NSF Summer School on Computational Modeling of Disordered Materials for Historically Black Colleges and Universities

The University of Southern Mississippi (USM) is organizing an NSF-supported summer workshop on computational modeling of complex materials in collaboration with the University of Texas at Arlington and Ohio University. The workshop is expected to be held at the Long Beach campus of the USM from June 3, 2019 to June 7, 2019. The primary purpose of the school is to provide a hands-on training and programing experience to STEM undergraduate and graduate students in computational sciences by exposing them to a host of modern computational methods and simulation techniques with an emphasis on atomistic and molecular modeling. Participants will be introduced to the basics of computer programming using a high-level language, such as Fortran, MatLab and Python, in linux programming environment for conducting simulations using classical/quantum molecular-dynamics and Monte Carlo methods. An introduction to machine learning and data-driven inverse and hybrid approaches to materials computation will also be provided.

Financial and other supports

- $500 stipend and accommodation
- Travel support from home institution (maximum up to $750)
- Breakfast and lunch
- Participants on successful completion of the workshop may eligible to receive a laptop computer for continuation of mini research projects for future collaboration

How to Apply

A 2-page curriculum vita listing your credentials along with a statement (max. one page) of your future study goals. Additionally, an unofficial transcript should also be included with the vita. Student applicants should also ask a faculty member at your college or university, who can account for your academic and research abilities, to provide a letter of recommendation. All documents must be submitted by email to both partha.biswas@usm.edu and attafynn@uta.edu as a single PDF file with a subject header "HBCU applicant name".

Eligibility

Participants must be currently enrolled as a student at an HBCU or a minority serving institution (MSI) or should be a faculty member in HBCUs/MSIs. Students must achieve sophomore/junior/senior standing in Physics, Chemistry, Computer science, or Materials Science/Engineering. **Women and minority students from non-HBCU/non-MSI will be also considered subject to the availability of positions.** Faculty members from HBCUs and MSIs, who can be accompanied by a student, are particularly encouraged to apply. Review of applications will begin immediately and it is expected that successful applicants would be intimated by April 2019 end.

Notes

25 positions. If you have any questions about the program or the application process, please contact Raymond Atta-Fynn by email (attafynn@uta.edu).