Lowell R. Moore

Lab Manager
Department of Geosciences
Virginia Tech

Email: moorelr@vt.edu
Cell:
Address:

OBJECTIVE: Pursue a career solving compelling problems analytically as part of a collaborative team.

EDUCATION

Doctor of Philosophy: Virginia Tech, *Blacksburg, VA* (Geosciences) **2019**
- *The volatile contents of melt inclusions and implications for mantle degassing, and ocean island evolution,* Committee Chair: Robert J. Bodnar

Master of Science: Virginia Tech, *Blacksburg, VA* (Geosciences) **2014**

Bachelor of Science: James Madison University, *Harrisonburg, VA* (Geology, Math Minor) **2012**

EXPERIENCE

Lab Manager: Electron Microprobe Laboratory, *Virginia Tech* **2019 – present**
- Responsible for scheduling, operation, accounting, maintenance, and repair of electron microprobe, scanning electron microscope, and x-ray fluorescence spectrometer.

Research Assistant: NSF-funded volcanology research, *Virginia Tech* **2016 – 2019**
- Wrote proposals for individual student and collaborative NSF grants to fund research projects
- Prepared and analyzed geologic samples using a variety of microanalytical methods
- Published results in peer-reviewed research in academic journals and at scientific conferences

Invited Lecturer: Carbon forms, paths, and processes, *Como Italy* **Fall 2017**
- Designed and presented lecture material for an international student audience
- Led students and professors in discussion about the geologic role of CO_2 in the deep earth

Teaching Assistant: Physical Geology, Field Observations, *Virginia Tech* **2012 – 2015**
- Taught geologic lab and field methods to civil and environmental engineers
- Lecture design, grading lab assessments and writing assignments, lab setup

TECHNICAL SKILLS

- **Materials Characterization** (*Electron Probe Microanalysis, Secondary Ion Mass Spectrometry*)
- **Design & Prototyping** (*Peltier microscope stage, 3D-printed microscope camera*)
- **Signal Processing** (*Raman spectroscopy, Laser Ablation ICP-MS*)
- **Statistical Computing** (R: *neuralnet, ggplot2, geoR, regular expressions*)
- **Field Geology** (*Riparian soil lysimetry, Field Observations TA, JMU Ireland field course*)

SELECTED PUBLICATIONS

Moore, L.R., Bodnar, R.J. (2019) *A Pedagogical Approach to Estimating the CO_2 Budget of Magmas*, Journal of the Geological Society of London. Published online 21 December 2018.

Moore, L.R., Mironov, N., Portnyagin, M., Gazel, E., Bodnar, R.J. (2018) *A comparative study of volatile contents of melt inclusions determined by mass-balance versus experimental homogenization methods*, Journal of Volcanology and Geothermal Research, 358, 124-131.

Moore, L.R., Gazel, E., Tuohy, R., Lloyd, A.S., Esposito, R., Steele-Macinnis, M., Hauri, E.R., Wallace, P.J., Plank, T., Bodnar, R.J. (2015) *Bubbles matter: An assessment of the contribution of vapor bubbles to melt inclusion budgets*, American Mineralogist, 100, 806-823.