# Curriculum Vitae


## Azadeh Nazemi

**Address:** Room 268, Chemistry Building, University of North Texas, Denton, TX.

**Email:** azadehnazemi@my.unt.edu


## Educational Background

- **PhD student** at University of North Texas, Denton, TX (Fall 2016-present)
  Advisor: Prof. Thomas R. Cundari
  Expected graduation date: May 2020

- **Master of Science** in Physical Chemistry, Iran University of Science and Technology, Tehran, Iran (Sep 2010-Nov 2012)
  Advisor: Prof. Seyed Abolfazl Seyed Sadjadi
  Thesis Title: "Electrofabrication of aluminium oxide nanowires from high purity aluminium film via two step anodization"

- **Bachelor of Science** in Chemistry, Alzahra University, Tehran, Iran (Sep 2006-July 2010)

## Research Experiences

**In University of North Texas:**

- ✓ Modeling and DFT calculations of organometallic compounds and catalysts
- ✓ Studying p$K_a$ of C-H bonds
- ✓ DFT study of C-H bond activation based on ethylbenzene dehydrogenase (EBDH) active-site mimics.

**In Iran University of Science and Technology:**

- ✓ Electrochemical synthesis of nanowires
- ✓ Synthesis of Semiconductors ($TiO_2$) and investigation of their application

## Research Publications:


1. Nazemi, A.; Cundari, T. R., "Control of C-H bond activation by Mo-oxo complexes: pKa or bond dissociation free energy (BDFE)?". *Inorganic Chemistry* **2017**, 56 (20), 12319-12327.

2. Jimenez-Halla, J. O. C.; Nazemi, A.; Cundari, T. R., "DFT study of substituent effects in the hydroxylation of methane and toluene mediated by an ethylbenzene dehydrogenase active site model", Submitted.

3. Nazemi, A.; Najafian, A.; Seyed Sadjadi, S. A., "Aluminium oxidenanowires synthesis from high purity aluminium films via two-step anodization", *Superlattices and Microstructures* **2015**, 81, 1-6.

4. Nazemi, A.; Seyed Sadjadi, S. A., "Controling the anodizing conditions in preparation of a nanoporous anodic aluminium oxide template", *Materials Science-Poland* **2014**, 32, 4, 565-570.

5. Najafian, A.; Rahimi, R.; Zargari, S.; Mahjoub-Moghaddas, M.; Nazemi, A., "Synthesis and photocatalytic activity of V-doped mesoporous TiO2 photosensitized with porphyrin supported by SBA-15", *Research on Chemical Intermediates* **2016**, 42, 3441-3458.

## Conferences and Presentations:

**1.** Azadeh Nazemi.; Thomas R. Cundari. "Control of C-H Activation by Mo-Oxo Complexes: pKa or BDFE?". Oral Presentation at ACS Meeting in Miniature, Fort Worth, TX. 2017.

**2.** Azadeh Nazemi.; Thomas R. Cundari. "Control of C-H Activation by Mo-Oxo Complexes: pKa or BDFE?". Oral Presentation at ACS Southwest Regional Meeting, Lubbock, TX. 2017.

**3.** Azadeh Nazemi, Seyed Abolfazl Seyed Sadjadi, "Fabrication of AAO template and investigating the potential effect on its structures", Nanotechnology Conference, Iranian Society of the Nanomedicines, Tehran, Iran, 2013.

**4.** Azadeh Nazemi, Seyed Abolfazl Seyed Sadjadi, "Analyzing the impact of electrolyte concentration on AAO template in order to fabrication of one-dimensional nanostructures", Nanotechnology Conference of Tarbiate Modares University, Tehran, Iran, 2013.

## Teaching and Work Experiences

- Research Assistant in Dr. Thomas Cundari's Research Group, Chemistry Department, University of North Texas, United States (Fall 2016- present).
- Teacher Assistant, Chemistry Department, University of North Texas, United States (Fall 2016-present).
- Teacher Assistant for the course "physical chemistry", Iran University of Science and Technology, Tehran, Iran (Two semesters).
- Teaching "industrial chemistry" course in Payam-e-Noor University, Tehran, Iran (Two semesters).
- Two years of experience in teaching "chemistry" at high school, Tehran, Iran.

## Professional Societies Membership

- Member of American Chemical Society (ACS)

## Reference

**Professor Thomas R. Cundari**, Chemistry Department, University of North Texas, 1155 Union Cir., Denton, TX 76203, (940) 565-3525.