Soroush E. Neyestani
Curriculum Vitae

Department of Environmental Sciences
University of California, Riverside
Riverside, CA 92507
seneyestani@uga.edu

Research Interests

- Air quality and climate modeling
- Atmospheric aerosols
- Atmospheric radiation
- Geospatial data analysis

Education

Ph.D., Engineering
University of Georgia
Advisor: Rawad Saleh
GPA: 3.8/4
2017 - 2021

M.Sc., Environmental Engineering - Air Pollution
University of Tehran
Advisor: Khosro Ashrafi & Majid Shafiepour
GPA: 17.9/20
2013 - 2016

B.Sc., Mining Engineering - Extraction
Azad University - South Tehran
GPA (last 60 units): 17.6/20
2007 - 2012

Research Experience

Postdoctoral Scholar
University of California, Riverside
2021 -

Graduate Research Assistant
College of Engineering, University of Georgia
Projects: (1) I modified emission inventory then calculated gasoline vehicles' direct radiative effect and attributable fraction over the U.S. using WRF-Chem. (2) I added a parameterization for brown carbon light absorption to WRF-Chem and evaluated direct radiative effect during a biomass burning event.
2017 - 2021

NASA DEVELOP Intern
NASA DEVELOP node (Georgia, US)
Project: Water turbidity and sea surface temperature are retrieved over Golfo Dulce in Costa Rica using Aqua-MODIS and Landsat-OLI.
2018 (Fall)

Graduate Researcher
Graduate Faculty of Environment, University of Tehran
Project: I detected (MODIS/AIRS) dust storms over the Middle East and simulated (WRF-Chem) the effect on air quality and radiation.
2013 - 2016

Teaching Experience

Teaching Assistant   2021 (Spr.)
      College of Engineering, University of Georgia   2020 (Spr.)
      Course: Air pollution engineering

Honors and Awards

Excellence in graduate research award   2020
      College of Engineering, University of Georgia

4.5 million (IR) Rials grant to pursue M.Sc. degree   2016
      Graduate Faculty of Environment, University of Tehran

Top 5% in civil/environmental engineering national graduate entrance exam   2013

Skills

- Regional climate models (WRF-Chem)
- Emission models (SMOKE)
- Programming languages (Fortran, MATLAB, Python, and NCL)
- Geospatial data analysis (QGIS & GEE)
- LaTeX typesetting system
- Unix based operating systems

Memberships

- American Meteorological Society (AMS)
- American Geophysical Union (AGU)

Selected Graduate Courses

Ph.D.: Aerosol Science and Engineering, Atmospheric Chemistry, Climatology, Computational Engineering, Advanced Fluid Mechanics. **M.Sc.:** Air Pollution Meteorology, Air Quality Modeling, Atmospheric Aerosols, Engineering Mathematics.

Publications

- **Neyestani, S. E.**; Saleh, R., Observationally constrained representation of brown carbon emissions from wildfires in a chemical transport model. *Environmental Science: Atmospheres*. Submitted.

- **Neyestani, S. E.**; Walters, S.; Pfister, G.; Kooperman, G. J.; Saleh, R., Direct Radiative Effect and Public Health Implications of Aerosol Emissions Associated with Shifting to Gasoline Direct-Injection (GDI) Technologies in Light-duty Vehicles in the United States. *Environmental Science & Technology* **2020**, 54 (2), 687-696. doi:10.1021/acs.est.9b04115.

- Ashrafi, K.; Motlagh, M. S.; **Neyestani, S. E.**, Dust storms modeling and their impacts on air quality and radiation budget over Iran using WRF-Chem. *Air Quality Atmosphere and Health* **2017**, 10 (9), 1059-1076. doi:10.1007/s11869-017-0494-8.

Conference Presentations

- AAAR 37th Annual Conference (talk). *Portland, OR.* October 2019.
- 10th International Aerosol Conference (poster). *St. Louise, MO.* September, 2018.

Seminars

- Graduate seminar course at the University of Georgia. *Athens, GA.* April 2020.
- Riverbend research highlight seminar at the University of Georgia. *Athens, GA.* June 2019.

Media Coverage

- Obama helped make cars more efficient, but now they spew black carbon. *Grist*, February 2020.
- Fuel efficient tech may threaten climate, public health. *Eurekalert*, January 2020.

Last updated: Aug. 2021