

Toti Erik Larson

Bureau of Economic Geology, The University of Texas at Austin,
University Station, Box X, Austin, TX, 78713-8924
Phone (512) 471-0140, toti.larson@beg.utexas.edu

Education

2003 Ph.D., Geochemistry, University of New Mexico, Earth and Planetary Sciences
1999 M.S., Geology, University of New Hampshire, Department of Earth Sciences
1993 B.A., Geology, Albion College, Geological Science

Professional Experience

2017 – current Research Associate, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin.

2017-current Director of Analytical Chemistry, Aloviam, Austin, Texas.

2012-2017 Research Science Associate, Dept. of Geological Sciences, Jackson School of Geosciences, The University of Texas at Austin.

2008-2012 Team Leader Geochemistry Research Laboratory, Los Alamos, New Mexico.

2005-2008 Technical Staff Member, Earth and Environmental Sciences, Los Alamos National Laboratory, Los Alamos, New Mexico.

2003-2005 Postdoctoral Research Fellow, Department of Earth Sciences, The University of Western Ontario, London, Ontario, Canada.

1999-2003 Graduate Research Assistant, Earth and Planetary Sciences, University of New Mexico.

1996-1999 Graduate Research Assistant, Department of Earth Sciences, University of New Hampshire.

1995-1996 Geologist, Kennecott Mining Company, Salt Lake City, Utah.

1994 Geologist, Bureau of Land Management, Salt lake City, Utah.

Research Interests

Using chemical stratigraphy to interpret mud rock depositional systems and evaluate resource potential in unconventional rock units. Research includes measurement of stable isotopes of organics and carbonates from mudrock and carbonate systems, carbon dioxide and fluids from carbon capture projects, natural gas from unconventional shale systems, and dissolved gases from a wide range of subsurface settings. Evaluating subsurface gas transport processes using stable isotope and geochemistry techniques. Applications include CO₂ sequestration, tracing of natural gas within petroleum reservoirs and into shallow groundwater systems, and CO₂ and CH₄

flux in Arctic permafrost. Developing novel analytical methods and experimental designs to characterize subsurface processes.

Graduate Research mentorship

Preston Durham (2016-Present)¹, Esben Pedersen (2015-Present)¹, Nicholas Ettinger (2016-2017)¹, Kiran Sathaye (2013-2016)¹, Colin McNeese (2013-Present)¹, Daria Akhbari¹ (2013-Present). Michael Patson (2013-2015)², Marlo Gawey (2012-2013)², April Gillens (2010-2011)³

¹Department of Geological Sciences, The University of Texas at Austin., ²Bureau of Economic Geology, The University of Texas at Austin. ³Los Alamos National Laboratory, Los Alamos, New Mexico

Professional Associations

American Association of Petroleum Geologists, American Geophysical Union