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Current Position

May 2022 – **Assistant Professor**

Department of Materials Science and Engineering, University of Delaware, Newark DE

Education

2009–2014 **Ph.D., Mechanical Engineering**

University of Massachusetts Amherst, Amherst MA, USA

Dissertation: “Structural, electronic and catalytic properties of graphene-supported platinum nanoclusters.”

Advisor: Prof. Ashwin Ramasubramaniam

2003–2008 **B.Sc., M. Eng., Electrical and Computer Engineering**

National Technical University of Athens, Athens, Greece

Thesis: “Optimal power flow in electric energy grids.”

Teaching Experience

2018–2022 **Visiting Assistant Professor**

Department of Mechanical Engineering, Villanova University

Fall 2017 **Postdoctoral Teaching Fellow**

School of Engineering and Applied Sciences, Harvard University

2016–2017 **Derek Bok Center Teaching Certificate**

The Derek Bok Center for Teaching and Learning, Harvard University

Fall 2013 **Graduate Teaching Assistant**

Department of Mechanical Engineering, University of Massachusetts Amherst

Research Experience

2016–2018 **Postdoctoral Research Fellow, Harvard University**

Advisor: Prof. Efthimios Kaxiras
Integrated Mesoscale Architectures for Sustainable Catalysis (IMASC) EFRC

2014–2016 **Postdoctoral Research Fellow, University of Delaware**

Advisor: Prof. Dionisios G. Vlachos
Catalysis Center for Energy Innovation (CCEI) EFRC

2009–2014 **Graduate Research Assistant, University of Massachusetts Amherst**

Advisor: Prof. Ashwin Ramasubramaniam
Computational Nanomaterials Lab, Department of Mechanical and Industrial Engineering

2007–2008 **Undergraduate Research Assistant, National Technical University of Athens**

Advisor: Prof. Nikos Hatziaargyriou
Department of Electrical and Computer Engineering

Publications

Google Scholar Profile

1. R. Reocreux, **I. Fampiou**, M. Stamatakis. The role of oxygenated species in the catalytic self-coupling of MeOH on O pre-covered Au(111). *Faraday Discussions* **2021**, 229, 251-266 [[Link](#)]
2. R. Hoyt, M. M. Montemore, **I. Fampiou**, W. Chen, G. Tritsarlis, E. Kaxiras. Machine Learning Prediction of H Adsorption Energies on Ag Alloys. *J. Chem. Inf. Model.* **2019**, 59, 4, 1357-1365 [[Link](#)]
3. D. Larson, **I. Fampiou**, E. Kaxiras. Li-intercalation in graphene-MoS₂ heterostructures. *J. Phys. Chem. C* **2018**, 122, 43, 24535-24541 [[Link](#)]
4. F. Xu, **I. Fampiou**, C. O'Connor, E. Kaxiras, R. J. Madix, C. M. Friend. Water facilitates oxygen migration on gold surfaces. *Phys. Chem. Chem. Phys.* **2018**, 20, 4, 2196-2204 [[Link](#)]
5. **I. Fampiou**, A. Ramasubramaniam. Influence of support effects on CO oxidation kinetics on CO-saturated graphene-supported Pt₁₃ nanoclusters. *J. Phys. Chem. C* **2015**, 119, 8703-8710 [[Link](#)]
6. P. Koskinen, **I. Fampiou**, A. Ramasubramaniam. Density-functional tight-binding simulations of curvature-controlled valley polarization and band-gap tuning in bilayer MoS₂. *Phys. Rev. Lett.* **2014**, 112, 186802 [[Link](#)]
7. C. Carpenter, A. M. Christmann, L. Hu, **I. Fampiou**, A. R. Muniz, A. Ramasubramaniam, D. Maroudas. Elastic properties of graphene nanomeshes. *Appl. Phys. Lett.* **2014**, 104, 141911 [[Link](#)]
8. **I. Fampiou**, A. Ramasubramaniam. CO adsorption on defective graphene - supported Pt₁₃ nanoclusters. *J. Phys. Chem. C* **2013**, 117, 19927-19933 [[Link](#)]
9. J. Deng, **I. Fampiou**, J. Z. Liu, A. Ramasubramaniam, N. V. Medhekar. Edge stresses of non-stoichiometric edges in two-dimensional crystals. *Appl. Phys. Lett.* **2012**, 100, 251906 [[Link](#)]
10. **I. Fampiou**, A. Ramasubramaniam. Binding of Pt nanoclusters to defects in graphene: adsorption, morphology, and electronic structure. *J. Phys. Chem. C* **2012**, 116, 6543–6555 [[Link](#)]

Honors and Awards

2018	Certificate of Distinction in Teaching during the Fall Semester of 2017, Harvard University
2013	Graduate Student Travel Award for attending AICHE Annual Meeting, UMass Amherst
2013	The Margo and Cuneyt Oge Graduate Fellowship, UMass Amherst
2013	Graduate Student Travel Award for attending APS March Meeting, UMass Amherst
2011	The Spyros and Yazmin Michail Graduate Fellowship, UMass Amherst
2010	The Spyros and Yazmin Michail Graduate Fellowship, UMass Amherst
2006	DAAD Scholarship for attending Summer School, Freie Universität Berlin, Berlin Germany
2003	EFG Eurobank Greece Award for achieving the highest GPA in the national university entrance exams

Research Skills

- VASP, Quantum ESPRESSO for quantum chemical calculations
- LAMMPS molecular dynamics package
- VMD, VESTA visualization packages
- *Zacros* software for kinetic Monte Carlo studies
- COMSOL Multiphysics, ANSYS finite element analysis packages
- Programming experience C, C++, MATLAB, Python, Mathematica
- Extensive experience in Linux shell scripting and Unix

Professional Activities and Memberships

Workshops and Professional Development Seminars

2021	Course Redesign Institute, VITAL, Villanova University (online workshop)
2020	Lilly Bethesda, Designing Effective Teaching (online conference)
2019	17th Annual Faculty Conference on Teaching Excellence, Temple University
2017	Teaching Seminar "Make it stick: Applying the science of learning to your teaching", Harvard University
2017	Teaching Workshop "Teaching and the Job Market: Getting from TF to colleague", Harvard University
2016	Teaching Seminar "Public speaking for international teachers and scholars", Harvard University

Reviewer

- Peer reviewer for Physical Review Letters, American Chemical Society, Journal of Computational Electronics, Catalysts, Nanomaterials.

Language Skills

Greek	Native Speaker
English	Fluent (Certificate of Proficiency in English, University of Michigan, 2004) TOEFL iBT March 2009 (Result 106/120)
German	Advanced Level (C1 Level, Goethe Institut, 2008)
French	Advanced Level (Diplome d' Etudes en Langue Francaise (DELF) 2nd Degre, 2003)
Spanish	Intermediate Level (DELE, Nivel Intermedio, 2006)

Industry Experience

2008–2009 **Electrical Engineer–Project Manager**

Unigea Renewable Energy Hellas, Athens, Greece

- Participated in the design of wind power energy parks with 500 MW output capacity.

2008 **Summer Intern**

Power Grid Distribution Department, Public Power Corporation, Argostoli, Greece

- Conducted studies for the extension of the electric power grid in new residential areas.

2005–2006 **Intern**

Program “Go-Net”, National Technical University of Athens, Greece

Funded by the Greek Ministry of Development

- Provided hands-on training for the integration of computers and the use of internet in small businesses.

Last updated: May 17, 2022