



Undergraduate Research Fellowships Announcement Summer 2019 (May 26 – August 2, 2019)

**National Science Foundation Research Experiences for Undergraduates (REU) Site
Interdisciplinary Water Science and Engineering
Virginia Tech, Blacksburg, Virginia**

Application Deadline: February 15, 2019 (11:59 PM, EST)

Qualified and motivated undergraduate students (rising sophomores, juniors, and seniors) from all U.S. colleges and universities are invited to submit applications to participate in a 10-week (May 26 – August 2, 2019) summer research experience in interdisciplinary water science and engineering at Virginia Tech. U.S. Citizens or Permanent Residents are eligible to apply. The research program is funded through the National Science Foundation's Research Experiences for Undergraduates (NSF REU) Site program. The 10-week internship will begin May 26, 2019 (arrival day) at Virginia Tech and will end August 2, 2019 (departure day, August 2 or 3). This research internship includes a stipend of \$500/week, housing (two persons per room), meals, and travel expenses (limited to a maximum of \$500 per person for students working at Virginia Tech and a maximum of \$1500 for those students travelling to India). From our prior sites, during 2007-2018, we have graduated **105** excellent undergraduate researchers representing 60+ institutions in the United States. Application materials, details about research mentors, along with information on summer 2019 research projects and other program activities, will be available through the "NSF/REU SITE" tab on the following website: <http://lewas.ictas.vt.edu/>.

Applicants are requested to upload their applications along with the other required documents by the deadline (February 15, 2019). Review of applications will begin February 11. However, we'll continue to accept applications until February 15, 2019. We'll start contacting successful applicants beginning on February 25, 2019. If you have any questions, please contact us at ictasreu@vt.edu.

Titles of Summer 2019 Projects

- Project 1: Virtual Reality Application for Water Engineering (Dr. Vinod K. Lohani)
- Project 2: Greenhouse Gas Dynamics in a Drinking Water Reservoir (Drs. Cayelan Carey and Madeline Schreiber)
- Project 3: Investigation of the Occurrence and Fate of Pharmaceuticals and Personal Care Products (PPCPs) in Urban-impacted Watersheds (Dr. Kang Xia)
- Project 4: Water Quality for Humanity and the Environment (Dr. Andrea Dietrich)
- Project 5: Bacterial Contamination of Water Distribution and Plumbing Pipelines (Drs. Mark Edwards and Amy Pruden)
- Project 6: Recovery of Nutrients and Water from Wastewater Using an Integrated Osmotic Bio-Electrochemical System (Dr. Jason He)
- Project 7: Symbioses in Aquatic Systems (Dr. Bryan L. Brown)
- Project 8: Drivers and Functions of Vulnerable Waters (Dr. Daniel McLaughlin)

India-based Research Projects for REU Scholars:

- Project 9*: Chemical and Microbial Water Quality in India (Drs. Peter Vikesland and Amy Pruden, Virginia Tech, USA) and (Dr. Indumathi Nambi, Indian Institute of Technology, Madras)
- Project 10*: PIRE Research Opportunity (Drs. Peter Vikesland and Amy Pruden, Virginia Tech, USA) and Dr. Indumathi Nambi, Indian Institute of Technology, Madras)

*REU scholars will spend the first week and the last 3 weeks of the 10-week program at Virginia Tech and the remaining 6 weeks at the Indian Institute of Technology, Madras.