Farah Hammami Ep Kammoun

Lecturer
Department of Mechanical Engineering
University of Houston

Phone : 713-743-9067
Office: 207, Eng. Building
Email: fhammami@uh.edu

EDUCATION

University of Houston January 2011 – August 2016
Pursuing Doctorate in Mechanical Engineering (3.8/4)
Advisor: Dr. Yashashree Kulkarni

Tunisia Polytechnic School, Tunis, Tunisia September 2008 - July 2010
Master of Engineering in Computational Mechanics
Lab.: Applied Mechanics and Systems Research Laboratory (LASMAP)

Tunisia Polytechnic School, Tunis, Tunisia September 2006 - June 2009
Bachelor of Polytechnic Engineering
Department: Mechanical Engineering

RESEARCH EXPERIENCE

University of Houston January 2011 - Present
Research Assistant
Research: Multi-scale modeling and simulations of the mechanical behavior of nanostructured materials
Supervisor: Dr. Yashashree Kulkarni

Polytechnic University of Cataluña (UPC), Barcelona, Spain November 2009 – January 2010
Department of Strength of Materials and Structures
Master's Research Thesis
Research: Homogenization and Damage detection in a composite material plate using Finite Elements and Experimental modal analysis
Supervisor: Dr. Lluis Gil, Dr. Marco Antonio Perez and Dr. Mondher Neifar

PROFESSIONAL EXPERIENCE

Société Nationale des Chemins de Fer Tunisiens (SNCFT) July 2008 – August 2008 & February 2009– June 2009
R&D Division Intern, Tunis, Tunisia
Bachelor's Graduation Project
Project: Study of train wheel cracks propagation using Finite Elements method
Supervisor: Dr. Sami El Borgi and Dr. Bassem Zouari

FLERTEX July 2007 – August 2007
R&D Division Intern, Paris, France
Project: Study of chemical composition of train break shoes for enhancement of their mechanical properties

Al Maaden March 2007 – April 2007
Supply Chain Supervisor Intern, Tunis
Project: Observation of the manufacturing process of pipe based packages

MEMBERSHIPS and AWARDS

- Received the certificate of participation in the Future Faculty Program in 2015.
- Awarded the ABS Scholarship for Excellence in the ME PhD program in two academic years 2014-2015 and 2015-2016.
- Awarded the AMOCO Minority Scholarship for the academic year 2014-2015.
- Awarded the Dr. Lewis Wheeler scholarship for Outstanding ME PhD students in Spring 2014.
- Awarded the Graduate Tuition Fellowship (GTF), University of Houston from 2011.
- Member of the Society of Women Engineers (SWE) and SWE-Grad from 2013.
- Member of the American Society of Mechanical Engineers (ASME) from 2012.

TEACHING EXPERIENCE

- Served as a co-instructor for Introduction to Engineering, as part of the Future Faculty Program in Fall 2014.
- Served as a teaching assistant for Dynamics with Dr. Wheeler in Spring 2012 and Dr. Chen in Summer 2015.
- Served as a teaching assistant for Fluid Mechanics with Dr. Kleis in Spring 2013.

PUBLICATIONS

- F. Hammami, and Y. Kulkarni, Size effects in twinned nanopillars, *Journal of Applied Physics,* 116 (2014) 033512.
- F. Hammami, and Y. Kulkarni, Long time-scale atomistic simulations of grain boundary sliding in nanostructures, in preparation.

SELECTED PRESENTATIONS

- Long Time-scale Atomistic Simulations of Grain Boundary Sliding in Nanostructures, ASME IMECE, November 2015.
- Interplay of Intrinsic and Extrinsic Size Effects in Twinned Nanopillars, NANOTECH MEET Tunisia 2014, April 2014.
- Interplay of Intrinsic and Extrinsic Size Effects in Twinned Cu Nanopillars, The Pan American Congress of Applied Mechanics (PACAM), May 2013.
- Damage Analysis of Composite Materials Using Modal Analysis of Intact and Damaged Plate, IMPACT 2010, Dynamic of Systems, Materials and Structures, March 2010.

POSTERS

- Twinned Nanopillars: Making Strong Stronger, F. Hammami and Y. Kulkarni, GRaSP, Fall 2014.

- Interplay of Size Effects in Twinned Cu Nanopillars, F. Hammami and Y. Kulkarni, Texas Materials Modeling Network, 3rd Annual Workshop, December 2013.

COURSEWORK AND PROGRAMMING EXPERIENCE

- Physical Properties of Crystals, Energy Storage Devices, Computational Modeling (Audited), Thermodynamics & Statistical Mechanics of Materials, Theory of Elasticity, Mechanics of Rods and Surfaces, Methods of Applied Mathematics (I & II), Variational Methods in Mechanics, Quantum Mechanics, Mechanical Behavior of Materials.

- Expertise in data processing tools, specifically Matlab and Excel, and proficiency in shared memory parallel programming in C, C++, and molecular dynamics open source code, LAMMPS.