

**Kyoung Nan Kim, Ph.D.**

Teaching Assistant Professor  
Department of Chemistry  
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**EDUCATION AND EMPLOYMENT**

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2024- Current	<b>University of Colorado Denver</b> <i>Teaching Assistant Professor</i> , Department of Chemistry	Denver, CO, USA
2023- 2024	<b>University of Colorado Denver</b> <i>Senior Instructor</i> , Department of Chemistry	Denver, CO, USA
2015- 2022	<b>University of Colorado Denver</b> <i>Instructor</i> , Department of Chemistry	Denver, CO, USA
2005-2012	<b>University of Notre Dame</b> <i>Ph.D.</i> , Department of Chemistry and Biochemistry Advisor: Prof. Marya Lieberman Thesis: <i>Deposition of DNA oligomer on EBL patterned cationic SAMs on SiO<sub>2</sub>/Si [100]</i>	Notre Dame, IN, USA
2002-2004	<b>Sejong University</b> <i>M.S.</i> , Department of Chemistry Advisor: Prof. Koo Shin Thesis: <i>The synthesis of calyx[n]pyrrole with dipyrromethylthione and thiophene. (n= 5, 6, 10)</i>	Seoul, Korea (ROK)
1997-2001	<b>Sejong University</b> <i>B.S.</i> , Department of Chemistry (Major in Chemistry, Minor in Education)	Seoul, Korea (ROK)

**TEACHING EXPERIENCE**

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2015- current	University of Colorado Denver <i>Teaching Assistant Professor</i> , Department of Chemistry: 24 teaching credits (80%), 10% service, and 10% research.	Denver, CO, USA
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**Lectures:**

- Chemistry for Everyday (CHEM1474, Spring 2017 - Current)
- Foundations of General Chemistry (CHEM1000, Fall 2015)
- Engineering General Chemistry (CHEM1130, Spring 2016, Fall 2016)
- General Chemistry I (CHEM2031, Fall 2015 - Fall 2016)
- Organic Chemistry I (CHEM3411 Lecture, Spring 2016-Summer 2019)
- Inorganic Chemistry (CHEM3011, Spring 2023)
- Biochemistry (CHEM3810, Fall 2015 - Current)
- Instrumental Chemistry (CHEM4121, Spring 2023)
- General Biochemistry I (CHEM4810, Fall 2022-Current)

- General Biochemistry II (CHEM4820, Spring 2018 - Current)
- Bioinorganic Chemistry/ Bioinorganic compounds in medicine (CHEM4860/5860, Fall 2020 - Current)

**Labs:**

- Honors General Chemistry I Lab (CHEM2088 Main Lab, Fall 2017-Fall 2019)
- Honors General Chemistry II Lab (CHEM2098 Main Lab, Spring 2018 and Spring 2019)
- Inorganic Chemistry Lab (CHEM3018 Lab, Spring 2020)

**FUNDINGS**

- **1R15DE034720**, \$466,500/3yrs Co-I 09/18/24-09/17/27 **NIDCR/NIH**  
Body heat activated, storable, near-infrared, self-illuminating nanoprobes for chemiluminescence imaging of cancer
- **250603-JL**, \$30,000/yr Co-I 01/01/25-12/31/25 **Cancer League of Colorado**  
Near-Infrared Chemiluminescent Nanoprobes for Image-Guided Head and Neck Cancer Surgery
- **N/A**, \$10,000/yr Co-I 01/01/25-12/31/25 **Milheim Foundation**
- Precision Surgery in Head and Neck Cancer with Advanced Chemiluminescent Nanoprobes
- 2025: CLAS faculty research award: \$1,000
- 2024: CU Next initiative (Cross-Campus LA Faculty Group): \$1,000

**SERVICE**

- SASE (Society of Asian Scientists and Engineers) career panel: Fall 2025
- CLAS IRC PD Grant Application Review Committee: Fall 2025 – Current.
- Academic advisor for Chemistry major and Biochemistry major/minor: Fall 2023 - Current.
- Biochemistry program director: Fall 2023 - Current.
- Chemistry Department Award Committee: Fall 2021- Current
- Chemistry Club Advisor: Fall 2022 - Current.
- CLAS Excellence in Teaching IRC Faculty Award Selection Committee: Spring 2023
- Chemistry Department Curriculum Committee: Fall 2021 - Spring 2023.
- DMRSEF (CoorsTek Denver Metro Regional Science and Engineering Fair) Senior Chemistry Category Judge: 2023 - Current
- RaCAS (The Research and Creative Activities Symposium) Reviewer: 2023 – Current
- Master's Thesis committee:
  - 11/3/2025: Keith McGee (Advisor: Dr. Resendiz, Marino)
  - 04/21/2023: Alhilal, Ahmed Atiah S (Advisor: Dr. Liu, Yong) Department of Chemistry, master's program, Denver campus
  - 05/12/2023: Emily Irlbeck (Advisor: Dr. Knight, Jeff) Department of Chemistry, Summa cum laude honors, Denver campus
  - 11/19/2021: Beauchamp Perez, Cisloynny (Advisor: Dr. Knight, Jeff) Department of Chemistry, Denver campus
  - 04/16/2021: Fullem, Stephanie (Advisor: Dr. Bankston, John) Department of Physiology and Biophysics, Anschutz medical campus

## AWARD

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- 08/2025: AY 25-26 **ThingStudio Fellowship** (\$2,000)
- 08/17/2024: “**Salute to Excellence**” Award from American Chemical Society for supporting 2024 [ACS kids zone event](#).
- 05/13/2022: **Excellent Teaching Award** – The College of Liberal Arts and Sciences, University of Colorado Denver
- 05/14/2021: **Excellent Teaching Award** - The National Society of Leadership and Success

## CERTIFICATES

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- 06/18/2021: **ACUE (Association of College and University Educator)** Micro credential Creating an Inclusive and Supportive Online Learning Environment
- 06/18/2021: **IPA (Inclusive Pedagogy Academy)** Completion Certificate
- 02/01/2002: **Teachers License for Middle/High School Science Course**, Sejong University

## PUBLICATIONS

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- **Kim, K. N.**; Oh, K. S.; Shim, J.; Schlaepfer, I. R.; Karam, S. D.; Lee, J. -J. Light-responsive polymeric micellar nanoparticles with enhanced formulation stability, *Polymers* **2021**, *13*, 377
- **Kim, K. N.**; Sarveswaran, K.; Mark, L.; Lieberman, M. Comparison of methods for orienting and aligning DNA origami, *Soft Matter*, **2011**, *7*, 4636-4643
- Yun, J. M.; **Kim, K. N.**; Kim, J. Y.; Shin, D. O.; Lee, W. J.; Lee, S. H.; Lieberman, M.; Kim, S. O. DNA origami nanopatterning on chemically modified graphene, *Angew. Chem. Int. Ed.* **2011**, *50*, 1-5
- Shah, F. A.; **Kim, K. N.**; Lieberman, M.; Bernstein, G. H. Roughness optimization of e-beam exposed hydrogen silsesquioxane for DNA origami immobilization, *Journal of Vacuum Science & Technology B* **2012**, *30*, 011806
- **Kim, K. N.**; Sarveswaran, K.; Mark, L.; Lieberman, M. DNA origami as self-assembling circuit boards proceedings of the UC10 – International conference on Unconventional Computation, C.S. Calude et al. (Eds.): UC2010, LNCS 6079, pp. 56-68, 2010
- Sarveswaran, K.; Gao, B.; **Kim, K. N.**; Bernstein, G.; Lieberman, M. Adhesion of DNA nanostructures and DNA origami to lithographically patterned self-assembled monolayers on Si [100] Proceedings of the SPIE - The International Society for Optical Engineering, v 7637, p 76370M (13 pp.), 2010 (data source: INSPEC)

## SELECTED PRESENTATIONS

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- Poster: Lee, R.; **Kim, K. N.**; Lee, J. -J. Body heat activated near-infrared luminescent nanoprobe for in vivo optical imaging of head and neck cancer, ACS Spring 2025, Mar. 23-27, 2025, San Diego, CA.
- Oral: **Kim, K. N.**; Lieberman, M. DNA origami attachment and AFM imaging on mica and SiO<sub>2</sub>/Si [100] in air, NSF workshop on DNA origami in 7th Foundations of Nanoscience (FNANO2010), Salt Lake City, Utah, United States, Apr. 2010.
- Oral: **Kim, K. N.**; Lieberman, M. Self-assembling DNA nanostructures as platforms for placement of fluorophores on silicon [100], PINDU (An Indiana Inorganic conference), Purdue University, West Lafayette, IN, United States, Nov. 2007.
- Poster: **Kim, K. N.**; Shah, F.; Mark, L.; Sarveswaran, K.; Bernstein, G.; Lieberman, M. Deposition of DNA oligomer on EBL patterned cationic SAMs on SiO<sub>2</sub>/Si [100], 9th International Conference on

Unconventional Computation (UC10), The University of Tokyo, Tokyo, Japan, Jun. 2010. Kim, K. N.; Mark, L.; Sarveswaran, K.; Lieberman, M. Controlling the orientation of DNA origami during oligomerization, 7th Annual Conference on Foundations of Nanoscience (FNANO2010), Salt Lake City, Utah, United States, Apr. 2010.

- Poster: **Kim, K. N.**; Mark, L.; Lieberman, M. DNA origami train, PIDU (An Indiana Inorganic conference), Indiana University, Bloomington, IN, United States, Nov. 2009.
- Poster: **Kim, K. N.**; Protasenko, Vladimir V.; Giblin, J.P.; Kuno, M.; Lieberman, M. Self-assembling DNA nanostructures as platforms for placement of fluorophores on silicon [100], 4th Annual Conference on Foundations of Nanoscience (FNANO2008), Salt Lake City, Utah, United States, Apr. 2008.

### **PROFESSIONAL ACTIVITIES**

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- 2005 - Member, American Chemical Society (ACS)

### **TECHNICAL PROFICIENCY**

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- Lab skills: Atomic Force Microscope, Scanning Electron Microscope, Electron-beam Lithography, X-ray photoelectron spectroscope, class #100 clean room use, Piranha and RCA cleaning procedures, Ellipsometry, non-denaturing PAGE, Nuclear Magnetic Resonance, UV-vis spectroscopy, Infrared Spectroscopy, Fluorescence spectroscopy, HPLC, Isothermal Titration Calorimeter, shrink line
- Softwares: WSxM, Casa XPS, Image J, NanoEngineer-1, L-Edit, EQ-NMR, ChemDraw and ORTEP