

**Name:** Jeana Collins

**Education:**

Ph.D., Chemical Engineering, Michigan Technological University, 2018  
M.S., Chemical Engineering, Michigan Technological University, 2016  
B.S., Chemical Engineering, University of Minnesota Duluth, 2012

**Academic experience:**

Michigan Technological University, Lecturer, 2016 – present.  
Michigan Technological University, Graduate Teaching Assistant, 2012 – 2016.  
Michigan Technological University, Graduate Research Assistant, 2012 – 2016.

**Non-academic experience:**

Microdevice Engineering LLC (work under sub-contract), 2014-2018 (part time)

**Certifications or professional registrations:**

Online Teaching Certification (in progress)

**Current membership in professional organizations:**

American Institute of Chemical Engineers  
Order of the Engineer

**Honors and awards:**

Teacher of the Year Award, Chemical Engineering, 2018-2019 academic year  
Outstanding Teaching Award, Chemical Engineering, 2015-2016 academic year  
Teaching Assistant of the Year, 2013-2014 academic year  
1<sup>st</sup> Place Poster in 2<sup>nd</sup> Annual Chemical Engineering Research Symposia, Michigan Technological University, Jan 2014  
Omega Chi Epsilon Member (Chemical Engineering Honor Society)  
Tau Beta Phi Member (Engineering Honor Society)

**Service activities:**

Advisor- AIChE Michigan Tech Chapter, 2018-present  
Advisor- Dance Team at Michigan Tech, 2012-present  
MICUP student mentor, Michigan Technological University, Summer 2013/2014  
Interactive Desktop Experiment Modules, Houghton Middle School Science and Engineering Explorations Course 2012-2015 Summer Youth Program, Michigan Tech, 2015-2016

**Most important publications and presentations:**

Dissertation: Reverse Insulator Dielectrophoresis: Utilizing Droplet Microenvironments for Discerning Molecular Expressions on Cell Surfaces, July 2018

**J.L. Collins**, H. Moncada Hernandez, S. Habibi, C.E. Kendrick, Z. Wang, N. Bihari, P.L. Bergstrom, and A.R. Minerick. “Electrical and chemical characterizations of hafnium (IV) oxide films for biological lab-on-a-chip devices.” Thin Solid Films. Online 18 July 2018.

Adrienne Robyn Minerick, **Jeana L. Collins**, Kaela M. Leonard, and Tayloria N.G. Adams. "Methods and systems for identifying a particle using dielectrophoresis." US10012613B2. 3 July 2018.

**J. L. Collins**, and A.R. Minerick, "Effect of Surfactant on Droplet Size and Stability in a Microfluidic T-junction Device, a mini-study," ASME 4th Global Conference on Nanoengineering for Medicine and Biology, Minneapolis MN, April 2015.

**J.L. Collins**, and A.R. Minerick, "Effect of Surfactant on Droplet Size and Stability in a Microfluidic T-junction Device," EAB Poster Session, Michigan Technological University, Oct. 2014. Also presented at: BRC Research Forum. Oct. 2014

**J.L. Dillon** and A.R. Minerick, "Comparison of simulations and experimental water-in-oil droplet formation in a microfluidic T-junction," 2nd Annual Chemical Engineering Research Symposia, Michigan Technological University, Jan 2014. [Author earned a 1st place Award]. This poster was also presented at: Private Poster Viewing for Bill Colton, VP Exxon Mobil Corporation. Jan. 2014, 2014 Graduate Research Colloquium. Feb. 2014, 10th Annual ESC/BRC Student Research Forum. Mar. 2014, Alumni Reunion Graduate Research Poster Session. Aug. 2014

**Recent professional development activities:**

ETOM Online Teaching Certification Course (OTCC), Summer 2020

NETI-1 Teaching Workshop, January 2019

Alan Alda Center for Communicating Science Workshop, August 2017

2015 ASME Global Conference on Nanoengineering for Medicine and Biology