

Markus Downey

1. Name and academic rank:

Markus A Downey, Visiting Assistant Teaching Professor

2. Education – degree, discipline, institution, year

- PhD, Chemical Engineering, Michigan State University, 2016
- M.S., Chemical Engineering, University of Rhode Island, 2004
- B.S., Chemical Engineering, University of Rhode Island, 2002
- B.A., German, University of Rhode Island, 2002

3. Academic experience – institution, rank, title

6.5 Years

- Florida International University, Mechanical & Materials Engineering Dept., 2020-present
- Michigan State University, Chemical Engineering and Material Science, Research Associate, 01/2017 to 06/2017
- Michigan State University, Chemical Engineering and Material Science, Graduate Research Assistant, 2013 to 2016

4. Non-Academic experience:

- Senior Material Scientist, Magic Leap Inc., 2017 to 2020
- Applications Engineer, Emitec Inc., 2007 to 2012
- Research Engineer, Emitec GmbH, 2005 to 2007

5. Certifications or professional registrations:

- Six Sigma Black Belt, Continuous Improvement Institute, 2019
- Six Sigma Green Belt, Continuous Improvement Institute, 2018
- Certification in College Teaching - Engineering, Michigan State University, 2017

6. Current membership in professional organizations

- N/A

7. Honors and awards

- Outstanding Research Poster Award, 3rd Place, 2015 Annual University of Michigan-Michigan State University Blue-Green Seminar
- ChEMS Graduate Student Service Award 2015
- MSUFCU Research Translation Award, 2014 Michigan State University Engineering Graduate Research Symposium
- Excellence in Research Award, 2014 Michigan State University Chemical Engineering and Material Science Research Forum

Service activities (within and outside of the institution)

- Toastmasters International Area Director and Club President

8. Briefly list the most important publications and presentations from the past five years

- “Toughening of Carbon Fiber-Reinforced Epoxy Polymer Composites Utilizing Fiber Surface Treatment and Sizing”, **Markus A. Downey**, Lawrence T. Drzal, Composites Part A, JCOMA_4419, Volume 90, p. 687-698, September 2016

9. Briefly list the most recent professional development activities

- Global Learning Course Design & Instruction Workshop, Florida International University, 2021
- Remote Teach Ready, Florida International University, 2020