

## PERSONAL INFORMATION:

Name: Michael J. Lueckheide  
Address: 1 South Avenue, Garden City, NY 11530  
Telephone: 516-877-4152

## EDUCATION:

<b>Ph. D., Chemistry</b> <b>University of Chicago</b> , Chicago, IL, USA Advisor: Prof. Matthew V. Tirrell <i>Dissertation: On the Structure-Property Relationships of Oligonucleotide Polyelectrolyte Complexes and Complex Micelles</i>	September 2014-November 2018
<b>M.S., Chemistry</b> <b>University of Chicago</b> , Chicago, IL, USA	September 2014-November 2018
<b>B.A., Chemistry</b> <b>Vassar College</b> , Poughkeepsie, NY, USA Advisor: Prof. Christopher J. Smart <i>Thesis: The Controlled Electrochemical Growth of Transition Metal Nanoparticles on Carbon Nanotubes</i>	September 2009-June 2013
<b>B.A., Physics</b> <b>Vassar College</b> , Poughkeepsie, NY, USA	September 2009-June 2013

## PROFESSIONAL EXPERIENCE – ACADEMIC:

### FULL-TIME

August 2022-Present, Assistant Professor of Chemistry, Adelphi University

## PROFESSIONAL EXPERIENCE – NON-ACADEMIC:

### FULL-TIME

March 2019-May 2022, Physicist, National Institute of Standards and Technology

PUBLICATIONS: All publications should be listed in chronological order, most recent first.

**N.B.** If you are a co-author or collaborator on any of the following, please detail in your self-evaluation the contribution you made to the text/piece. Also give specifics in your self-evaluation about how authors are listed in your discipline (e.g. all authors are listed alphabetically in Mathematics regardless of contribution).

PUBLISHED REFEREED BOOKS: None

PUBLISHED NON-REFEREED BOOKS: None

REFEREED BOOK CHAPTERS:

P. D. Pickett, Y. Ma, N. D. Posey, M. Lueckheide, V. M. Prabhu, **Structure and Phase Behavior of Polyampholytes and Polyzwitterions**, *Wiley-VCH Gmbh*, **2022**, DOI: 10.1002/9783527815562.mme0056

NON-REFEREED BOOK CHAPTERS: None

REFEREED JOURNAL ARTICLES:

Jalissa L. Warthen, M. J. Lueckheide, **Peptides as Targeting Agents and Therapeutics: A Brief Overview**, *Biomacromolecules*, **2024**, <https://doi.org/10.1021/acs.biomac.4c00518>

M. Lueckheide, A. Marin, H. D. Tagad, N. D. Posey, V. M. Prabhu, A. K. Andrianov, **Monitoring Protein Complexation with Polyphosphazene Polyelectrolyte Using Automated Dynamic Light Scattering Titration and Asymmetric Flow Field Flow Fractionation and Protein Recognition Immunoassay**, *ACS Polymers Au*, **2023**, <https://pubs.acs.org/doi/10.1021/acspolymersau.3c00006>

P. D. Pickett, Y. Ma, M. Lueckheide, Y. Mao, V. M. Prabhu, **Temperature dependent single-chain structure of poly[3-(acrylamidopropyl-dimethylammonium) propyl-1-sulfonate] via small-angle neutron scattering**, *The Journal of Chemical Physics*, **2022**, <https://doi.org/10.1063/5.0093158>

W. Zhang, Y. Ma, N. D. Posey, M. J. Lueckheide, V. M. Prabhu, J. F. Douglas, **Combined Simulation and Experimental Study of Polyampholyte Solution Properties: Effects of Charge Ratio, Hydrophobic Groups, and Polymer Concentration**, *Macromolecules*, **55**, 6750-6761, **2022**

Z. Zhou, C. F. Yeh, M. Mellas, M. J. Oh, J. Zhu, J. Li, R. T. Huang, D. Harrison, T. P. Shentu, D. Wu, M. Lueckheide, L. Carver, E. J. Chung, L. Leon, K. C. Yang, M. V. Tirrell, Y. Fang, **Targeted polyelectrolyte complex micelles treat vascular complications in vivo**, *Proceedings of the National Academy of Sciences*, **118**, 50, 1-12, **2021**

N. D. Posey, Y. Ma, M. Lueckheide, J. Danischewski, J. A. Fagan, V. M. Prabhu, **Tuning Charge Balance in Aliphatic Polycarbonates Alters Solubility and Protein Complexation Behavior**, *ACS Omega*, **6**, 22589-22602, **2021**

M. Lueckheide†, J. R. Viereggt†, A. J. Bologna, L. Leon, M. V. Tirrell, **Structure-property relationships of oligonucleotide polyelectrolyte complex micelles**, *Nano Letters*, 18, 11, 7111-7117, **2018**

J. R. Viereggt†, M. Lueckheide†, A. B. Marciel, L. Leon, A. J. Bologna, J. R. Rivera, M. V. Tirrell, **Oligonucleotide-peptide complexes: phase control by hybridization**, *Journal of the American Chemical Society*, 140, 5, 1632-1638, **2018**.

M. Lueckheide, N. Rothman, B. Ko, J. M. Tanski,  **$\pi$ -Stacking Motifs in the Crystal Structures of Bis(phosphine) Copper (I) 2-Tetrahydroborate Complexes**, *Polyhedron*, 58, 79-84, **2013**.

J. Magnes, K. Raley-Susman, N. Melikechi, A. Sampson, R. Eells A. Bello, M. Lueckheide, **Analysis of Freely Swimming C. elegans Using Laser Diffraction**, *Open Journal of Biophysics*, 2, 101-107, **2012**.

NON-REFEREED JOURNAL ARTICLES: None

REFEREED PAPERS AND PRESENTATIONS:

**Oral Presentation.** M. Lueckheide, A. Marin, H. Tagad, N. Posey, V. Prabhu, A. K. Andrianov, "Investigating protein-polyphosphazene complexation with automated dynamic light scattering titrations, asymmetric flow field flow fractionation, and protein recognition immunoassay, *American Chemical Society March Meeting*, March 2024, New Orleans, Louisiana, March 17-21

**Poster Presentation.** M. Lueckheide, T. R. Blake, B. McCarthy, D. P. Walton, R. M. Waymouth, Y. Ma, Y. Mao, V. M. Prabhu, "Solution structure of amphiphilic charged transporters (ACTs) and ACT-polynucleotide complexes for delivering therapeutic nucleic acids," *American Chemical Society March Meeting*, March 2021, Virtual Conference

**Poster Presentation.** M. Lueckheide, T. Blake, D. Walton, R. M. Waymouth, Y. Ma, Y. Mao, V. M. Prabhu, "Solution Structure of Lipophilic-Charged Block Copolymers and Complexes for Delivering Therapeutic Nucleic Acids," *American Conference on Neutron Scattering*, July 2020, Virtual Conference

**Oral Presentation.** M. Lueckheide, "Multimodal characterization of oligonucleotide-polyelectrolyte complex micelles," *12th International Symposium on Polyelectrolytes*, 2018, Wageningen, Netherlands, August 27-31

**Oral Presentation.** M. Lueckheide, "Oligonucleotide/block-copolymer micelles: shape, size, and structure," *National Graduate Research Polymer Conference*, June 10-12, 2018, Minneapolis, MN

**Poster Presentation.** M. Lueckheide, J. Viereggt, A. Marciel, S. Srivastava, A. Bologna, M. Tirrell, "Effects of Nucleic Acid Modifications on Micelle Stability and Structure," *91st American Chemical Society Colloid and Surface Science Symposium*, July 2017, New York, NY

**Poster Presentation.** M. Lueckheide, J. Viereggt, A. Marciel, L. Leon, A. Bologna, J. Reyes, M. Tirrell, *Gordon Research Conference on Bioinspired Materials*, June 2016, Les Diablerets, Switzerland

## NON-REFEREED PAPERS AND PRESENTATIONS:

**Poster Presentation.** M. Lueckheide, J. Viereg, A. Marciel, L. Leon, A. Bologna, J. Reyes, M. Tirrell, *Colloquium on Polymer Science and Molecular Engineering-Zhejiang University and the University of Chicago*, April 2017, Hangzhou, China

INVITED PAPERS AND PRESENTATIONS: None

OTHER CREATIVE WRITTEN PROJECTS: None

ACCEPTED (BUT NOT YET PUBLISHED) WORKS: None

WORKS IN PROGRESS: None

ARTISTIC ACHIEVEMENTS: None

## GRANTS:

Michael Lueckheide, **Frederick Bettelheim Research Award**, "Polysoap Particles for Environmental Cleanup, Water Purification, and Drug Delivery," Adelphi University, 2024

Michael Lueckheide, **Adelphi Faculty Development Grant**, "Synthesis, and Characterization of Amino Acid Sequences for Targeting *Trichomonas Vaginalis*," Adelphi University, 2023

OTHER PROFESSIONAL ACHIEVEMENTS: None

## HONORS AND AWARDS:

**Cash-In-Your-Account Award**, National Institute of Standards and Technology 2021  
*In recognition of promotion of diversity and inclusion through leadership with NIST Pride and the Employee Resource Council as a resource for members of the LGBTQ+ community and allies at NIST*

**National Research Council Research Associateship**, National Institute of Standards and Technology, 2018

**Best Contributed Presentation by a Junior Scientist**, International Symposium on Polyelectrolytes 2018

**Best Poster Award**, Colloquium on Polymer Science and Molecular Engineering-Zhejiang University and the University of Chicago 2018

**Selected to attend National School on Neutron and X-Ray Scattering** August 2016  
Oak Ridge National Laboratory and Argonne National Laboratory

**Selected to attend Next Generation Electrochemistry Workshop** June 2016  
University of Illinois at Chicago

**Friends of Frances D. Ferguson Scholar**, Vassar College 2010-2013

**Olive Lammert Book Prize for excellence in Physical Chemistry**, Vassar College 2012

**Olive Lammert Book Prize for excellence in General Chemistry**, Vassar College 2010

ACADEMIC AND PROFESSIONAL SOCIETIES:

**American Chemical Society** 2009-Present

SERVICE:

PROFESSIONAL:

**Judge**, Long Island Science and Engineering Fair 2024

**Judge**, Long Island Science and Engineering Fair 2023

**Session Chair**, Virtual Polymer Physics Symposium 2021  
Chaired “Self Assembly and Supramolecular Interactions,” and Moderated “Diversity and Dispersity discussion hour”

**President**, NIST Pride 2019-2022  
NIST Pride is the LGBTQ+ Employee Resource Group at the National Institute of Standards and Technology

SCHOOL/DEPARTMENT:

**Teaching Observation of Chemistry Adjunct Teachers** 2024  
One adjunct instructor observed in Physiological Chemistry recitation and laboratory

**March and Dakin Lecture Organizer** March 2023-Present

**Teaching Observation of Chemistry Adjunct Teachers** 2023  
One adjunct instructor observed in General Chemistry laboratory

**Teaching Observation of Chemistry Adjunct Teachers** 2023  
One adjunct instructor observed in Physiological Chemistry recitation and laboratory

**Volunteer Tutor**, Biochemistry Bootcamp for CSTEP

2023

**Adelphi Accepted Student Days and Open Houses**

Eight Times

Chemistry Department Representative

**Teaching Observation of Chemistry Adjunct Teachers**

2022

Two adjunct teachers observed in Physiological Chemistry recitation and laboratory

UNIVERSITY: Adelphi Pride Committee, August 2022-Present, Robby Fahrenholz and Mena Sposito (Chairs).

College of Arts and Sciences Academic Affairs Committee, August 2023-Present, Ryan Erhart (Chair)

**WORKLOAD:**

**TEACHING WORKLOAD:**

Course Number	Course Name	# Students	Semester and Year
0106-109-050	Physiological Chemistry Lecture	48	Fall 2022
0106-109-070	Physiological Chemistry Lecture	47	Fall 2022
0106-109-071	Physiological Chemistry Recitation	24	Fall 2022
0106-109-072	Physiological Chemistry Lab	24	Fall 2022
0106-109-073	Physiological Chemistry Recitation	23	Fall 2022 (6 weeks)
0106-109-074	Physiological Chemistry Lab	23	Fall 2022 (6 weeks)
0106-109-040	Physiological Chemistry Lecture	22	Spring 2023
0106-109-043	Physiological Chemistry Recitation	3	Spring 2023
0106-472-001	Biochemistry II	9	Spring 2023
0106-498-007	Guided Research in Chemistry	4	Spring 2023
0105-791-002	Special Research Problems	1	Summer 2023
0106-109-030	Physiological Chemistry Lecture	48	Fall 2023
0106-109-060	Physiological Chemistry Lecture	44	Fall 2023

0106-109-063	Physiological Chemistry Recitation	23	Fall 2023
0106-109-064	Physiological Chemistry Lab	23	Fall 2023
0106-193-001	Research Seminars in Chemistry	15	Fall 2023
0106-498-004	Guided Research in Chemistry	2	Fall 2023
0105-798-005	Thesis Research: Synthetic Peptides	1	Fall 2023
0106-109-030	Physiological Chemistry Lecture	33	Spring 2024
0106-294-001	Research Seminars in Chemistry	9	Spring 2024
0106-394-001	Research Seminars in Chemistry	10	Spring 2024
0106-472-001	Biochemistry II	15	Spring 2024
0106-494-001	Research Seminars in Chemistry II	4	Spring 2024
0106-498-004	Guided Research in Chemistry	1	Spring 2024
0105-498-002	Guided Research in Biology	1	Spring 2024
0105-799-002	Thesis Research, Writing, and Presentation	1	Spring 2024
0105-498-008	Guided Research Peptide Polymer Conjugates for Dentistry	1	Fall 2024
0106-109-030	Physiological Chemistry Lecture	48	Fall 2024
0106-109-040	Physiological Chemistry Lecture	44	Fall 2024
0106-293-001	Research Seminars in Chemistry I	9	Fall 2024
0106-321-001	Physical Chemistry I	10	Fall 2024
0106-393-001	Research Seminars in Chemistry I	11	Fall 2024
0106-493-001	Research Seminars in Chemistry I	9	Fall 2024
0106-498-003	Guided Research in Chemistry	2	Fall 2024

#### NON-TEACHING WORKLOAD:

**Honors Thesis Committee Member**, Hannah Sharifian (Advisor: Deborah Cooperstein)  
2023

Pediatric Bone Fractures, Depression, & Vitamin D Status During the COVID-19 Pandemic: A Review

**Honors Thesis Committee Member, Kendra Jimenez (Advisor: Dempsey Hyatt) Fall 2024**  
Novel Hypervalent Iodine Compounds Containing Three Carbon Ligands and Their Use for C(sp<sup>3</sup>)-C(sp<sup>3</sup>) Formation

PROFESSIONAL DEVELOPMENT:

Fundamentals of POGIL Virtual Workshop—from 08/03/2022–08/04/2022

FCPE tutorial on Moodle basics (1 hr)

FCPE tutorial on Moodle quizzes (1hr)

FCPE appointment on using Turnitin (30min)

Gordon Research Conference on Peptide Materials—from 01/15/2023—01/20/2023

Adelphi Teaching and Learning Conference—from 02/16/2023—02/17/2023

Active Learning and Equity in the POGIL Classroom (1 hr)

Towards Inclusive Teaching: DEIB Committee in the Wilumstad School of Business (1 hr)

Specifications Grading: Mastery-Based Assessment of Student Learning (1 hr)

Group Work on Steroids: Injecting Energy into Gen Z Classroom Groups (1 hr)

Introduction to OSCQR: SUNY-Developed Online Course Quality Review Rubric (1 hr)

Let's Chat About ChatGPT: Teaching and Learning in the Era of Artificial Intelligence Tools (1 hr)

Teaching Biochemistry through Research with the BASIL Curriculum–04/13/2024, SUNY Old Westbury (6.5 hr)

Promoting Equity and Active Learning through Collaborative Teamwork–10/15/2024, Adelphi University (2 hr)