

INSTAAR short curriculum vita for Wesley E. LeMasurier (updated January, 2018).

INSTAAR Title: Fellow and Senior Research Scientist

Other CU Titles: Professor of Geology Emeritus, University of Colorado at Denver

Professional Preparation

B.S. Union College, Schenectady, NY, 1956

Exchange Scholar, St. Andrews University, Fifeshire, Scotland, 1954-55

M.S. University of Colorado, 1962

Ph.D. Stanford University, Palo Alto, California, 1965

Career

2003-Present Fellow and Senior Research Scientist, INSTAAR, University of Colorado at Boulder

2003-Present Professor of Geology Emeritus, University of Colorado at Denver

2000-03 Affiliate, INSTAAR, University of Colorado at Boulder

1973-2003 Professor of Geology, University of Colorado at Denver

1998 Visiting Professor, University of Siena (Italy), 1 Jan – 31 March

1998 Honorary Research Fellow, University of Aberdeen (Scotland), 1 April-1 August

1990 Bye Fellow, Robinson College, Cambridge University (UK)

1990 Visiting Scientist, British Antarctic Survey

1982-83 Visiting Professor, University of Otago (New Zealand).

1975-76 Visiting Professor, Victoria University of Wellington (New Zealand).

1968-73 Associate Professor of Geology, University of Colorado, Denver & Boulder

1964-68 Assistant Professor of Geology, Cornell University.

1961-63 Geologist (GS-7), U.S. Geological Survey, Theoretical Geophysics Branch.

1956-57 Geologist (GS-5), U.S. Geological Survey, General Geology Branch (summers).

Honors and Awards

Award for outstanding editorial work as co-editor of Proceedings of the 10th International Symposium on Antarctic Earth Sciences, August 26-September 1, 2007.

Who's Who in America, 2007 Edition

Career Teaching Award, College of Liberal Arts & Sciences, University of Colorado at Denver, 2003

Who's Who Among America's Teachers, 1996 and 1998

Chancellor's Lectureship, University of Colorado at Denver, 1995

Invited lecture tour, People's Republic of China, sponsored by China Non-ferrous Metals National Corporation and Guilin Institute of Technology, 1994

Award for "Excellence in Scholarly Publishing," PSP Division of the Association of American Publishers, for "Volcanoes of the Antarctic Plate and Southern Oceans," Antarctic Research Series, American Geophysical Union, v. 48. 1991

Invited lecture tour, People's Republic of China, sponsored by Changsha Institute of Geotectonics, and Academia Sinica. 1985

"Mount LeMasurier" (75deg 27min S, 139deg 40min W) named in recognition of contributions to exploration and scientific research in Antarctica. 1971

Antarctic Service Medal. 1971

Meritorious Service Award, U.S. Geological Survey, 1957

Union College Exchange Scholar to St. Andrews University, Scotland, 1954-55

Service to the Profession (1997-2008)

Book Review Editor, "Arctic, Antarctic and Alpine Research," April 2008 -

Associate Editor, Proceedings of the 10th International Symposium on Antarctic Earth Sciences, Santa Barbara, CA, 26Aug-1Sept, 2007

Glossary of Geology (Am. Geol. Inst) reviewer for 5th edition, volcanology terms.

Proposal reviewer: NSF (Div. Polar Programs, Div. Petrology & Geochem, Div. International Progr);

Italian National Antarctic Research Program, National Energy Research Council (UK).. New Zealand Antarctic Research Institute (2015)

Manuscript reviewer: GSA (Bulletin, Geology), Bull. Volcanol., Tectonics, Geophysical Research Letters, Polar Record, Antarctic Science, Global & Planetary Change, 9th International Symposium on Antarctic Earth Science, Quaternary Science Reviews, Paleogeography Paleoclimatology Paleocology, Geosphere, Contributions to Mineralogy and Petrology .

External Reviewer, South African National Research Foundation; Lamont-Doherty Geological Observatory; Dickinson College (tenure review).

Member, Education & Outreach Committee. Volcanology, Geochemistry and Petrology Section, AGU (1996-98). Providing documented rock samples from Antarctic localities to the Polar Rock Repository, Byrd Polar Research Institute, Ohio State University, Columbus, OH

Selected Publications (1996-2013)

LeMasurier, W.E.; Choi, Sung Hi; Kawachi, Y.; Mukasa, Sam; Rogers, Nick, 2018. Dual origins for pantellerites, and other puzzles, at Mount Takahe volcano, Marie Byrd Land, West Antarctica. *Lithos* 269-299 (2018) 142-162. Doi: 10.1016/j.lithos.2017.10.014.

LeMasurier, Wesley E.; Choi, Sung Hi.; Hart, Stanley R.; Mukasa, Sam; Rogers, N.W., 2016, Reconciling the shadow of a subduction history with rift geochemistry and tectonic environment in Eastern Marie Byrd Land, Antarctica. *Lithos*, v. 260, p. 134-153. DOI: 10.1016/Lithos.2016.05.018.

LeMasurier, W.E., 2013, Shield volcanoes of Marie Byrd Land, West Antarctic rift: oceanic island similarities, continental signature, and tectonic controls. *Bulletin of Volcanology*, v.75:726 (18p). DOI: 10.1007/s00445-013-0726-1.

LeMasurier, W.E., Choi, SH, Kawachi, Y, Mukasa, SB, and Rogers, NW, 2011, Evolution of pantellerite-trachyte-phonolite volcanoes by fractional crystallization of basanite magma in a continental rift setting, Marie Byrd Land, Antarctica: *Contributions to Mineralogy and Petrology*, v. 162, p. 1175-1199. DOI: 10.1007/s00410-011-0646-z

LeMasurier, W.E., 2008, Neogene extension and basin deepening in the West Antarctic rift inferred from comparisons with the East African rift and other analogs: *Geology*, v. 36, p. 247-250, doi: 10.1130/G24363A.1.

1. LeMasurier, W.E., 2007, West Antarctic rift system, *in* Riffenburgh, B., ed., *Encyclopedia of the Antarctic*, 2 vols., Routledge, New York, p. 1060-1066. (invited).

2. Rocchi, S., LeMasurier, W.E., and DiVincenzo, G., 2006, Oligocene to Holocene erosion and glacial history in Marie Byrd Land, West Antarctica, inferred from exhumation of the Dorrel Rock intrusive complex and from volcano morphologies: *Geological Society of America Bulletin*, 118: 991-1005.

3. LeMasurier, W.E., and Rocchi, S., 2005, Terrestrial record of post-Eocene climate history in Marie Byrd Land, West Antarctica: *Geografiska Annaler*, 87A: 51-66. (invited)

4. LeMasurier, W.E., Futa, K., Hole, M.J., and Kawachi, Y., 2003, Polybaric evolution of phonolite, trachyte, and rhyolite volcanoes in eastern Marie Byrd Land, Antarctica: Controls on peralkalinity and silica saturation. *International Geology Review*, 45: 1055-1099.

5. LeMasurier, W.E., 2002, Architecture and evolution of hydrovolcanic deltas in Marie Byrd Land, Antarctica, *in* Smellie, J.L., and Chapman, M.G., eds., *Volcano-Ice Interactions on Earth and Mars*. Geological Society of London Special Publications, 202: 115-148.

6. LeMasurier, W.E. and Landis, C.A., 1996, Mantle plume activity recorded by low-relief erosion surfaces in West Antarctica and New Zealand: *Geological Society of America Bulletin* 108: 1450-1466.

7. LeMasurier, W. E. & Thomson J.W. (eds.), 1990. Volcanoes of the Antarctic Plate and Southern Oceans. Antarctic Research Series, v. 48, American Geophysical Union (487 pp).

Research Support 1997-2008

1. Principal Investigator, Geochemistry and Petrologic Evolution of Felsic Volcanoes in Western Marie Byrd Land, Antarctica. NSF Research Grant ANT 0536526, \$35,295. Effective August 1, 2006 for two years.
2. Principal Investigator, Late Cenozoic Volcanism in Marie Byrd Land: Assessing Petrogenetic and Eruptive Mechanisms by Comparative Studies of Analogs. NSF Research Grant OPP-9720411, \$45,745. Effective December 15, 1997 - November 30, 1998.