



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

## Ph.D. Position in Experimental Studies of Nanoconfined Fluids

**About the position:** The Laboratory for Materials Interfaces is seeking applicants for Ph.D. student position in chemical or materials engineering. The student will receive full financial support including stipend and coverage for the tuition. The candidate will be working on ultrasonic studies of nanoconfined fluids, supervised jointly by **Prof. Gennady Gor** and **Prof. Alexei Khalizov**. More information about the project can be found in our recent review paper: <https://doi.org/10.1063/5.0024114>

### **An ideal candidate should:**

- (1) Have strong motivation to pursue interdisciplinary experimental research
- (2) Have an M.S. degree in chemical engineering, materials science, physics, chemistry, etc., however outstanding candidates with a B.S. degree will also be considered
- (3) Be available to start in **January 2025**
- (4) Have hands-on experimental experience (preferably either **ultrasound** or **gas adsorption**)

**How to apply:** Initial applications should include the following: (1) Short cover letter (2) Curriculum vitae (3) Contact information for three references (4) Unofficial academic transcript (5) Publications (if any). Applications should be sent by email to Prof. Gennady Gor [gor@njit.edu](mailto:gor@njit.edu) with *PhD application* in the subject. Please send it as a single PDF file. Application review will begin immediately. At the next stage, GRE and TOEFL are required, see the NJIT admissions website: <https://www.njit.edu/admissions/phd-programs>

### **About the Professors:**

**Dr. Gor** and his group has been developing and applying theoretical and computational methods (Monte Carlo simulations, molecular dynamics, density functional theory, etc.) to solve a wide spectrum of engineering problems related to porous materials and solid-fluid interfaces. Dr. Gor's research has been published in more than 70 papers in peer-reviewed journals. Prior joining NJIT he worked at Rutgers University, Princeton University and Naval Research Laboratory. He is the recipient of the National Research Council Associateship (2014) and the NSF CAREER Award (2020). More information at <http://porousmaterials.net/>

**Dr. Khalizov's** group develops instrumentation and conducts experimental and modeling work to understand the interaction of nanoparticles with atmospherically relevant fluids. Dr. Khalizov has published more than 70 peer-reviewed journal articles with an h-index of 30 (Scopus). Prior to joining NJIT, he conducted research at Texas A&M University, University of Waterloo, and McGill University. He is the recipient of the NATO-NSERC Postdoctoral Fellowship (2000) and the NSF CAREER Award (2016). More information at <https://centers.njit.edu/krg/>

**About NJIT:** NJIT is one of the US leading public research universities, with 140 years of history. NJIT is located in the vibrant University Heights district of downtown Newark, NJ, just 20 minutes from Manhattan, NY by train.