

Ph.D. Student (Materials Science, Geology,
Geochemistry)
University of Texas at Arlington

Direct Link: <https://www.AcademicKeys.com/r?job=143256>

Downloaded On: Aug. 5, 2020 6:03am

Posted Jun. 24, 2020, set to expire Oct. 24, 2020

Job Title	Ph.D. Student (Materials Science, Geology, Geochemistry)
Department	Materials Science & Engineering
Institution	University of Texas at Arlington Arlington, Texas
Date Posted	Jun. 24, 2020
Application Deadline	Open until filled
Position Start Date	Fall 2020
Job Categories	Graduate Student
Academic Field(s)	Materials Sciences/Polymer Sciences Geology - Geochemistry Earth Sciences Chemistry - Physical
Apply By Email	erika.laplante@uta.edu

Job Description

Subject: Open Ph.D. position at the Department of Materials Science & Engineering at the University of Texas at Arlington

An educational leader in the thriving North Texas region, the University of Texas at Arlington (UTA) nurtures minds within an environment that values excellence, ingenuity, and diversity. (<https://www.uta.edu>)

The Materials Science and Engineering Department is the oldest and most diversified program in North Texas. It is a university-wide, highly- interdisciplinary graduate program with eight core materials faculty and approximately 25 affiliated faculty spanning from physics and chemistry to electrical, mechanical, aerospace, civil and bio engineering. It offers minor, masters and doctoral degree programs in Materials Science and Engineering. It has courses in nanoscale materials and

Ph.D. Student (Materials Science, Geology,
Geochemistry)
University of Texas at Arlington

Direct Link: <https://www.AcademicKeys.com/r?job=143256>

Downloaded On: Aug. 5, 2020 6:03am

Posted Jun. 24, 2020, set to expire Oct. 24, 2020

nanotechnology, magnetic, optical and energy materials, bio/nano materials, surface engineering, and thin film technology. The department's growth is aided by high levels of research funding from NSF, NIH, DOE, ONR, NASA, DOD and other federal, industrial and state sources in the areas of micro/nano electronic devices, self-assembled nanomaterials, multifunctional nanocomposite thin films, biomaterials, optoelectronics, biosensor, solar cells and materials for clean energy, advanced lubricants, and coatings. (<https://www.uta.edu/mse/>)

See requirements for admission to UTA MS&E here:

<https://catalog.uta.edu/engineering/materialsscience/graduate/#doctoraltext> and here:

<https://www.uta.edu/admissions/apply/graduate>, <https://catalog.uta.edu/pdf/2019-2020.pdf>.

The ideal applicant will have the following characteristics:

- B.S. or M.S. degree in geochemistry, materials science, geology, chemistry, earth sciences, or related fields
- Research experience in materials characterization (surface and bulk), and chemical analysis relevant to natural materials, ceramics, and related topics
- Competence in performing experiments with high attention to detail and diligence, and ability to abstract and infer conclusions from observations
- High level of motivation and capability to work both independently and with supervision
- Background in aqueous chemistry, mineral-water interactions, and earth materials

The successful candidate will work with Dr. Erika La Plante to develop alternative infrastructure materials through high-resolution investigations of low-temperature mineral-fluid processes (e.g., sorption, dissolution, nucleation). Approaches that will be implemented include experimental aqueous geochemistry and surface science. Studies will be performed using a combination of in situ (fluid cell) and ex situ microscopy and spectroscopy techniques, with focus on atomic force microscopy (AFM) and complementary techniques, to probe, among others: degradation processes under various environmental stimuli, control of physical and chemical properties of silicate, carbonate, and oxide materials, and characterizations of morphology and structure of films and bulk materials at the angstrom level. Interested applicants are invited to reply to this posting with their CV, a cover letter, and a 1-2-page personal statement. Please send inquiries and applications to erika.laplante@uta.edu. Applications will be reviewed as they are received for a Fall 2020 start date.

Contact Information



Ph.D. Student (Materials Science, Geology,
Geochemistry)
University of Texas at Arlington

Direct Link: <https://www.AcademicKeys.com/r?job=143256>

Downloaded On: Aug. 5, 2020 6:03am

Posted Jun. 24, 2020, set to expire Oct. 24, 2020

Please reference Academickeys in your cover letter when
applying for or inquiring about this job announcement.

Contact Erika La Plante
Arlington, TX 57106

Contact E-mail erika.laplante@uta.edu