New Jersey Institute of Technology

OTTO H. YORK DEPARTMENT OF CHEMICAL AND MATERIALS ENGINEERING
LABORATORY FOR MATERIALS INTERFACES

Postdoctoral Position: Molecular Modeling of Electrolytes in Nanopores

About the position: The Laboratory for Materials Interfaces is seeking applicants for a postdoctoral position to work on molecular and continuum modeling of aqueous electrolytes in nanopores and electrosorption-induced deformation. The initial appointment is for 1 year; extension depends on the availability of funds. The start date is flexible and can be as early as **April 2026**. The following two papers provide background on the project: https://doi.org/10.1021/acs.langmuir.4c00443 and https://doi.org/10.1021/acs.jpcc.5c02553.

An ideal candidate should have:
(1) Proficiency in molecular dynamics simulations (LAMMPS, GROMACS, etc.)
(2) Strong programming skills
(3) Strong math skills and the ability to relate MD to continuum theories
(4) Experience in modeling electrolytes
(5) A track record of peer-reviewed publications

How to apply: Applications should include the following:
(1) A short cover letter
(2) A curriculum vitae, including contact information for two to three references
(3) Three selected publications
Applications should be sent by email to Prof. Gennady Gor at gorcheme@gmail.com with *Postdoc application* in the subject line. Please send all materials as a single PDF file. Application review will begin immediately.

About the PI: Dr. Gennady Gor is an Associate Professor of Chemical and Materials Engineering at the New Jersey Institute of Technology (NJIT). He earned his Ph.D. in Theoretical Physics from St. Petersburg State University in 2009 and conducted postdoctoral research at Rutgers University, Princeton University, and the U.S. Naval Research Laboratory before joining NJIT in 2016. Dr. Gor leads a research group that integrates molecular simulations, theory, and experiments to study the interactions of fluids with porous and soft materials. His current work spans confined liquids and electrolytes, atmospheric aerosols, and ultrasound propagation in porous media. He is the author of more than 80 peer-reviewed publications, a recipient of the NSF CAREER Award (2020), and serves as Associate Editor of the journal Adsorption. More information is available at http://porousmaterials.net/

About NJIT: NJIT is one of the leading public research universities in the US, with 145 years of history. NJIT is located in the vibrant University Heights district of downtown Newark, NJ, just 20 minutes from Manhattan, NY, by train.