



Vasileios Anagnostopoulos, Ph.D.

Assistant Professor

Department of Chemistry, University of Central Florida, Orlando, Florida

Vasileios.Anagnos@ucf.edu

EDUCATION

- Ph.D.** **Environmental Radiochemistry**
Department of Chemistry, University of Patras, Patras, Greece (2012)
- M.Sc.** **Environmental Analytical Chemistry**
Department of Chemistry, University of Patras, Patras, Greece (2012)
- B.Sc. Honors** **Chemistry**
Department of Chemistry, University of Patras, Patras, Greece (2006)

RESEARCH EXPERIENCE

University of Central Florida, Orlando, Florida (2018)

Assistant Professor, Department of Chemistry

Florida Memorial University, Miami, Florida (2017)

Adjunct Assistant Professor, Department of Natural Sciences

Florida International University, Miami, Florida (2014-2018)

Postdoctoral Research Fellow, Applied Research Center

- Development of novel remediation techniques for the *in situ* immobilization of uranium in groundwater
- Studies on biogeochemical dissolution of uranium ores
- The role of iron oxides on technetium redox chemistry under reducing conditions

University of Miami, Miami, Florida (2013-2014)

Postdoctoral Research Fellow, Sylvester Cancer Center, Miller School of Medicine

- Immunochemistry studies for melanoma skin cancer using rodent models

University of Patras, Patras, Greece (2007-2012)

Graduate Research Assistant, Department of Chemistry

- Kinetic and thermodynamic modelling of actinide retention by natural organic matter
- Speciation modelling of uranium complexation with inorganic and organic ligands
- Studies on microbially facilitated transport of trivalent actinides in the environment
- Development of potentiometric titration protocol for the quantification of surface functional groups and point of zero charge (pzc) of organic substrates

University of A Coruña, A Coruña, Spain (2009)

Visiting Graduate Research Fellow, Department of Chemical Technology

- Studies on the redox changes of mercury by natural organic matter in batch and continuous flow experiments
- Development of remedial strategies for the treatment of mercury and arsenic bearing electroplating wastewater

PUBLICATIONS

1. Morozov AN, Govor EV, **Anagnostopoulos VA**, Kavallieratos K, Mebel AM (2018). Coordination of Sm(III) and Am(III) to the 1,3,5-Tris-(4-(iso-propyl)-phenylsulfamoylmethyl)benzene Ligand: An Experimental and Theoretical Study. *Molecular Physics*, doi.org/10.1080/00268976.2018.1471228
2. Gonzalez-Raymat H, **Anagnostopoulos VA**, Katsenovich Y, Denham M. (2018). Study of unrefined humate solutions as a potential remediation method for groundwater contamination from U(VI). *Journal of Environmental Management*, 212, 210-218
3. **Anagnostopoulos VA**, Katsenovich Y, Lee B., Lee H (2018). Biotic dissolution of autunite under anaerobic conditions: effect of bicarbonates and *Shewanella oneidensis* MR1 microbial activity. *Journal of Environmental Radioactivity* (accepted)
4. **Anagnostopoulos VA**, Katsenovich Y, Denham M (2017). Sodium silicate treatment for the attenuation of U(VI) in acidic groundwater plumes. *Journal of Chemical Technology and Biotechnology*, 92(8), 1919-1927
5. Anastopoulos I, **Anagnostopoulos VA**, Bhatnagar A, Mitropoulos CA, Kyzas GZ (2017). A review for chromium removal by carbon nanotubes. *Chemistry and Ecology* 33 (6), 1-17
6. **Anagnostopoulos VA**, Koutsoukos PG, Symeopoulos BD (2015) Removal of U(VI) from aquatic systems, using winery by-products as biosorbents: equilibrium, kinetic and speciation studies. *Water, Air and Soil Pollution* 226 (4), 107-113
7. **Anagnostopoulos VA**, Bourikas K, Bekatorou A, Symeopoulos BD (2015). Biosorption of U(VI) from aqueous systems by malt spent rootlets. Kinetic, equilibrium and speciation studies. *International Journal of Environmental Science and Technology*, 13, 285-296
8. **Anagnostopoulos VA**, Vlachou A, Symeopoulos BD (2015). Immobilization of *Saccharomyces cerevisiae* on low-cost lignocellulosic substrate for the removal of Cd(II) from aquatic systems. *Journal of Environment & Biotechnology Research*, 1(1), 23-29
9. **Anagnostopoulos VA**, Symeopoulos BD (2014). Significance of age, temperature and aeration of yeast cell culture for the biosorption of europium from aquatic systems. *Desalination and Water Treatment*, 57(9), 3957-3963
10. **Anagnostopoulos VA**, Symeopoulos BD (2013). Sorption of europium by Malt Spent Rootlets, a low-cost biosorbent: effect of pH, kinetics and equilibrium. *Journal of Radioanalytical and Nuclear Chemistry* 295 (1), 1-7
11. **Anagnostopoulos VA**, Manariotis ID, Karapanagioti HK (2012). Removal of mercury from aqueous solutions by Malt Spent Rootlets. *Chemical Engineering Journal* 213, 135-141
12. **Anagnostopoulos VA**, Bekatorou A, Symeopoulos BD (2011). Contribution to interpretation of metal uptake dependence upon the growth phase of microorganisms. The case of U(VI) uptake by common yeasts, cultivated at different temperatures, with or without aeration. *Journal of Radioanalytical and Nuclear Chemistry* 287 (2), 665-671

13. Carro L, **Anagnostopoulos VA**, Lodeiro P, Barriada JL, Herrero R, Sastre de Vicente ME (2010). A dynamic proof of mercury elimination from solution through a combined sorption-reduction process. *Bioresource Technology* 101 (23), 8969-8974
14. **Anagnostopoulos VA**, Soupioni MJ, Symeopoulos BD (2010) Effect of growth conditions conditions on biosorption of cadmium and copper by yeast cells. *Global Network of Environmental Science and Technology Journal* 12(3), 288-295
15. **Anagnostopoulos VA**, Symeopoulos BD (2008). A preliminary study of europium uptake by yeast cells. The case of *Kluyveromyces marxianus*. American Institute of Physics, pp 203

GRANTS & SCHOLARSHIPS

- Department of Energy - Office for Environmental Management (2017-2018) - \$400K
Co-principal Investigator
Technetium sulfides as a potential immobilization form of Tc-99 in the environment: stability and dissolution studies
- European Union National Funds for Research, Technology and Innovation (2011-2012) – \$55K
Removal of radioisotopes from aquatic ecosystems using biological materials
- European Union Operational Program for Educational & Vocational Training (2007-2009) - \$70K
Novel applications of radioisotopes in biosorption
- European Union Lifelong Learning Placement Fellowship (2009) - \$4K
Visiting Graduate Research Fellow, Department of Chemical Technology, University of A Coruña, Spain
Remedial strategies for the treatment of mercury and arsenic bearing electroplating wastewater

PROFESSIONAL ACTIVITIES

- **Organizer & Chair of the Symposium** “Fate, transport and remediation of radionuclides in the environment”, Division of Environmental Chemistry, 254th American Chemical Society Meeting, Washington DC, August 2017
- **Proposal Reviewer - Department of Energy Office of Nuclear Energy University Program (NEUP)** FY 2018 call for Nuclear Fuel Cycle and Used Nuclear Fuel Disposition thematic areas
- **Principal Analyst - International Atomic Energy Agency Worldwide Proficiency Testing**
Determination of natural occurring radionuclides in phosphogypsum and water (2010)
Determination of trace elements in mineral water (2015)
- **Assistant Coordinator of Nuclear Scholars Program** (2015) funded by the US Nuclear Regulatory Committee (NRC), Florida International University

- **Journal Reviewer by Invitation**
 Bioresource Technology
 Chemical Engineering Journal
 Environmental Science and Pollution Research
 Journal of Chemical Technology and Biotechnology
 Journal of Environmental Radioactivity
 Journal of Environmental Management
 Journal of Molecular Liquids
 Journal of Nuclear Materials
 Journal of Radioanalytical and Nuclear Chemistry
 Urban Water Journal

HONORS AND AWARDS

- **Mentor of the Year (2015)**
Florida International University, Applied Research Center
 Ranked outstanding in all evaluation categories: learning experience, communication skills, availability and professional conduct.
- **Recognized Reviewer Award (2014)** as recommended by Elsevier Editorial Board
- **2nd Young Researcher Award (2011)**
 3rd International Conference towards sustainable development: assessing the footprint of resource utilization and hazardous waste management, Athens Greece
Europium removal from aqueous solutions using barley rootlets as biosorbents

TEACHING EXPERIENCE

- **Advanced Radiochemistry CHE 370 & Advanced Radiochemistry Lab CHE 371**, Fall 2017
Adjunct Assistant Professor, Florida Memorial University, Miami FL – Department of Chemistry
- **Advanced Radiochemistry CHS 6111** (Spring 2017)
Florida International University, Miami FL - Department of Chemistry
- **Principles & Applications of Nuclear Chemistry** (Spring 2007-2011)
Graduate Teaching Assistant, University of Patras, Patras Greece – Department of Chemistry
- **General Chemistry** (Fall 2007-2009, 2010-2011)
Graduate Teaching Assistant, University of Patras, Patras Greece – Department of Biology
- **Inorganic Chemistry** (Fall 2009)
Graduate Teaching Assistant, University of Patras, Patras Greece – Department of Physics

MENTORING EXPERIENCE

- **Research Mentor** (2014-2017)

Department of Energy – Florida International University Cooperative Agreement

Provided mentorship to 3 undergraduate and 2 graduate students (DOE Fellows), as well as technical writing guidance for scientific publications and theses

Under my guidance, students have received the following awards:

- American Chemical Society – Environmental Chemistry Undergraduate Award (2016): Alejandro Hernandez
- Roy G. Post Nuclear Waste Management Scholarship (2017: Alejandro Hernandez, 2018: Christine Wipfli)
- Best Poster Presentation Waste Management Symposium (2015: Christine Wipfli)
- Best Poster Presentation South Florida STEM Symposium (2016: Alejandro Hernandez)
- Emory STEM Symposium Travel Award (2017: Awmna Rana)
- ACS Nuclear Summer School Fellowship (2017: Alejandro Hernandez)

- **Assistant Research Mentor**, (2007-2011)

University of Patras, Patras, Greece – Department of Chemistry

During my graduate studies, I have supervised 8 undergraduate students who conducted research in their senior year as a part of their Honors Major Thesis and have provided them with guidance in experimental procedures and scientific writing.

SELECTED ORAL PRESENTATIONS

- Govor E., Twomey M. Tosin J., **Anagnostopoulos V.**, Morozov AN. Mebel A., Raptis RG, Kavallieratos K., Tripodal Sulfonamide and Pyrazolyl Ligands for Extraction and Sensing of Lanthanides and Actinides
Global 2017 International Nuclear Fuel Cycle Conference, September 2017, Seoul, Korea
- Govor E., **Anagnostopoulos V.**, Morozov AN. Mebel A., Raptis RG, Kavallieratos K. Trivalent f-metal coordination and extraction by tripodal sulfonamide ligands and analogs.
253rd American Chemical Society, April 2017, San Francisco, California
- Hernandez A., Wipfli C., **Anagnostopoulos V.**, Katsenovich Y., Denham M.
Sodium silicate treatment for the attenuation of U(VI) in acidic groundwater plumes
252nd American Chemical Society, August 2016, Philadelphia, PA
- **Anagnostopoulos V.**, Lagos L., Triay I. Training tomorrow chemists at Florida International University, the largest Hispanic serving institution. *252nd American Chemical Society, August 2016, Philadelphia, PA*
- Herrera S., **Anagnostopoulos V.**, Katsenovich Y., Lee B., Lee MH. The effect of bicarbonate on autunite dissolution in the presence of *Shewanella oneidensis* under oxygen restricted conditions.
Waste Management Symposium 2016, Phoenix, AZ
- **Anagnostopoulos V.** Young Scientists joining the Nuclear Workforce, *Waste Management Symposium 2016, Phoenix, AZ*

PROFESSIONAL AFFILIATIONS

American Chemical Society
American Clay and Minerals Society
European Association for Chemical and Molecular Sciences
Association of Greek Chemists

ANALYTICAL INSTRUMENTATION EXPERIENCE

Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES)
Atomic Absorption Spectroscopy (AAS)
X-Ray Diffraction (XRD)
Liquid Scintillation Spectroscopy (LSC)
Gamma Ray Spectroscopy
Ion Chromatography (IC)
BET surface area analysis
Potentiometry
X-Ray Fluorescence Spectroscopy (XRF)
Fourier Transform Infrared Spectroscopy (FTIR)
Anodic Stripping Voltammetry (ASV)
Neutron Activation Analysis (NAA)
Gas Chromatography coupled with Mass Spectrometry (GC-MS)

LANGUAGES

English, French, Spanish, Greek