

# Ph.D. Position at NJIT, New Jersey, USA in Computational Nanomechanics/Materials

**Contact:** Dr. Dibakar Datta, Email: [dibakar.datta@njit.edu](mailto:dibakar.datta@njit.edu), Web: [www.dibakardatta.net](http://www.dibakardatta.net)

The Department of Mechanical and Industrial Engineering (<http://mie.njit.edu>) at the New Jersey Institute of Technology (<http://www.njit.edu>) has an opening for a fully funded Ph.D. position. The position will start in Spring 2024/Fall 2024. Interested candidates should apply as soon as possible. Email: [dibakar.datta@njit.edu](mailto:dibakar.datta@njit.edu)

**Research Description:** The selected student will primarily work on Atomistic/Molecular Modeling and Machine Learning. He/she will be involved in different projects such as:

*Modeling of Energy Systems:* Nanomaterials for Energy Storage and Conversion, e.g., Lithium-ion Battery.

*Mechanics and electronic properties of nanomaterials:* Different aspects of mechanics (e.g., Fracture, Friction) and electronics of various nanomaterials and their heterostructures: Graphene, Transition Metal Dichalcogenide (TMDC), MXenes, 2D/3D composites, etc.

The candidate will have the opportunity to collaborate with experimentalists at NJIT and other institutions.

## **Candidate's background:**

The position requires an undergraduate/master degree or equivalent within Nanotechnology, Materials Science, Physics, Chemistry, or Engineering (Civil, Mechanical, Aerospace, or Chemical Engineering).

Background in Machine Learning (ML), Molecular Dynamics (MD) Simulation, Density Functional Theory (DFT) is preferred – but not essential. However, the candidate should be strongly interested in learning ML, MD, and DFT.

**Funding:** The position is fully funded.

**Application:** The interested candidates should email Dr. Dibakar Datta with CV. Email address: [dibakar.datta@njit.edu](mailto:dibakar.datta@njit.edu)