, Tony Clare, “Non-toxic amphiphilic fouling-release coatings via self-stratification,” 21st Annual Green Chemistry & Engineering Conference, Reston, VA, June 13-15, 2017.

72. Dean C. Webster, Adlina Paramarta, Songqi Ma, “High performance bio-based thermosets from highly functional resin systems,” 21st Annual Green Chemistry & Engineering Conference, Reston, VA, June 13-15, 2017.

73. Arvin Yu and Dean C. Webster, “Optimization studies on viscosity and thermomechanical properties of highly methacrylated bio-based resins,” 9th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe, Germany, March 19-21, 2017.

74. Arvin Yu, Raul Setien, James Docken, Dean C. Webster, “Catalyzed non-isocyanate polyurethane (NIPU) coatings from bio-based cyclic carbonates,” 9th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe, Germany, March 19-21, 2017.

75. Samantha Silbert, Dean C. Webster, “Investigating the improvement of metal adhesion of cationic, UV-curable, bio-based epoxy coatings,” The Society of Protective Coatings Conference Student Poster Competition, Tampa, FL, January 30-February 2, 2017. Poster. Awarded 1st Place.

76. Kelly Sutko, Eric Krall, Dean C. Webster, “Bio-based thermosets from novel methacrylated lignin resin,” 51st Midwest Regional Meeting of the American Chemical Society, Manhattan, Kansas, October 26-28, 2016.

77. Ivan Hevus, Dean C. Webster, “Bio-based cationic UV-curable resins for waterborne printing inks,” 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

78. Eric Krall, Dean C. Webster, “Development of acetoacetate functionalized resins derived from Kraft lignin,” 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

79. Adlina Paramarta, Dean C. Webster, “High performance ambient cure coatings derived from soybean-oil based acrylic resin,” 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

80. Alison Rohly, Dean C. Webster, “Vanillin: a biobased crosslinker for melamine-formaldehyde coatings,” 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

81. Samantha Silbert, Dean C. Webster, “UV-curable bio-based epoxy coatings,” 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

82. Arvin Yu, Dean C. Webster, “Novel bio-based highly functional dual methacrylated epoxidized sucrose soyate (DMESS)", 1st International Symposium on Materials from Renewables, Fargo, N.D. July 19-20, 2016. Poster.

83. Madhura Pade, Jackson Benda, Dean Webster, Shane Stafslien, Lyndsi Vanderwal, “Non-toxic isocyanate-free fouling-release coatings,” 12th National Graduate Research Polymer Conference, Akron, Ohio, June 19-22, 2016. Oral.

84. Arvin Z. Yu, Jonas M. Sahouani, Dean C. Webster, “Structure-property relationships of dual methacrylated epoxidized sucrose soyate (DMESS),” 12th National Graduate Research Polymer Conference, Akron, Ohio, June 19-22, 2016. Poster.

85. Alison Rohly, Dean C. Webster, “Vanillin: A biobased crosslinker for melamine-formaldehyde coatings,” 12th National Graduate Research Polymer Conference, Akron, Ohio, June 19-22, 2016. Poster.

86. Eric M. Krall, Dean C. Webster, “Model compound study to characterize the development of acetoacetate functionalized resin derived from Kraft lignin,” 12th National Graduate Research Polymer Conference, Akron, Ohio, June 19-22, 2016. Poster

87. Jonas M. Sahouani, Arvin Z. Yu, Dean C. Webster, “Highly functional methacrylated bio-based resin system for UV-curable coatings,” 12th National Graduate Research Polymer Conference, Akron, Ohio, June 19-22, 2016. Poster.

88. Joshua R. Bernier, Alison Rohly, Dean C. Webster, “Study of vanillin-amine systems for potential uses in coatings,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

89. Arvin Yu, Jonas Sahouani, Dean C. Webster, “Structure-property relationships of dual methacrylated epoxidied sucrose soyate (DMESS),” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

90. Jonas Sahouani, Arvin Yu, Dean C. Webster, “Highly functional methacrylated bio-based resin system for UV curable coatings,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

91. Alison Rohly, Dean C. Webster, “Vanillin: A biobased crosslinker for melamine formaldehyde coatings,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

92. Eric Krall, Taysir Bader, Eric Serum, Dean Webster, Mukund Sibi, “Model Compound Study to Characterize the Development of Acetoacetate Functionalized Resin Derived from Kraft Lignin,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

93. Adlina Paramarta, Dean C. Webster, “Ambient-cured Coatings derived from Acrylated Epoxidized Soybean Oil,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster

94. Ivan Hevus, Dean C. Webster, “Sustainable UV-curable cationic resins from sucrose soyate,” North Dakota EPSCoR State Conference, Grand Forks, ND, April 19, 2016. Poster.

95. Alison Rohly, Dean C. Webster, “Vanillin: A biobased crosslinker for melamine-formaldehyde coatings,” American Coatings Conference, Indianapolis, Indiana, April 11-13, 2016. Poster.

96. Madhura Pade, Jackson Benda, Dean C. Webster, “Novel non-isocyanate siloxane-polyurethane coatings,” American Coatings Conference, Indianapolis, Indiana, April 11-13, 2016. Oral.

97. Teluka Galhenage, Dean C. Webster, Augusto Moreira, Ryan J. Burgett, Shane J. Stafslien, Lyndsi Vanderwal, John A. Finlay, Sofia C. Franco, Anthony S. Clare, "Poly(ethylene glycol) modified amphiphilic siloxane polyurethane coatings and their performance," American Coatings Conference, Indianapolis, Indiana, April 11-13, 2016. Oral. Winner of the 1st Place Roon Award.

98. Dean C. Webster, Songqi Ma, Curtiss Kovash, "Effects of solvents on the curing and properties of fully biobased thermosets for coatings," American Coatings Conference, Indianapolis, Indiana, April 11-13, 2016. Oral.

99. Songqi Ma, Dean C. Webster, "Sustainable thermosets from epoxidized sucrose soyate and carboxylic acids with the assistance of solvents," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Oral

100. Eric Krall, Dean Webster, Taysir Bader, "Model compound study to characterize the development of acetoacetate functionalized resin derived from kraft lignin," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Poster

101. Madhura Pade, Jackson Benda, Dean Webster, Shane Stafslien, Lyndsi VanderWal, "Non-isocyanate approach for the synthesis of polyurethane fouling-release coatings," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Poster

102. Arvin Yu, Dean Webster, "Effect of degree of functionality on properties of methacrylated bio-based resins and thermosets," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Oral

103. Ivan Hevus, Dean Webster, "Highly functional cationic biobased resins for sustainable UV-curable coatings," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Oral

104. Alison Rohly, Dean Webster, "Vanillin: A biobased crosslinker for melamine-formaldehyde coatings," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Poster

105. Joshua Bernier, Alison Rohly, Dean Webster, "Study of vanillin-amine systems for potential uses in coatings," ACS National Meeting, San Diego, Ca., March 13-17, 2016. Poster. Winner of second place award in Undergraduate Research in Polymer Science Symposium.

106. Teluka Galhenage, Dean Webster, Augusto Moreira, Shane Stafslien, Lyndsi VanderWal, John Finlay, Sofia Franco, Tony Clare, "Poly(ethylene glycol) modified amphiphilic siloxane polyurethane coatings and their performance as effective fouling release surfaces," ACS National Meeting, San Diego, Ca., March 13-17, 2016.

107. Madhura Pade, Dean C. Webster, "Water dispersible glycidyl carbamate coatings for fouling-release applications," Pacific Polymer Conference 14, Kawai, Hawaii, December 9-13, 2015.

108. Songqi Ma, Dean C. Webster, "Naturally-occurring acids as crosslinkers to yield VOC-free, high-performance fully bio-based, degradable thermosets," NDSU-KU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Fargo, ND, October 15-16, 2015.

109. Arvin Z. Yu, Dean C. Webster, “Synthesis and characterization of biobased thermosets from dual methacrylated epoxidized sucrose soyate (DMESS),” NDSU-KU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Fargo, ND, October 15-16, 2015.

110. Adlina Paramarta, Dean C. Webster, “Finding the optimum accelerator for anhydride-cured epoxidized sucrose soyate thermoset,” NDSU-KU Joint Symposium on Biotechnology, Nanomaterials and Polymers, Fargo, ND, October 15-16, 2015.

111. Teluka Galhenage, Dean C. Webster, Shane Stafslien, Justin Daniels, John Finlay, “Fouling-release performance of silicone oil modified siloxane-polyurethane coatings,” ACS National Meeting, Boston, Ma., August 16-20, 2015.

112. Teluka Galhenage, Dean Webster, Dylan Hoffman, Samantha Silbert, Shane Stafslien, Lyndsi Vanderwal, John Finlay, Sofia Franco, “Fouling-release performance of siloxane-polyurethane marine coatings: Comparison of laboratory biological assays and field immersion studies in the marine environment,” ACS National Meeting, Boston, Ma., August 16-20, 2015.

113. Arvin Yu, Dean C. Webster, “Synthesis and characterization of biobased thermosets from dual methacrylated epoxidized sucrose soyate,” ACS Green Chemistry and Engineering Conference, Bethesda, Md., July 14-16, 2015.

114. James A. Docken, Jr., Dean C. Webster, “Novel biobased resins for use in non-isocyanate polyurethane coatings,” ACS Green Chemistry and Engineering Conference, Bethesda, Md., July 14-16, 2015.

115. Allison Rohly, Dean C. Webster, “Vanillin: A biobased crosslinker for thermoset coatings, ACS Green Chemistry and Engineering Conference, Bethesda, Md., July 14-16, 2015.

116. Eric Krall, Dean C. Webster, “Development of Acetoacetate functionalized resin derived from Kraft lignin,” ACS Green Chemistry and Engineering Conference, Bethesda, Md., July 14-16, 2015.

117. Teluka Galhenage, Dean C. Webster, Dylan Hoffman, Kunyu Zheng, Shane J. Stafslien, Justin Daniels, John A. Finlay, Maureen E. Callow, James, E. Callow, “Amphiphilic Acid Functional Siloxane Polyurethane Coatings,” International Congress on Marine Corrosion and Fouling, Singapore, July 6 – 10, 2014.

118. Adlina Paramarta, Dean C. Webster, “Curing kinetics of bio-based epoxy-anhydride thermosets,” American Coatings Conference, Atlanta, Georgia, April 8-10, 2014.

119. Alison Rohly, Dean C. Webster, “Is the silanol-isocyanate reaction suitable for forming stable siloxane-polyurethane block copolymers?” ACS National Meeting, Dallas, Texas, March 16-20, 2014.

120. Madhura Pade, Dean C. Webster, James Bahr, Shane Stafslien, Justin Daniels, “PU-PDMS fouling release coatings: Effect of surface damage,” ACS National Meeting, Dallas, Texas, March 16-20, 2014.

121. Adlina Paramarta, Dean C. Webster, Chris Taylor, Chad Ulven, “Biobased epoxy-anhydride thermosets for structural composites: The effect of composition variables,” 247th National Meeting of the American Chemical Society, Dallas, Texas, March 16-20, 2014.

122. Dean C. Webster, Thomas J. Nelson, Adlina Paramarta, Jimmy Docken, “Understanding the performance of novel biobased polymer systems used in coatings and composites,” 246th National Meeting of the American Chemical Society, Indianapolis, Indiana, September 8-12, 2013.

123. Curtiss Kovash, Erin Pavlacky, Dean C. Webster, “Vinyl ether blocked carboxylic acid compounds for use in biobased epoxy-acid thermosets,” 245th National Meeting of the American Chemical Society, New Orleans, La., April 7-11, 2013.

124. Adlina Paramarta, Dean Webster, Chris Taylor, Chad Ulven, “Biobased epoxy-anhydride thermosets for biocomposite matrix resin systems,” 245th National Meeting of the American Chemical Society, New Orleans, La., April 7-11, 2013.

125. Curtiss Kovash, Erin Pavlacky, Dean C. Webster, “Blocked biobased acids as crosslinkers for biobased epoxy resins,” CoatingsTech, Rosemont, Ill., March 12-13, 2013.

126. Dean C. Webster, “Novel high performance vegetable-oil based thermosets,” International Conference on Biobased Polymers and Composites, Siofok, Hungary, May 27-31, 2012.

127. Thomas J. Nelson, Dean C. Webster, “Catalyzed Crosslinking of highly functional biobased resins,” American Coatings Conference, Indianapolis, In, May 7-9, 2012.

128. Thomas J. Nelson, Dean C. Webster, “Highly functional biobased polyols and their use in melamine-formaldehyde systems,” Poster presented at American Coatings Conference, Indianapolis, In, May 7-9, 2012.

129. Adlina Paramarta, Dean C. Webster, “Soybean-based epoxy-anhydride thermoset coatings,” Poster presented at American Coatings Conference, Indianapolis, In, May 7-9, 2012.

130. Thomas J. Nelson, Dean C. Webster, “Impact of functionality on properties of vegetable oil based thermosetting coatings,” 5th Workshop on Fats and Oils as Renewable Feedstocks for the Chemicals Industry, Karlsruhe, Germany, March 18-20, 2012.

131. Rajan B. Bodkhe, Dean C. Webster, “Novel amphiphilic siloxane-polyurethane fouling release coatings using ring-opening equilibration polymerization and click chemistry,” CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

132. Stacy Sommer, Justin Daniels, Dean C. Webster, “Correlation of fouling-release field testing and laboratory biological analysis of siloxane-polyurethane coatings based on PDMS macromers,” CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

133. Xiao Pan, Partha Sengupta, Dean C. Webster, “High biocontent thermosetting coatings from epoxidized sucrose ester of fatty acids,” CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

134. Thomas J. Nelson, Dean C. Webster, “Waterborne monomer-grafted sucrose ester resins,” CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

135. Erin Saville, Neena Ravindran, Dean C. Webster, “Novel in-situ synthesis in the preparation of UV curable nanocomposite barrier coatings,” CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

136. Stacy Sommer, Abdullah Ekin, Rajan Bodkhe, Robert Pieper, Justin Daniels, Shane Stafslien, Dean C. Webster, Fouling-release field testing of siloxane-urethane coatings based on PDMS macromers,” International Marine and Offshore Coatings Conference, Virginia Beach, Va., May 19-21, 2010.

137. Dean C. Webster, Abdullah Ekin, Robert Pieper, Stacy Sommer, Rajan Bodhke, and Shane Stafslien, Maureen Callow and Stephanie Thompson, “Design and Optimization of Self-stratified Underwater Marine Coatings,” International Marine and Offshore Coatings Conference, Virginia Beach, Va., May 18-20, 2009.

138. Mohammed J. Nasrullah, Dean C. Webster, “Using an automated reactor system to explore process and compositional variations in aqueous polyurethane dispersions,” oral presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

139. Robert J. Pieper, Scott M. Ennis, Mohammed J. Nasrullah, Dean C. Webster, “Exploration of process variables using automated parallel reactors for the semi-batch synthesis of acrylic polyols,” oral presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

140. Dean C. Webster, Abdullah Ekin, Robert Pieper, Rajan Bodkhe, Stacy Sommer, Justin Daniels, Shane Stafslien, “High throughput screening of non-toxic marine coatings: correlation of lab assays with field test results,” oral presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

141. Mohammed J. Nasrullah, Dean C. Webster, Vishal V. Sonalkar, Thanusha Koralage, “Evaluation of the effect of inhibitors on conventional and controlled free radical polymerization using a high throughput approach,” poster presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

142. Rajan B. Bodkhe, Dean C. Webster, Maureen E. Callow, Stephanie Thompson, “Fouling-release performance of siloxane-polyurethane coatings using combinatorial high throughput methods,” poster presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

143. Chavanin Siripirom, James Bahr, Dean C. Webster, “An automated instrument for high throughput screening of polymer toughness,” poster presentation, Materials Research Society Spring Meeting, San Francisco, Ca., April 13-17, 2009.

144. Samali Datta, Muang Htet, Dean C. Webster, “Novel All Carbon-Based, UV-Curable Conductive Composites for Printed Microelectronics Applications,” Materials Research Society Fall Meeting, Boston, Ma. December 1-5, 2009.

145. Mohammed J. Nasrullah, Thanusha Koralage, Vishal V. Sonalkar and Dean C. Webster, " US Penny - A Source of Copper Catalyst for Atom Transfer Radical Polymerization (ATRP)," Poster presented at ASBMB Undergraduate Affiliate Network and ACS Regional Meeting, October 17 & 18, 2008, MSUM, Moorhead, MN.

146. Kugel, Alex J.; Jarabek, Laura E.; Daniels, Justin W. ; Vander Wal, Lyndsi J.; Ebert, Scott M.; Jepperson, Michael J.; Stafslien, Shane J.; Pieper, Robert J.; Webster, Dean C.; Bahr, James and Chisholm,Bret J. Combinatorial materials applied to the development of new surface coatings XII: Novel environmentally friendly antimicrobial coatings derived from biocide-functional acrylic polyols and isocyanates,” paper presented at FutureCoat! Chicago, Illinois, October 14-16, 2008. (Roon Foundation Award winner.)

147. Mohammed J. Nasrullah and Dean C. Webster, “Silicone resins containing polystyrene and poly(*t*-butyl acrylate) grafts as foul release coatings for marine applications, paper presented at FutureCoat! Chicago, Illinois, October 14-16, 2008.

148. Partha Sengupta, Xiao Pan, Dean C. Webster, “Waterborne long oil alkyd for coating wood,” poster presentation at FutureCoat! Chicago, Illinois, October 14-16, 2008.

149. Robert J. Pieper, Scott M. Ennis, Mohammed J. Nasrullah, Shane J. Stafslien, Justin W. Daniels, and Dean C. Webster, “Novel Zwitterionic/Amphiphilic Penta-block Copolymer Acrylic-Urethane Coatings for the Application of Fouling-Release Marine Coatings,” poster presentation at FutureCoat! Chicago, Illinois, October 14-16, 2008.

150. Stacy Sommer, Abdullah Ekin, Shane Stafslien, Justin Daniels, Stephanie Thompson, Maureen Callow, Dean C. Webster, “Fouling-Release Performance of Siloxane-Polyurethane Coatings Prepared with Siloxane Macromers,” poster presentation at FutureCoat! Chicago, Illinois, October 14-16, 2008.

151. Mohammed J. Nasrullah, Shane Stafslien, Justin Daniels, Lyndsi Vander Wal, and Dean C. Webster, “Evaluation of Polyurethane Dispersion as Potential Fouling Release Coatings for Marine Applications,” poster presentation at FutureCoat! Chicago, Illinois, October 14-16, 2008.

152. Rajan B. Bodkhe, Stephanie Thompson, Maureen E. Callow, and Dean C. Webster, “Combinatorial High Throughput Exploration Of The Effect Of PDMS Molecular Weight and Amount on The Fouling Release Performance Of Siloxane-Polyurethane Coating,” poster presentation at FutureCoat! Chicago, Illinois, October 14-16, 2008.

153. Dean C. Webster, Abdullah Ekin, Robert Pieper, Stacy Sommer, Rajan Bodhke, Shane Stafslien, Maureen Callow, Stephanie Thompson, “Toward tough fouling-release coatings: self-stratified siloxane-polyurethane coatings,” International Congress on Marine Corrosion and Fouling, Kobe, Japan, July 2008.

154. Dipak Chattopadhyay, Autumn Zakula, Dean C. Webster, “Hybrid sol-gel coatings from glycidyl carbamate functional resins,” Coatings Science International, Noordwijk, Netherlands, June 23-27, 2008.

155. D.K. Chattopadhyay, Autumn D. Zakula, Dean C. Webster, “Synthesis and Characterization of Organic-Inorganic Hybrid Materials from Glycidyl Carbamate Resin, 3-aminopropyltrimethoxysilane and Tetraethoxyorthosilicate,” Gordon Research Conference on Composites, Ventura, Ca., Jan. 13-18, 2008.

156. D.K. Chattopadhyay and Dean C. Webster, “Novel Organic-Inorganic Hybrid Coatings Prepared from Glycidyl Carbamate Resin and 3-Aminopropyltrimethoxy Silane,” Poster presented at ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

157. D.K. Chattopadhyay**,** Aaron Muehlberg, Autumn D. Zakula, Dean C. Webster, “Hybrid Coatings Prepared from Silane Modified Glycidyl Carbamate Resin and Amine Crosslinkers,” Poster presented at ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

158. Neena Ravindran, Dipak Chattopadhyay**,** Autumn D. Zakula, Dante Battocchi, Dean C. Webster, Gordon Bierwagen, “Properties of Magnesium-rich Primers Based on Glycidyl Carbamate Resins,” Poster presented at ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

159. Pieper, Robert J.; Casse, Franck; Callow, Maureen E.; Callow, James A.; Stafslien, Shane; Daniels, Justin; Webster, Dean C.. **“**Combinational study on the recent developments of acrylic urethane bulk properties and their effect on hybrid siloxane-urethane coatings for marine fouling-release applications.” ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

160. Nasrullah, Mohammed J.; Bahr, James A.; Gallagher-Lein, Christy; Webster, Dean C.; Roesler, Richard R.; Schmitt, Peter. **“**Automated method of polyurethane dispersion synthesis and characterization at laboratory scale.” ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

161. Huovinen, Andrew; Shedlosky, Tara J.; Bierwagen, Gordon; Webster, Dean. **“**Protecting outdoor bronze sculptures: a challenge to coatings scientist and conservators.” ICE 2007, International Coatings Expo: Clean-Lean-Green: Innovative Solutions for the Global Coatings Community, Toronto, ON, Canada, Oct. 3-5, 2007.

162. Dean C. Webster, Abdullah Ekin, Robert Pieper, Shane Stafslien, and Bret Chisholm, Franck Casse, James A. Callow, Maureen E. Callow, “High throughput synthesis and screening of coatings for underwater marine applications, Eurocombi4, Florence, Italy, July 2007.

163. Douglas L. Schulz, Kristen Keller, Samali Datta and Dean Webster “Conducting Adhesives for Advanced Manufacturing,” Spring Meeting of the Materials Research Society, San Francisco, Ca., April 2007.

164. Partha Majumdar, Shane Stafslien, Justin Daniels, Dean C. Webster, “High Throughput Combinatorial Characterization of Thermosetting Siloxane-Urethane Coatings Having

Spontaneously Formed Microtopographical Surfaces," Presentation at the FutureCoat! Technical Conference, Federation of Societies of Coatings Technology, New Orleans, La., November 2006.

165. Robert J. Pieper, Franck Casse, Maureen Callow, Dean C. Webster, "A Combinatorial Approach to Study the Effect of Acrylic Polyol Composition on the Properties of Crosslinked Siloxane-Urethane Fouling Release Coatings," Presentation at the FutureCoat! Technical Conference, Federation of Societies of Coatings Technology, New Orleans, La., November 2006.

166. Abdullah Ekin, Dean C. Webster, Justin Daniels, Shane Stafslien, "Synthesis and Characterization of Thermoset Siloxane-Polyurethane Coatings for Underwater Marine Applications Using Combinatorial High Throughput Experimentation," Presentation at the FutureCoat! Technical Conference, Federation of Societies of Coatings Technology, New Orleans, La., November 2006 (Roon Award Winner).

167. Mohammed Nasrullah, Dean C. Webster, "Synthesis and Characterization of Polyuethane Dispersions – A Comparison of Traditional and Automated Methods," Poster presented at the *International Coatings Exposition,* New Orleans, La., November 2006.

168. Roopashree Suryanarayana, Umesh Harkal, Dean C. Webster, "Effect of Glycidyl Carbamate Composition and Amine Crosslinkers on the Performance of Two-component Non-Isocyanate Polyurethane Coatings," Poster presented at the *International Coatings Exposition,* New Orleans, La., November 2006.

169. Samali Datta, Dean C. Webster, "Study of the Polymerization Behavior of Radiation Cured Conductive Composites," Poster presented at the *International Coatings Exposition,* New Orleans, La., November 2006.

170. Neena Ravindran, Dean C. Webster, "Effect of Method of In-situ Synthesis of Hyperbranched Polymer on Properties of Radiation Curable Polymer Clay Nanocomposites," Poster presented at the *International Coatings Exposition,* New Orleans, La., November 2006.

171. Abdullah Ekin, Dean C. Webster, "Library synthesis of organofunctional siloxanes, siloxane-poly(caprolactone) triblock copolymers and their use in advanced marine coatings", Poster Presentation, Gordon Research Conference on Combinatorial and High Throughput Materials Science, Oxford, UK, August 2005.

172. Partha Majumdar, Dean C. Webster, "Development of siloxane-urethane coatings having a microstructured surface topography", Poster Presentation, Gordon Research Conference on Coatings and Films, New London, New Hampshire, July 2005.

173. Zhigang Chen, Dean C. Webster, "Synthesis and use of novel sensitizers to enhance laser ablation of cationic UV curable coatings", Poster Presentation, Gordon Research Conference on Coatings and Films, New London, New Hampshire, July 2005. Selected as a best student poster at the conference.

174. Dean C. Webster, Partha Majumdar, Abdullah Ekin, James A. Bahr, David A. Christianson, "High Throughput Methods in the Development of Novel Marine Coatings,"

12th International Congress on Marine Corrosion and Biofouling, Southampton, UK, July 2004.

175. Fawn M. Uhl, Dean C. Webster, Chrstine Gallagher-Lein, David A. Christianson, James Bahr, "High throughput determination of structure-property relationships in UV cured polymer films," *40th International Symposium on Macromolecules*, Paris France, July 2004.

176. Heather A. Nash, Heidi J. Docktor, and Dean C. Webster, "Effect of composition on performance properties in cationic UV-curable coating systems," *International Coatings Exposition,* Philadelphia, Penn., November 12-14, 2003. (Roon Foundation Award winner.)

177. Fawn M. Uhl, Brian R. Hinderliter, Prashanth Davuluri, Stuart G. Croll, Shing Chung Wong, and Dean C. Webster, "Organically modified layered silicates in UV curable formulations," *International Coatings Exposition,* Philadelphia, Penn., November 12-14, 2003. (Best poster presentation award.)

178. Dean C. Webster, James W. Bennett, Sigrid C. Keubler, Mary Beth Kossuth, and Sigridur Jonasdottir, "High throughput workflow for the development of coatings," *International Coatings Exposition,* Philadelphia, Penn., November 12-14, 2003.

PREPRINTS/PROCEEDINGS (abstracted by Chemical Abstracts)

1. Dean C. Webster, Robert J. Pieper, Rajan B. Bodkhe, "Approaches to robust coatings with amphiphilic surfaces via self-stratification," Polymer Preprints, 52(2), 1032-1033, 2011.

2. Erin Saville, Neena Ravindran, Dean C. Webster, "Properties of UV-curable nanocomposites prepared using a novel in situ synthesis process," Polymer Preprints, 52(2), 100-101, 2011.

3. Dean C. Webster, "Polymers to coatings: principles for designing complex functional materials," PMSE Preprints, 105, 1180, 2011.

4. Rajan B. Bodkhe, Dean C. Webster, "Synthesis and characterization of novel α, ω, functional siloxanes with PEG sidechains," PMSE Preprints, 105, 712-713, 2011.

5. Thomas J. Nelson, Xiao Pan, Teluka Galhenage, Dean C. Webster, "Thermally initiated crosslinking of highly functional biobased resins," PMSE Preprints, 105, 1057-1058, 2011.

6. Adlina Paramarta, Xiao Pan, Dean C. Webster, "Synthesis and photopolymerization of highly functional acrylated biobased resins," Polymer Preprints, 52, 522-523, 2011.

7. Rajan B. Bodkhe, Dean C. Webster, "Synthesis and characterization of novel functional amphiphilic/zwitterionic triblock copolymers using ATRP and ring opening equilibration polymerization," Polymer Preprints, 52, 359-360, 2011.

8. Stacy Sommer, Rajan Bodkhe, Dean C. Webster, "Synthesis and characterization of end-functional PDMS homopolymer molecular brushes," Polymer Preprints, 52, 392-393, 2011.

9. Xiao Pan, Dean C. Webster, "Novel biobased high functionality polyols and their use in polyurethanes," Polymer Preprints, 52, 74-75, 2011.

10. Rajan B. Bodkhe, Dean C. Webster, “Synthesis and characterization of novel amphiphilic siloxane-polyurethane fouling release coatings using click chemistry,” Polymer Preprints, 52, 148-149, 2011.

11. Stacy Sommer, Joseph R. Byrom, Hanna D. Fischer, Rajan B. Bodkhe, Shane J. Stafslien, Justin Daniels, Carolyn Yehle, Dean C. Webster, “Effects of pigmentation on siloxane-polyurethane coatings and their performance as fouling-release marine coatings,” Proceedings of CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

12. Rajan B. Bodkhe, Stephanie E.M. Thompson, Carolyn Yehle, Nicholas Cilz, Justin Daniels, Shane J. Stafslien, Maureen E. Callow, James A. Callow, and Dean C. Webster, “The effect of formulation variables on the fouling-release performance of stratified siloxane-polyurethane coatings,” Proceedings of CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

13. Vinod Upadhyay, Umesh D. Harkal, Andrew J. Muehlberg, Nicholas Sauer, Dean C. Webster, Gordon P. Bierwagen, “Impact of polymer composition on electrochemical properties of coatings as determined by electrochemical impedance spectroscopy (EIS),” Proceedings of CoatingsTech Conference, American Coatings Association, Rosemont, Illinois, March 14-16, 2011.

14. Mohammed J. Nasrullah, Pooja Thapliyal, Vishal V. Sonalkar, Christy Gallagher-Lein, Dean C. Webster, “Synthesis of polyurethane dispersions using novel polypropylene carbonate polyols,” *PMSE Preprints*, **2010**, *103*, 108-109.

15. Xiao Pan, Partha Sengupta, Dean C. Webster, “Epoxy-anhydride curing of epoxidized sucrose esters of fatty acids,” *PMSE Preprints*, **2010**, *103*, 268-269.

16. Thomas J. Nelson, Dean C. Webster, “Monomer-grafted sucrose ester resins,” *PMSE Preprints*, **2010**, *103*, 406-407.

17. Umesh D. Harkal, Andrew J. Muehlberg, Peter A. Edwards, Dean C. Webster, “Novel waterborne glycidyl carbamate (GC) coatings,” Proceedings of the American Coatings Conference, Charlotte, N.C., April 12-14, 2010.

18. Dean C. Webster, Abdullah Ekin, Robert Pieper, Stacy Sommer, Rajan Bodhke, Shane J. Stafslien, Maureen Callow, Stephanie Thompson, “Marine Field Testing of Siloxane-polyurethane Fouling-Release Coatings,” Proceedings of the American Coatings Conference, Charlotte, N.C., April 12-14, 2010.

19. Umesh D. Harkal, Andrew J. Muehlberg, Dean C. Webster, “Novel air drying glycidyl carbamate (GC) coatings,” PMSE Preprints, **2010**, *201*, 247-248.

20. Partha Pratim Sengupta, Xiao Pan, Thomas J. Nelson, Adlina Paramarta, Dean C. Webster, “Cationic UV curing characteristics of epoxidized sucrose esters,” PMSE Preprints, **2010**, *102*, 888-889.

21. Dean C. Webster, “Reducing the environmental impact of protective and functional coatings,” PMSE Preprints, **2010**, *102*, 104.

22. Dean C. Webster, “Tailoring the surface properties of coatings through self-stratification,” PMSE Preprints, **2010**, *102*, 52.

23. Xiao Pan, Thomas J, Nelson, Dean C. Webster, “Novel enamine formation (EF) and air-drying (AD) co-curable coating resins: miscible blends of sucrose esters,” PMSE Preprints, **2010**, *102*, 759-760.

24. Erin Saville, Neena Ravindran, Dean C. Webster, “UV-curable nanocomposite barrier coatings with organically modified montmorillonite for flexible electronic devices,” PMSE Preprints, **2010**, *102*, 437-438.

25. Samali Datta, Muang Htet, Dean C. Webster, “Preparation and study of UV-curable conductive compositions using exfoliated graphite,” PMSE Preprints, **2009**, *100*, 615-616.

26. Mohammed J. Nasrullah, Vishal V. Sonalkar, Thanusha Koralage, Dean C. Webster, “Exploration of copper beads as catalyst for atom transfer radical polymerization of styrene,” Polymer Preprints, **2008**, *49*(2), 113-114.

27. Mohammed J. Nasrullah, Vishal V. Sonalkar, Robert M. Hoshaw, Dean C. Webster, “ATRP and ARGET of styrene and t-butyl acrylate using a high throughput approach,” Polymer Preprints, **2008**, *49*(2), 20-21.

28. Rajan B. Bodkhe, Stephanie Thompson, Maureen E. Callow, Dean C. Webster, “Effect of siloxane molecular weight and content on fouling release performance of siloxane-polyurethane coatings using combinatorial high throughput methods,” PMSE Preprints, **2008**, *99*, 376-377

29. D. K. Chattopadhyay, Aaron Muehlberg, Dean C. Webster, “Organic-inorganic hybrid coatings prepared from glycidyl carbamate resin and amino-functional silane,” PMSE Preprints, **2008**, *98*, 883-884.

30. Ankit Vora, Neena Ravindran, Kunal Singh, Dean C. Webster, “Use of PDMS-functionalized unsaturated polyester for preparation of UV-curable coatings with modified surface properties,” PMSE Preprints, **2008**, *98*, 871-872.

31. Mohammed J. Nasrullah, Ankit Vora, Dean C. Webster, “Block copolymer synthesis by a combination of ATRP and RAFT via click chemistry using a high throughput approach,” Polymer Preprints **2008**, *49*(1), 422-423.
32. Ankit Vora, Kunal Singh, Dean C. Webster, “Synthesis of Miktoarm star polymers by a combination of RAFT, ROP and "Click" chemistry,” Polymer Preprints, **2008**, *49*(1), 216-217.

33. Mohammed J. Nasrullah, Ankit Vora, Dean C. Webster, “Combination of ATRP and RAFT via "click" chemistry,” Polymer Preprints **2007**, *48*(2), 128-129.

34. Mohammed J. Nasrullah, Dean C. Webster, “Synthesis of silicone resins containing polystyrene and poly(t-butyl acrylate) grafts using ATRP and “click” chemistry,” PMSE Preprints, **2007**, 97, 92-93.

35. Ankit Vora, Mohammed Nasrullah, Dean C. Webster, “Synthesis and characterization of a novel RAFT agent with epoxy group,” PMSE Preprints **2007**, *97*, 106-107.

36. Mohammed J. Nasrullah, Richard R. Roesler, Peter Schmitt, James A. Bahr, Christy Gallagher-Lein, Dean C. Webster, “Synthesis and characterization of polyurethane dispersions by traditional and automated methods,” Polymer Preprints **2007**, *48*(1), 175-176.

37. Dean C. Webster, Partha Majumdar, Abdullah Ekin, Robert J. Pieper, “High throughput screening of compositional variables in a siloxane-urethane coatings systems for marine applications,” Polymer Preprints **2007**, *48*(1), 159-160.

38. Shane J. Stafslien, Justin W. Daniels, James A. Bahr, Bret Mayo, Bret J. Chisholm, Robert J. Pieper, Dean C, Webster, “An automated software tool for the rapid evaluation of bacterial biofilm retraction on fouling-release marine coatings,” Polymer Preprints **2007**, *48*(1), 149-150.

39. Mohammed J. Nasrullah, Dean C. Webster, “ATRP and free radical polymerizations using high throughput approach-effect of inhibitor,” Polymer Preprints **2007**, *48*(1), 145-146.

40. Robert J. Pieper, Shane J. Stafslien, Justin W. Daniels, Dean C. Webster, “Acrylic polyol composition and its effect on the fouling-release performance of siloxane-urethane coatings developed using combinatorial/high throughput methods,” Polymer Preprints **2007**, *48*(1), 139-140.

41. Robert J. Pieper, Franck Casse, Maureen Callow, Abdullah Ekin, Dean C.Webster, “A combinatorial approach to study the effect of acrylic polyol composition on the properties of crosslinked siloxane-urethane fouling release coatings,” FutureCoat Proceedings, New Orleans, LA, United States, Nov. 1-3, (2006).

42. Abdullah Ekin, Dean C. Webster, Justin Daniels, Shane Stafslien, “Synthesis and characterization of siloxane-polyurethane coatings for underwater marine applications using combinatorial high throughput experimentation,” FutureCoat Proceedings, New Orleans, LA, United States, Nov. 1-3, (2006).

43. Partha Majumdar, Shane Stafslien, Justin Daniels, Dean C. Webster, “High-throughput combinatorial characterization of thermosetting siloxane-urethane coatings having spontaneously formed microtopographical surfaces,” FutureCoat Proceedings, New Orleans, LA, United States, Nov. 1-3, (2006).

44. Mohammed J. Nasrullah, Abdullah Ekin, James A. Bahr, Christine Gallagher-Lein, Dean C. Webster, “Practical and automated high throughput approach: Atom Transfer Radical Polymerization of styrene and t-butyl acrylate,” PMSE Preprints **2006**, *95*, 10-12.

45. Abdullah Ekin, Dean C. Webster, “Synthesis and characterization of novel carbamate linked Di- and tetra- functional poly(dimethylsiloxane) oligomers and their block copolymers with poly(ε -caprolactone) using combinatorial and high-throughput methods,” Polymer Preprints **2006**, *47(2)*, 1204-1205.

46. Partha Majumdar, Dean C. Webster, “Effect of siloxane content and degree of reaction on the formation of siloxane-urethane coatings having a microtopographical surface,” Polymer Preprints **2006**, *47(2),* 1119-1120.

47. Abdullah Ekin, Dean C. Webster, Justin Daniels, Shane Stafslien, “Effect of PDMS composition on the surface and bulk properties of crosslinked siloxane-urethane coatings,” Polymer Preprints **2006**, *47(2),* 1117-1118.

48. Zhigang Chen, Dean C. Webster, “Designed Carrier Gas UV Laser Ablation Sensitizers for Cationic UV Curable Coatings,” Technical Conference Proceedings - UV & EB Technology Expo & Conference, Chicago, Il., April 24-26, 2006.

49. Zhigang Chen, Dean C. Webster, “Intramolecular Hydrogen Abstraction Photosensitizers (IHA-PS) for Cationic Photopolymerization,” Technical Conference Proceedings - UV & EB Technology Expo & Conference, Chicago, Il., April 24-26, 2006.

50. Samali Datta, Saurabh Nanavati, Nathan Schuler, Robert Sailer, Dustin Vaselaar, Aaron Reinholz, Douglas Schulz, David Wells and Dean C. Webster, “Development of solvent-free UV-curable conductive inks for printed flexible microelectronics,” Technical Conference Proceedings - UV & EB Technology Expo & Conference, Chicago, Il., April 24-26, 2006.

51. Mohammed J. Nasrullah, Dean C. Webster, “Polymerization of styrene and t-butyl acrylate by atom transfer radical polymerization - high throughput approach.” Polymer Preprints 47(1), 217-218 (2006).

52. Neena Ravindran; Dean C. Webster. "Effect of in-situ synthesis of precursor oligomers on exfoliation of clay in radiation cured nanocomposites." *Polymer Preprints (American Chemical Society, Division of Polymer Chemistry)* **2005**, *46*, 732-733.

53. Zhigang Chen; Dean C. Webster. "UV curing and UV laser ablation behavior of coatings containing novel sensitizers." *PMSE Preprints* **2005**, *93*, 18-19.

54. Abdullah Ekin; Dean C. Webster. "Combinatorial synthesis of novel carbamate linked Di- and tetra- functional poly(dimethyl siloxane) oligomers and block copolymers and their use in polyurethane coatings." *PMSE Preprints* **2005**, *93*, 468-469.

55. Partha Majumdar; Dean C. Webster. "Effect of solvent composition on the formation of microtopographical siloxane-urethane surface." *PMSE Preprints* **2005**, *93*, 692-694.

56. Robert J. Pieper; Dean C. Webster. "A combinatorial approach to study the effect of acrylic polyol composition on the properties of crosslinked siloxane-urethane coatings." *PMSE Preprints* **2005**, *93*, 734-735.

57. Abdullah Ekin; David A. Christianson; Dean C. Webster. "Combinatorial synthesis of organo-functional poly(dimethyl siloxane) (PDMS) oligomers and triblock copolymers and their use in PDMS-polyurethane coatings." *PMSE Preprints* **2005**, *93*, 896-897.

58. Bret J. Chisholm; David A. Christianson; Christine Gallagher-Lein; Dean C. Webster. "Process capability studies for a combinatorial workflow designed to develop new marine coatings." *PMSE Preprints* **2005**, *93*, 906-907.

59. Partha Majumdar; David A. Christianson; David C. Webster. "Minimization of film thickness variation using an automated high-throughput coating application unit." *PMSE Preprints* **2005**, *93*, 908-909.

60. Fawn M. Uhl, Brian R. Hinderliter, Prashanth Davuluri, Stuart G. Croll, Shing Chung Wong, Dean C. Webster. "Enhanced properties of UV curable films containing layered silicates as the nanomaterial." Technical Conference Proceedings - UV & EB Technology Expo & Conference, Charlotte, NC, United States, May 2-5, 2004 (2004), 610-619.

61. Neena Ravindran, Ankit Vora, Dean C. Webster. "Effect of polymer composition on performance properties of maleate-vinyl ether donor-acceptor UV-curable systems." Technical Conference Proceedings - UV & EB Technology Expo & Conference, Charlotte, NC, United States, May 2-5, 2004 (2004), 148-159.

62. Fawn M. Uhl, Prashanth Davuluri, Shing-Chung Wong, Dean C. Webster, "Properties of UV curable acrylate nanocomposite coatings." Annual Technical Conference – Society of Plastics Engineers, 62nd(Vol. 2), 1892-1895 (2004).

63. Shing-Chung Wong, Eric M. Sutherland, Fawn M. Uhl, Suchitra Yerramaddu, Dean C. Webster, Bor Z. Jang, "Graphene nanoplatelet reinforced polymer coatings," Annual Technical Conference – Society of Plastics Engineers, 62nd(Vol. 2), 1733-1737 (2004).

64. Fawn M. Uhl, Brian R. Hinderliter, Siva Prashanth Davuluri, Stuart G. Croll, Shing-Chung Wong, Dean C. Webster, "UV curable polymers with organically modified clay as the nanoreinforcements," *Materials Research Society Symposium Proceedings,* 788 (Continuous Nanophase and Nanostructured Materials), 203-208 (2003).

65. Peter A. Edwards, Grant Striemer, Dean C. Webster,. "Cure properties of glycidyl carbamate functional oligomers reacted with amines," *Polymer Preprints,* **45**(1), 935-936 (2004).

66. Partha Majumdar, David A. Christianson, Dean C. Webster,. "Rapid approach for determination of pot life of two-component reactive coatings," *Polymeric Materials Science and Engineering*, **90**, 799-800 (2004).

67. Peter A. Edwards, Grant Striemer, Dean C. Webster, "Kinetics and cure of glycidyl carbamate functional oligomers," *Polymeric Materials Science and Engineering,* **90,** 455-456 (2004).

68. Fawn M. Uhl, Brian R. Hinderliter, Prashanth Davuluri, Stuart G. Croll, Shing Chung Wong, Dean C. Webster, "UV Curable Montmorillonite-Acrylate Nanocomposites," *Polymer Preprints,* **44**(2), 247-248 (2003).

69. Peter A. Edwards, Joel Erickson, Dean C. Webster, "Synthesis and characterization of glycidyl carbamate functional oligomers," *Polymer Preprints*, **44**(1), 144-145 (2003).

70. Heather A. Nash, Heidi J. Docktor, Dean C. Webster, "Effect of addition of polyol on cure kinetics and viscoelastic properties of UV-curable coating formulations containing cycloaliphatic epoxide and oxetane," *Polymer Preprints*, **44**(1), 121-122 (2003).

71. Peter A. Edwards, Joel Erickson, Dean C. Webster, "Synthesis and self-crosslinking of glycidyl carbamate functional oligomers," *Polymer Preprints*, **44**(1), 54-55 (2003).

72. Dean C. Webster and Allen L. Crain, "Synthesis and applications of cyclic carbonate functional polymers from vinyl ethylene carbonate," *Proc. Int. Waterborne, High-Solids, Powder Coat. Symp.*, 27th, 240-253 (2000).

73. Dean C. Webster, Chad E. Marlow, Allen L. Crain, "Free Radical Polymerization of 3-Butene-1,2-diol Diesters," *Polymer Preprints*, **39**(1), 623-624 (1998).

74. Dean C. Webster, Allen L. Crain, "Synthesis of Cyclic Carbonate Functional Polymers", *Polym. Mater. Sci. Eng.*, **76**, 302-303 (1997).

75. James C. Scanlan, Dean C. Webster, Allen L. Crain, "Correlation Between Network Mechanical Properties and Physical Properties in Polyester-urethane Coatings," *Polym. Mater. Sci. Eng.*, **73**, 191-192 (1995).

76. Dean C. Webster, "Design of Fatty Acid Modified Polyester Oligomers for High Solids Bake Coatings," *Polym. Mater. Sci. Eng.*, **63**, 841-845 (1990).

77. J. M. Lambert, D. C. Webster, and J. E. McGrath, "Synthesis of Segmented Poly(arylene ether sulfone)-Poly(arylene terephthalate) Copolymers," *Polymer Preprints*, **25**(2), 14-16 (1984).

78. Patricia J. Andolino-Brandt, Dean C. Webster, and J. E. McGrath, "Polyarylester-polysiloxane Block Copolymers: Synthesis and Characterization," *Polymer Preprints*, **25**(2), 91-93 (1984).

79. Dean C. Webster, P. J. Andolino, J. S. Riffle, F. L. Keohan, and J. E. McGrath, "Synthesis and Characterization of Polyarylester-Polydimethylsiloxane Block Copolymers," *Polymer Preprints*, **24**(1), 161-163 (1983).

80. A. K. Banthia, D. C. Webster, and J. E. McGrath, "Synthesis and Characterization of Poly(arylether) Containing Block Copolymers," *Organic Coatings and Plastics Preprints*, **42**(1), 127-133 (1980).

81. J. S. Riffle, A. K. Banthia, D. C. Webster, and J. E. McGrath, "Synthesis of Organosiloxane Block Copolymers via an Interfacial Process," *Organic Coatings and Plastics Preprints*, **42**(1), 122-126 (1980).

82. J. E. McGrath, D. W. Dwight, J. S. Riffle, T. F. Davidson, D. C. Webster, and R. Viswanathan, "Bulk and Surface Segregation of Polycarbonate-Polysulfone and Polycarbonate-Polydimethylsiloxane Block Copolymers," *Polymer Preprints*, **20**(2), 528-530 (1979).

GRADUATE STUDENTS SUPERVISED

1. Nastaran Shahzadeh, Ph.D. student.

2. Ramsharan Pandey, Ph.D. student.

3. Shokoofeh Ghasemi, Ph.D. student.

4. Iryna Bon, Ph.D. student.

5. Wanli Cheng, M.S., January 2023, "Amphiphilic Marine Coatings System of Self-Layered PDMS-PEG Surface with an Epoxy-Polyurethane Matrix and its Critical Hydrophilic-Lipophilic Ratio (CHLR)."

6. Morgen Hagerott, M.S., December 2022, “Development of Ice Releasing Epoxy-Siloxane Marine Coatings.”

7. Maryam Safaripour, Ph.D. student.

8. Marta Vonsul, Ph.D. Student.

9. Michael Odegaard, Ph.D. Student.

10. Joseph Dahlgren, Ph.D. Student.

11. Jonas Sahouani, M.S. Student.

12. Hannah Booher, Ph.D. Student.

13. Alexander Hart, Ph.D. Candidate.

14. Shikhin Nadkarni, Ph.D. Student.

15. Raul Setien, Ph.D., December 2022, “Sustainable thermosetting polymers: biobased epoxy resin systems and aqueous non-isocyanate polyurethanes.”

16. Jackson Benda, Ph.D., May 2022, “surface modifying amphiphilic additives for the improvement of fouling-release properties of siloxane-polyurethane coatings.”

17. AliReza Rahimi, Ph.D. May 2020, “Investigation of novel approaches for improved amphiphilic fouling-release coatings.”

18. Samantha Silbert, Ph.D., December 2019, “Epoxidized sucrose soyate and derivatives as bioderived crosslinkers in various thermosets.”

19. Eric Krall, Ph.D., May 2019, “Development of novel kraft lignin resins for use in thermoset materials.”

20. Alison Rohly, Ph.D., May 2019, “Improving sustainability in protective coating systems.”

21. Jimmy Docken, M.S. Student.

22. Arvin Yu, Ph.D. December 2017, “Highly Functionalized Thermosets from Renewables for Composites and Coatings Applications.”

23. Madhura Pade, Ph.D. December 2018, “Influence Of Surface Topography And Curing Chemistry On Fouling-Release Performance Of Self-Stratified Siloxane-Polyurethane Coatings.”

24. Teluka Galhenage, Ph.D., December 2016, “Surface Optimization of Siloxane-Polyurethane Marine Coatings for Improved Fouling-Release Properties.”

25. Adlina Paramarta, Ph.D. December 2016, “High Performance Bio-based Thermosets for Composites and Coatings.”

26. T.J. Nelson, Ph.D., February 2013, “Novel biobased resins for high performance coatings.”

27. Erin Saville Pavlacky, Ph.D. Student, January 2012, “Novel hybrid polymeric materials for barrier coatings.”

28. Chavanin Siripirom, Ph.D., March 2012, “High-throughput characterization of the mechanical properties of coatings.”

29. Rajan Bodkhe, Ph.D., August 2011, “Amphiphilic siloxane-polyurethane coatings.”

30. Xiao Pan, Ph.D., May 2011, “Novel biobased resins using sucrose esters of plant oils.”

31. Stacy Sommer, Ph.D. April 2011, “Siloxane-polyurethane fouling-release coatings based on PDMS macromers.”

32. Umesh Harkal, Ph.D., September 2010, “Low VOC coating systems from novel glycidyl carbamate resins.”

33. Robert Pieper, Ph.D., September 2010, “Surface Property Modification of Coatings Via Self-Stratification.”

34. Samali Datta, Ph.D. September 2009, “Design and Characterization of Environmentally-friendly Printable Conductive Composites.”

35. Ankit Vora, Ph.D., May 2008, “Synthesis and characterization of novel functional polymeric materials.”

36. Abdullah Ekin, Ph.D., January 2007, “Siloxane-polyurethane marine coatings.”

37. Roopashree Suryanarayana, M.S., October 2006, “Zero-VOC Binder System from Glycidyl Carbamate Functional Resins.”

38. Partha Majumdar, Ph.D., August 2006, “Thermosetting Siloxane-Urethane Fouling-Release Coatings.”

39. Zhigang Chen, Ph.D., May 2006, “Development of cationic UV curable materials for flexible microelectronics encapsulation.”

40. Neena Ravindran, Ph.D., January 2006, “High performance UV curable polymers and polymer-clay nanocomposite thin films for advanced electronic applications.”

41. Peter A. Edwards, Ph.D., December 2004, “Glycidyl carbamate resins to achieve polyurethane properties and epoxide reactivity.”

42. Heather A. Nash (Goulet), Ph.D., December 2003, “The use of cycloaliphatic epoxides in latex and UV-curable coatings.”

POSTDOCTORAL ASSOCIATES SUPERVISED

Dr. Fawn M. Uhl, Ph.D., Marquette University, Currently at Owens-Corning.

Dr. Mohammed Nasrullah, Ph.D., Indian Institute of Technology, Madras, Currently at Afton Chemical.

Dr. Dipak Chattopadhyay, Ph.D., Indian Institute of Chemical Technology, Hyderabad. Currently at Classic Stripes Private Limited, India.

Dr. Abhijit Jadhav, Ph.D., University of Cincinnati. Currently at BASF, Michigan.

Dr. Partha Sengupta, Ph.D., Indian Institute of Technology, Kharagpur.

Dr. Erin Saville Pavlacky, Ph.D. NDSU. Currently at H. B. Fuller.

Dr. Curtiss Kovash, Ph.D., South Dakota State University.

Dr. Ivan Hevus, Ph.D., NDSU.

Dr. Songqi Ma, Ph.D. Currently at Jiangnan University, Wuxi, China.

Dr. Olena Shafranska, Current Research Scientist at NDSU.

Dr. Ihor Tarnavchyk, Currently at Renuvix, LLC.

Dr. Satayabrata Samanta, Currently at Danimer Scientific.

Dr. Jingbo Wu, Currently at Alcon.

Dr. David Boucher

Dr. Daniel Bellido-Aguilar, Currently at University of Arizona.

Dr. Tong Li

UNDERGRADUATE STUDENTS SUPERVISED

Langdon Martin, Heidi Docktor, Ankit Vora, Matthew Axtman, Eric Hamp, Aaron Muehlberg, Scott Ennis, Vishal Sonalkar, A.J. Muehlberg, Thanusha Korlage, Hanna Fischer, Asantha Lokuenderage, Joseph Byrom, Adlina Paramarta, Autumn Zakula, Dustin Pfundheller, T.J. Nelson, Ben Gaboury, Erica Pfarr, Bryan Masaki, Neal Eidenschink, Loren Vanderhoff, Lindsey Bultema, Teluka Galhenage, Kunyu Zheng, Jiwon Lee, Zachary Morseth, Dylan Hoffman, Myuenkeun Oh, AliReza Rahimi, Samantha Silbert, Travis Peterson, Josh Bernier, Nicholas Horski, Jonas Sahouani, Augusto Moreira, Dat Nguyen, Taysir Badir, Jackson Benda, Ryan Burgett, Mitchell Maw, Braeden Corts, Andrii Tiara, Autumn Fuchs, Alexander Hart, Joseph Dahlgren, Michael Odegaard, Morgan Murphy, Marta Vonsul, Justin Schroepfer, Wardah Yusra, Christian Borchardt.