

**Research Projects:**

- 06/16-Pres., *Molecular Dynamics Simulations of pABA Functionalized Cellulose Nanocrystals*, PREM
- 09/14-05/15, *Analysis of trends in scientific public publications using Data Mining*, PREM
- 09/13-05/15, *Molecular Dynamics Simulation of Electrodes for Capacitors made with Nano-onions*, PREM
- 06/14-07/14, *Implementation of New Methods to Decrease Wolffia's Algorithms Time and Calculations*, PREM

**Internships:**

- 07/14-08/14, *NSF-Pennsylvania Summer Science Initiative*, University of Pennsylvania, Pennsylvania, USA

**Publications:**

- JAC, Mir., F. M. (2014). *Molecular dynamics simulation of electrodes for capacitors made with nano-onions*, NCUR.

**Out of State Presentations:**

- 10/11/17 Presenter, *Visualization and Analysis of Para-aminobenzamidine Functionalized Cellulose Nanocrystals through Molecular Dynamics Simulations*, NSF PREM Meeting, Alexandria, VA.
- 12/01/14 Presenter, *Molecular Dynamics Simulation of Adsorption of Ionic Liquids on Porous Carbon*, 2014 MRS Fall Meeting & Exhibit at Sheraton Hotel and the Hynes Convention Center, Boston Massachusetts.
- 04/03/14 Presenter, *Molecular Dynamics Simulation of Electrodes for Capacitors made with Nano-onions*, NCUR 2014 at University of Kentucky, Kentucky, US.

**Local Presentations:**

- 08/17/17 Presenter, *Computational Analysis of the interaction of Para-aminobenzamidine Functionalized Cellulose Nanocrystals*, Poster at the NSF Site Visit at UPRH, PR.
- 08/17/17 Presenter, *A study of the relation between ligand density and height in pABA functionalized cellulose nanocrystals using molecular dynamics simulations*, Oral Presentation at the NSF Site Visit at UPRH, PR.
- 01/26/17 Presenter, *Multiple Elements of Security Hardening*, PREM Seminars, University of Puerto Rico at Humacao.
- 11/20/15 Presenter, *Cellulose Nanocrystal Model for Molecular Dynamics Simulations*, 12<sup>th</sup> PREM Annual Meeting at Wyndham Garden Hotel, Humacao, PR.
- 03/10/15 Presenter, *Analysis of trends in scientific publications using Data Mining*, Regional Science Fair, PR.
- 02/23/15 Presenter, *Analysis of trends in scientific publications using Data Mining*, District Science Fair, PR.
- 12/10/2014 Presenter, *Molecular Dynamics Simulation of Adsorption of Ionic Liquids on Porous Carbon*, Presentation by NASA Administrator Charles F. Bolden, Jr., at University of Puerto Rico at Humacao, PR.
- 11/21/14 Presenter, *Molecular Dynamics Simulation of Adsorption of Ionic Liquids on Porous Carbon*, 11th PREM Annual Meeting at Wyndham Garden Hotel, Humacao PR.
- 05/16/2014 Presenter, *A Molecular Dynamics Simulation of a Capacitor Made with Nano-onions*, 8th PREM Symposium at Wyndham Garden Hotel, Humacao, PR.
- 03/04/14 Presenter, *Molecular Dynamic Simulation about the Interactions of Sulfuric Acid Ions with agglomerates of carbon fullerenes*, Regional Science Fair at Fajardo, PR.
- 02/11/14 Presenter, *Molecular Dynamic Simulation about the Interactions of Sulfuric Acid Ions with agglomerates of carbon fullerenes*, District Science Fair at Las Piedras, PR.
- 11/22/13 Presenter, *Simulation of Fullerenes and Carbon Nanotubes Electrodes for Capacitors*, 10th PREM Annual Meeting at Wyndham Garden Hotel, Humacao, PR.