
LAXMIKANT (LP) PATHADE

<http://laxmikantpathade.com> • (315) 560-8200 • laxmikant.pathade@gmail.com
1670 N 42nd Circle, Apt 203, Vero Beach, Florida. 32967

WORK EXPERIENCE (TEACHING & RESEARCH)

Saint Edward's School: Upper School Chemistry Teacher **2018-present**

- I have taught on-level, honors, and AP chemistry classes (~70 students annually) for the past six years. I manage a chemistry classroom & storage spaces, design coursework and co-curricular materials.
- School-wide science-fair coordinator; created research opportunities for students interested in STEM fields; taught a science research class; mentored advanced studies projects; mentored co-curricular student clubs.
- I was named the *Richardson Family Foundation Chair for Distinguished Teaching* during the 2023 commencement. This endowed position is awarded to a faculty who demonstrates the highest standard of excellence in teaching. Also awarded the *Morrison Waldrop Summer Research Stipend* for curriculum development in 2019 & 2022.

Syracuse University: Graduate Teaching Assistant **2013-2018**

- Taught general/honors chemistry labs (mandatory) & held optional recitations for almost all five years of graduate school. Developed new lab modules to introduce advanced materials chemistry topics such as synthesis & properties of nanoparticles. Topics include "*Synthesis of Cesium Lead Perovskite (CsPbX₃) nanocrystals*", "*Demonstration of Transmission Electron Microscope*", & "*Solid State Modeling & X-ray Diffraction*."
- Supervised undergraduate trainees, summer *NSF-REU* researchers, & junior graduate students.
- Received Graduate Teaching Assistant Mentor Award from the Syracuse University Graduate School in 2016 for outstanding mentorship service to the incoming STEM teaching assistants. Received Conference Travel Award from the Syracuse University Department of Chemistry in 2015 & 2016.

Syracuse University: Graduate Research Assistant **2013-2018**

- Research: Investigated synthetic design of transition metal core/shell type "*stainless*" nanoparticles (NPs) that exhibited *hollow internal microstructures* and exploited our findings to improve corrosion resistance in alloys NPs. Other topics included asymmetric internal voids, sulfidation of NPs, CsPbX₃ perovskites, ligand exchange, surface functionalization, & modeling electromagnetic absorption and scattering (DDA) around NP geometries.
- Held position as a graduate X-ray facility admin (2014–2018): trained new users on the diffractometer and the safety protocols; coordinated user queue; maintained auxiliary chiller operations, & repaired minor breakdowns.

Part time middle school teacher (India) **2011-2012**

- Instructor at a rural middle school in Maharashtra, India. Classes taught as per the discretion of the headmaster.
- Danve Family Foundation Award for Academic Excellence in 2007 & 2013.

EDUCATION

Syracuse University **2013-2018**

Ph.D. in *Materials Chemistry* with Prof. Mathew M. Maye

Thesis: Design and Synthesis of Stainless-Steel Nanoparticles: Oxidation Behavior and Morphological Evolution

Institute of Chemical Technology, Mumbai (formerly UDCT/UICT) **2009-2013**

Bachelors of Technology in Chemical Engineering

JNV Boarding Schools, India **2002-2009**

Scholarship from grades 6 through 12 (Govt. of India)