

Robert S. Darling

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Curriculum Vitae (January, 2020)

Administrative Experience:

Aug. 2016 – Jul. 2019	Director, Faculty Development Center, SUNY Cortland.
Jan. 2010 – Jul. 2012	Chair, Department of Geology, SUNY Cortland.
Aug. 2007 – Jul. 2008	Acting Chair, Department of Chemistry, SUNY Cortland.
Jan. 2000 – Jul. 2002	Chair, Department of Geology, SUNY Cortland.
May 1999 – Dec. 1999	Acting Chair, Department of Geology, SUNY Cortland.

Academic Ranks:

May 2013 – present	Distinguished Teaching Professor, Dept. of Geology, SUNY Cortland.
Sep. 2001 – May 2013	Professor, Dept. of Geology, SUNY Cortland.
Sep. 1996 – Aug. 2001	Associate Professor, Dept. of Geology, SUNY Cortland.
Sep. 1992 – Aug. 1996	Assistant Professor, Dept. of Geology, SUNY Cortland.
Jan. 1992 – Jun. 1992	Adjunct Instructor, Dept. of Geology, SUNY Cortland.
Sum. 1990, Sum. 1991	Instructor, University College of Syracuse University.

Education:

1984

1992	Ph.D., Geology, Syracuse University, Syracuse NY, <i>Dissertation title:</i> Petrogenesis of the Cannivan Gulch stockwork and skarn molybdenum deposit, southwest Montana.
1987	M.S., Geology, Idaho State University, Pocatello ID, <i>Thesis title:</i> The geology and ore deposits of the Carrietown silver-lead-zinc district, Blaine and Camas Counties, Idaho.

B.S., Geology, SUNY, College at Oneonta, Oneonta NY.

Professional Activities and Appointments:

2002 to pres.	Appointed Research Associate (Mineralogy), New York State Museum.
2010 to 2012	Board of Directors, New York State Geological Association.
Fall. 2013	External Reviewer, promotion of faculty member from Colgate University.
Fall. 2013	External Reviewer, promotion of faculty member from Bowling Green State U.
Spr. 2013	External Reviewer, promotion of faculty member from Hamilton College.

Spr. 2011	External Reviewer, Center for Earth & Environmental Science, SUNY Plattsburgh, Plattsburgh, NY.
Spr. 2010	External Reviewer, promotion of faculty member from St. Lawrence University.
2007-2008	President, New York State Geological Association.
Spr. 2006	External Reviewer, Department of Geology & Environmental Geosciences, Lafayette College, Easton PA.
2001-2002	External M.S. Thesis Advisor, for Mr. Greg Lester, Geological Sciences Department, SUNY Binghamton, <i>Liquid Immiscibility in the FeO_x-K₂O-SiO₂-Al₂O₃-H₂O±SO₄±F±Cl system at 2 Kbar Pressure.</i>
2000	Co-Chaired Geological Society of America session titled: "Igneous and Metamorphic Petrology." Northeast Regional Meeting, New Brunswick, NJ.
1994-1998	Regional Editor of <i>New York Earth Science and the Environment</i> , a journal dedicated to Earth Science research, environmental issues and education strategies pertaining to the State of New York.
1994	Co-Convened and Chaired Geological Society of America Symposium titled: "Geochemistry and Movement of Modern and Ancient Crustal Brines." Northeast Regional Meeting, Binghamton, NY.
1990	Northeast Regional Meeting, Geological Society of America (GSA), Organization Committee (Syracuse University).
ards:	
 State University of New York, Chancellor's Award for Excellence in Teaching Syracuse University Doctoral Prize. Syracuse University Geology Department's Newton E. Chute Award. Syracuse University Geology Department's Marjorie Hooker Award. 	

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1999	State University of New York, Chancellor's Award for Excellence in Teaching
1993	Syracuse University Doctoral Prize.
1991	Syracuse University Geology Department's Newton E. Chute Award.
1990	Syracuse University Geology Department's Marjorie Hooker Award.
1989	Syracuse University Geology Department's Newton E. Chute Award.

Grants Funded:

2016	\$6,969	SUNY Cortland Academic Program Innovation Grant, Major Upgrade to the Geology Department's X-ray Diffractometer for Hands-On Learning and Student and Faculty Research. With Dr. Christopher McRoberts, Funded
2011	\$988	Cortland College Faculty Research Grant: Mineralogy and texture of multiple-solid inclusions in western Adirondack garnet as determined by Field Emission Scanning Electron Microscopy (FESEM).
2009	\$100,097	NSF-EAR-MRI-0922814. Acquisition of a Powder X-Ray Diffractometer to Enhance Faculty and Undergraduate Research and Education in Geology and Chemistry at SUNY Cortland. Co-Pi with Drs. Christopher McRoberts (Geology); Karen Downey (Chemistry); David Collins (Chemistry).

2001	\$12,040	NSF-EAR Geothermal fluxes of solutes, heat, and carbon to the Narayani river system, central Nepal. Collaborative project with Dr. Louis Derry (Cornell Univ.)
1999	\$1,256	Cortland College Faculty Research Grant: <i>Analysis of Fluid inclusions in the Diamond Anvil Cell.</i>
1996	\$3,500	Cortland College Faculty Research Grant: <i>Mineral-Melt Phase Relations in the system fluorapatite-magnetite-ilmenite: A test of the nelsonite eutectic melt hypothesis.</i>
1995	\$19,150	NSF-DUE Instrumentation and Laboratory Improvement Program: <i>Modeling Magmatic Crystallization and Melting Behavior with Synthetic Water-Salt Fluid Inclusions</i> .
1995	\$500	Cortland College Grant Incentive Program: <i>Molybdenite Solubility at Elevated Temperature and Pressure</i> .
1993	\$2,579	Cortland College Faculty Research Grant: <i>Thermobarometry of Metapelites in the Western Adirondacks</i> .

Invited Lectures

Honors Events

10/7/16	Success Now and in your Future. Keynote Address, SUNY Cortland, Fall 2016 President's List Award Ceremony.
4/15/00	The Unlikely Path to Discovery. Keynote Address, SUNY Cortland 2000 Honors Convocation.
	Colleges and Universities
4/5/18	Cristobalite, stretched quartz and melt inclusions in Adirondack Garnet Earth Sciences Department, Syracuse University, Syracuse NY
2/24/06	A Geochemical Conundrum: Superheated Ice in Pure Water Fluid Inclusions. Department of Geological Sciences, Binghamton University, Binghamton, NY.
2/25/05	Cristobalite in Adirondack Garnet: A Remarkable Case of Mineral Preservation. Geology Department, Lafayette College, Easton, PA.
4/1/03	Post-Orogenic Uplift as Determined by Fluid Inclusion studies: The Grenville and Himalayan Orogenies. Geology Department, Colgate University, Hamilton, NY.
9/15/00	Analysis H_2O+CO_2+NaCl fluid inclusions in the hydrothermal diamond anvil cell. Chemistry Department, Alfred University, Alfred, NY.
6/1/00	Analysis of Adirondack H_2O+CO_2+NaCl fluid inclusions in the hydrothermal diamond anvil cell. Geology Department, Colgate University, Hamilton, NY.

2/16/99 Fluid Inclusions: Occurrence, Analysis, and Applications to Geologic Problems. Department of Geological Sciences, Cornell University, Ithaca, NY. 3/5/98 Cristobalite in Adirondack Garnet: A Remarkable Case of Mineral Preservation. Geology Department, Colgate University, Hamilton, NY. Cristobalite in Adirondack Garnet: A Remarkable Case of Mineral Preservation. 2/27/98 Department of Geological Sciences and Environmental Studies, Binghamton University, Binghamton, NY. 11/5/97 A Low Pressure Mineral in High Pressure Rocks: Cristobalite in the Adirondacks. Geology Department, Hobart and Wm. Smith Colleges, Geneva, NY. 9/2/97 Cristobalite in Adirondack Garnet: A Remarkable Case of Mineral Formation and Preservation. Geology Department, Cornell University, Ithaca, NY. 5/7/97 A Low Pressure Mineral in High Pressure Rocks: Cristobalite in the Adirondacks. Geology Department, Hamilton College, Clinton, NY. 12/5/96 Polymetamorphism in the Western Adirondacks. Geology Department, University of Tennessee, Knoxville, TN. Professional / Community Organizations The Microscopic World of Adirondack Garnet 11/27/18: Science & Suds lecture, Cortland Brewery Club, Cortland, NY 5/21/18 The Microscopic World of Adirondack Garnet Gem & Mineral Society of Syracuse, 207 Old Liverpool Rd, Liverpool NY 4/21/10 Post-orogenic uplift of the Grenville and Himalaya Mountains: Evidence from H_2O+CO_2 fluid inclusions in quartz: Hudson-Mohawk Professional Geologists Association (HMPGA), Albany, NY. 9/16/00 Geology of the Barton Garnet mine. Central New York Association of Professional Geologists (CNYAPG), Syracuse, NY. 1/13/00 Discovery of cristobalite (SiO₂) in Adirondack Garnet: What is it doing there? Why is it important? Central New York Association of Professional Geologists (CNYAPG), Syracuse, NY. 5/09/96 Ancient Brines in the Adirondacks: Evidence from Fluid Inclusions. Central New York Association of Professional Geologists (CNYAPG), Syracuse, NY.

Memberships in Professional Organizations

1990 to present	Member, Geological Society of America.
1992 to 2006	Member, Mineralogical Society of America.
2014 to present	Member, Geochemical Society.

Publications

Journal Articles:

- Darling, R.S., Gordon, J.L., & Loew, E.R., Microscopic blue sapphire in nelsonite from the western Adirondack Mountains of New York State, USA, *MINERALS*, v. 9, p. 633. DOI:10.3390/min9100633
- 2019 Bailey, D.G., Lupulescu, M.V., **Darling, R.S.**, and Chamberlain, S.C., A review of boron-bearing minerals (excluding tourmaline) in the Adirondack region of New York State: *MINERALS*, v. 9, p. 644. DOI: 10.3390/min9100644
- 2019 Siron, C.R., Thompson, J.F.H., Baker, T., **Darling, R.S.**, and Dipple, G., Origin of Au-rich carbonate-hosted replacement deposits of the Kassandra Mining District, northern Greece: Evidence for late Oligocene, structurally-controlled, and zoned hydrothermal systems, *Economic Geology*, v. 114, no. 7, p. 1389-1414. DOI: 10.5382/econgeo.4664
- 2018 Rddad, L., Mouguina, E.M., Muchez P., **Darling, R.S.**, The genesis of the Ali Ou Daoud Jurassic carbonate Zn-Pb Mississippi Valley-type deposit, Moroccan central High Atlas: Constraints from bulk stable C-O-S, in situ radiogenic Pb isotopes, and fluid inclusion studies: *Ore Geology Reviews*, v. 99, p. 365–379
- Ashley, K.T., Steele-MacInnis, M., Bodnar, R.J., and **Darling, R.S.**, Quartz-in-garnet inclusion barometry under fire: Reducing uncertainty from model estimates, *Geology*, v. 44, p. 699-702.
- **Darling, R.S.**, and Peck, W.H., Metamorphic conditions of Adirondack rocks; *Adirondack Journal of Environmental Studies*, Volume 21, p. 61-79.
- 2015 Ashley, K.T., **Darling, R.S.**, Bodnar, R.J., and Law, R.D., 2015, Significance of "stretched" mineral inclusions for reconstructing *P-T* exhumation history, *Contributions to Mineralogy and Petrology*, 169:55, DOI: 10.1007/s00410-015-1149-0
- **Darling, R.S.**, Zircon-bearing, crystallized melt inclusions in peritectic garnet from the western Adirondack Mountains, New York State, USA, *Geofluids*, v. 13, p. 453-459. DOI: 10.1111/gfl.12047
- Derry, L.A., Evans, M.J., **Darling, R.S.**, and France-Lanord, C., Hydrothermal heat flow near the Main Central Thrust, central Nepal Himalaya: *Earth and Planetary Science Letters*, v. 286, p. 101-109.
- **Darling, R.S.**, Florence, F.P., *Lester, G.W.*, and Whitney, P.R., Petrogenesis of prismatine-bearing, metapelitic gneisses along the Moose River, west-central Adirondacks, New York: in Tollo, R.P., Corriveau, L. McLelland, J., and Bartholomew, M.J., eds., Proterozoic tectonic evolution of the Grenville orogen in North America: Boulder Colorado, *Geological Society of America Memoir 197*, p. 325-336.
- **Darling, R.S.**, and Bassett, W.A., Analysis of natural H₂O+CO₂+NaCl fluid inclusions in the hydrothermal diamond anvil cell: *American Mineralogist*, v. 87, p. 69-78.
- **Darling, R.S.**, Modeling magmatic phase equilibria with synthetic H₂O-KCl fluid inclusions: *Journal of Geoscience Education*, v. 48, p. 198-202.

- **Darling, R.S.**, Chou, I-M., and Bodnar, R.J., An occurrence of metastable cristobalite in high pressure garnet granulite: *Science*, v. 276, p. 91-93.
- 1995 Florence, F.P., **Darling, R.S.**, and Orrell, S.E., Moderate pressure metamorphism and anatexis due to anorthosite intrusion, western Adirondack highlands, New York: *Contributions to Mineralogy and Petrology*, v. 121, p. 424-436.
- 1995 **Darling, R.S.**, and Florence, F.P., Apatite light rare-earth element chemistry of the Port Leyden nelsonite, Adirondack Highlands, New York: Implications for the origin of nelsonite in anorthosite-suite rocks: *Economic Geology*, v. 90, p. 964-968.
- 1995 **Darling, R.S.**, Campbell, H.W., and Link, P.K., Petrogenesis of silver-lead-zinc veins on the eastern margin of the Idaho batholith in the Carrietown mineralized area, Blaine and Camas Counties, south-central Idaho: *U.S. Geological Survey Bulletin*, 2064-P, p. P1-P17.
- **Darling, R.S.**, Fluid inclusion and phase equilibrium studies at the Cannivan Gulch molybdenum deposit, Montana, USA: Effect of CO₂ on molybdenite-powellite stability: *Geochimica et Cosmochimica Acta*, v. 58, p. 749-760.
- 1991 **Darling, R.S.**, An extended equation to calculate NaCl contents from final clathrate melting temperatures in H₂O-CO₂-NaCl fluid inclusions: Implications for P-T isochore location: *Geochimica et Cosmochimica Acta*, v. 55, p. 3869-3871.

Guidebook articles:

- **Darling, R.S.**, Geology of the Black River Valley and the Western Adirondacks: in Rayne, T., ed., Field Trip Guidebook for the 84th Annual Meeting of the New York State Geological Association, p. A1-A22.
- McLelland, J., and **Darling, R.S.**, Quartz-sillimanite veins and nodules in Lyon Mountain Granite, and the Occurrence of prismatine in metapelitic gneiss and quartzite, Moose River, Western Adirondacks: in Nelson, N.R.., ed., Field Trip Guidebook for the 83th Annual Meeting of the New York State Geological Association, p. 107-122.
- 2008 Kelly, W.M., and Darling, R.S., Geology and mining history of the Barton Garnet Mine, Gore Mt. and the NL Ilmenite Mine, Tahawus, NY and a review of the MacIntyre Iron Plantation of 1857: in Selleck, B., ed., Field Trip Guidebook for the 80th Annual Meeting of the New York State Geological Association, p. 101-116
- **Darling, R.S.**, Mineralization at the Knox unconformity and the western Adirondack paleosurface: in McRoberts, C., (ed.) Field Trip Guide, 79th Annual Meeting of the New York State Geological Association, p. 129-138.
- Florence, F.P., **Darling, R.S.**, Whitney, P.R., and Lester, G.W., Cordierite-bearing gneisses in the west-central Adirondack Highlands: in Badger, R., ed., New York State Geological Association, 76th Annual Meeting Field Trip Guidebook, Trip A-6, p. 143-152.
- 2002 Kelly, W.M., and **Darling, R.S.**, Geology and mining history of the Barton Garnet Mine, Gore Mt. and the NL Ilmenite Mine, Tahawus, NY with a temporal excursion to the MacIntyre Iron Plantation of 1857: in McLelland, J., and Karabinos, P., eds., New England Intercollegiate

- Geological Conference and New York State Geological Association, Guidebook for Field Trips in New York and Vermont, p. B3-1-B3-14
- 2000 Orrell, S.E. and **Darling, R.S.**, Survey of the Geology of the Northwestern Adirondack Mountains and Black River Valley: in Woodrow, D.L., and McKinney, D. B (eds), Field Trip Guide, 72nd Annual Meeting of the New York State Geological Association, Trip A1, p. 3-12.
- Florence, F.P. and **Darling, R.S.**, Timing of intrusion, anatexis, and metamorphism in the Port Leyden area of the western Adirondacks: in Rayne, T.W., Bailey, D.G., and Tewksbury, B. J., (eds), Field Trip Guide for the 69th Annual Meeting of the New York State Geological Association, Trip A3, p. 37-50.
- 1988 **Darling, R.S.**, Ore deposits of the Carrietown silver-lead-zinc district, Blaine and Camas Counties, Idaho: <u>in</u>: Link, P.K., and Hackett, W.R., (eds.), Guidebook to the Geology of Central and Southern Idaho: Idaho Geological Survey Bulletin 27, p. 193-198.
- 1985 **Darling, R.S.**, Mineralization in the Fort Hall mining district, Bannock County, Idaho: <u>in</u>: Kerns, G.J., and Kerns, R.L., Jr., (eds.), Orogenic Patterns and Stratigraphy of North-Central Utah and Southeastern Idaho, Utah Geological Association Publication 14, p. 167-173.

Abstracts:

Italicized name indicates student co-author.

- **Darling, R.S.**, Ferrero, S., *Wannhoff, I.*, Primary CO₂ fluid inclusions in transition zone garnet from Gore Mountain, Central Adirondacks, New York, USA: Geological Society of America, Abstracts with Programs, (accepted for presentation). DOI: 10.1130/abs/2020SE-344592
- 2019 *Wannhoff I.*, Ferrero S., **Darling R.**, Wunder B., Laurent O., Reddy, S., Günther, C., Ziemann M.A., & O'Brien P., Partial melting in giant garnets from the Gore Mountains revealing great secrets using tiny inclusions: Workshop PetroChro2019: Melting, Modelling, Dating the crust, Potsdam, Germany.
- 2019 Ferrero S., *Wannhoff I.*, **Darling R.**, Wunder B., Laurent O., Ziemann M.A., Günter C. & O'Brien P., Micropetrology of megagarnets: Nanogranitoids reveal presence of melt during formation of the giant garnets of Barton Mine (Adirondacks, US), SIMP, Parma Italy.
- 2019 Ferrero S., *Wannhoff I.*, **Darling R.**, Wunder B., Laurent O., Ziemann M.A., Günter C. & O'Brien P., Why are they so darn big? The role of crustal melting in the formation of the Gore Mountains mega garnets (Adirondacks, US) AGU, San Francisco.
- 2019 *Malanoski C.*, and **Darling, R.S.**, Corundum exsolution lamellae in ilmenite from a western Adirondack iron and emery prospect: *Geological Society of America, Abstracts with Programs*, v. 51, DOI: 10.1130/abs/2019NE-328337
- 2017 Siron, Chris R., Thompson, John, F.H., Baker, Tim, **Darling, R.S.**, and Dipple, Gregory, Evidence for a complex, multi-phase and zoned Oligo-Miocene magmatic-hydrothermal system within the Stratoni Fault Zone, Northern Greece: Geological Society of America, Paper No. 237-12

- **Darling, R.S.**, Lupulescu, M.V., and Chiarenzelli, J.R., Rare earth element composition of apatite, zircon, and monazite, and U-Pb zircon age of, the Port Leyden Nelsonite, Western Adirondack highlands, NY: Geological Society of America, paper No. 40-3.
- 2016 **Darling, R.S.**, Felsic mineral inclusions in zircon from the Port Leyden nelsonite, Western Adirondacks: A product of magma mixing?: Geological Society of America, *Abstracts with Programs*. v. 48, n. 2. doi: 10.1130/abs/2016NE-272695
- 2016 Avgerinos, N., Jeroulis, S., Kelson, C.R., and **Darling, R.S.**, Mineralogical and isotopic study of a calcite vein near Edwards, New York: Geological Society of America, Abstracts with Programs. v. 48, n. 2. doi: 10.1130/abs/2016NE-272347
- 2016 Rddad, L., *Louissant, J.*, and **Darling, R.S.**, Constraining the origin of calcite in the veins hosted in lockatong abd Passaic Formations using C-O stable isotope and fluid inclusions: Implications to fluid migration in the Newark Basin: Geological Society of America, *Abstracts with Programs*. v. 48, n. 2. doi: 10.1130/abs/2016NE-272425
- Ashley, K.T., Steele-MacInnis, M., Bodnar, R.J., and **Darling, R.S.**, Solid inclusion thermobarometry under fire: Heating experiments on encapsulated quartz inclusions in garnet: European Geosciences Union, Vienna, Austria, http://meetingorganizer.copernicus.org/EGU2016/EGU2016-1725-1.pdf
- 2015 **Darling, R.S.**, Preliminary bedrock map of the Moose River from McKeever to Lyons Falls, Western Adirondacks, New York: Geological Society of America, *Abstracts with Programs*. v. 47, n. 3, p. 131
- Wiant, John C., Kozlowski, A.L., **Darling, R.S.,** Bird, B., and Graham, B.L., Clay mineral investigation of glacial till in Great Gully, Cayuga County, NY: Geological Society of America, Abstracts with Programs, v. 46, p. 52.
- 2014 *Haller, Mitchell B.*, Kelson, C.R., and **Darling, R.S.**, Age and origin of a gold-bearing breccia from the Hilltop Gold Deposit, Lander County, Nevada: Geological Society of America, Abstracts with Programs, v. 46, p. 62.
- 2014 LaLonde, David A.T., Aiken, Cheyne L., Kelson, C.R., **Darling, R.S.**, and Blamey, N.J.F., A geochemical investigation of lead-bearing calcite vein from Macomb, St. Lawrence County, NY: Geological Society of America, Abstracts with Programs, v. 46, p. 62.
- Darling, R.S., Origin of sand color at Golden and Silver Beaches, Raquette Lake, NY: Geological Society of America, Abstracts with Programs, v. 45, p. 137.
- 2013 **Darling, R.S.**, and Mamedov, S., Methane inclusions in hydrothermal quartz from the PreCambrian-hosted, Box-Vein of Lyonsdale, NY: Geological Society of America, Abstracts with Programs, v. 45, p. 58.
- 2013 Ferguson, M.M., and **Darling, R.S.**, Secondary CO₂ inclusions in Gore Mountain garnet, North Creek, NY: Geological Society of America, Abstracts with Programs, v. 45, p. 72-73.

- 2012 Mamedov, S., and **Darling, R.S.**, Applications of Raman microspectroscopy to fluid inclusions phase identification: Geological Society of America, Abstracts with Programs, v. 44, no. 7, p. 191.
- 2012 **Darling, R.S.**, Zircon-adhering, crystalized melt inclusions in peritectic garnet from the western Adirondack Mountains, New York State, USA: 22nd V.M. Goldschmidt Conference, Montreal, Quebec, Canada, Session 23a, poster 205.
- **Darling, R.S.**, and *Crysler, J.L.*, An occurrence of microscopic sapphire (blue corundum) in the western Adirondacks: Geological Society of America, Abstracts with Programs, v. 44, no. 1, p. 81.
- **Darling, R.S.**, Breccia-filled fractures on western Adirondack summits: Relicts of an Ordovician paleosurface?: Geological Society of America, Abstracts with Programs, v. 43, no. 1, p. 130.
- 2011 *Morris, E.*, Kelson, C.R., and **Darling, R.S.**, Mineralogical and geochemical study of a sulfiderich breccia from the Hilltop gold deposit, Lander County, Nevada: Geological Society of America, Abstracts with Programs, v. 43, no. 1, p. 59.
- 2010 *Henriquez, J.L.*, and **Darling, R.S.**, Zircon clinging inferred anatectic melt inclusions from Adirondack garnet: Geological Society of America, Abstracts with Programs, v. 42, no. 1, p. 161.
- **Darling, R.S.**, Density of liquid H₂O in metastable equilibrium with superheated ice: Data from pure water fluid inclusions: Ninth Pan-American Conference on Research on Fluid Inclusions, In memory of Edwin Roedder, ed. H.E. Belkin. p.18.
- **Darling, R.S.**, and Gleason, G.C., A Possible "Negative Flower Structure" on the Tug Hill Escarpment, Northern NY, Geological Society of America, Abstracts with Programs, v. 39, no. 1, p. 59.
- **Darling, R.S.**, Superheated ice in pure water fluid inclusions from Moose River, NY, Geological Society of America, Abstracts with Programs, v. 38, no. 2, p. 5.
- Florence, F.P., and **Darling, R.S.**, Evidence for a lower pressure trajectory in the post-Ottwan cooling path in western Adirondack gneisses, Geological Society of America, Abstracts with Programs, v. 37, no. 1, p. 8.
- **Darling, R.S.**, Derry, L.A., and *Evans, M.J.*, Refining the Himalayan retrograde metamorphic path: Evidence from fluid inclusions in undeformed quartz veins, central Nepal: Geological Society of America, Abstracts with Programs, v. 35, no. 6, paper 133-4.
- Darling, R.S., and Bassett, W.A., 2002, Heating Adirondack fluid inclusions in the diamond anvil cell: Implications for the retrograde path: Geological Society of America, Abstracts with Programs, v. 34, p. A-6.
- 2000 **Darling, R.S.**, and Bassett, W.A., Analysis of H₂O+CO₂+NaCl fluid inclusions in the hydrothermal diamond anvil cell: EOS, Transactions, American Geophysical Union, v. 81, n.19, p. 539.

- **Darling, R.S.**, Florence, F.P., *Lester, G.W.*, and Whitney, P.R., Petrogenesis of prismatine-bearing cordierite + garnet metapelites in the western Adirondack Highlands: Geological Society of America, Abstracts with Programs, v. 32, p. A-13.
- *Walter, P.J., Charles, M.A., Gordon, J.H., Jr.*, and **Darling, R.S.**, An occurrence of cristobalite in Adirondack garnet: Rocks and Minerals, v. 74, p. 191.
- 1998 Charles, M.A., Gordon, J.H., Jr., Walter, P.J., and **Darling, R.S.**, More cristobalite in Adirondack garnet: Geological Society of America, Abstracts with Programs, v. 30, p. 10.
- **Darling, R.S.**, Modeling magmatic phase equilibria with synthetic H₂O-KCl fluid inclusions: An interactive laboratory exercise for undergraduate petrology students: Geological Society of America, Abstracts with Programs, v. 30, p. 132.
- **Darling, R.S.**, Chou, I-M., and Bodnar, R.J., Cristobalite in Adirondack garnet: A remarkable example of mineral preservation: Geological Society of America, Abstracts with Programs, v. 29, p. 337.
- **Darling, R.S.**, Chou, I-M., and Bodnar, R.J., Cristobalite in granulite facies garnet from Gore Mtn., NY: Geological Society of America, Abstracts with Programs, v. 29, p. 39.
- *Hill, B.M.*, and **Darling, R.S.**, Fluid inclusion evidence for "Shield-Type" brine mineralization in post-metamorphic, hydrothermal sphalerite, Balmat-Edwards District, northwest Adirondacks, NY: Geological Society of America, Abstracts with Programs, v. 29, p. 52.
- *Bird, B.C.*, and **Darling, R.S.**, Fluid inclusion study of the Long Lake calcite-fluorite vein, central Adirondacks: Geological Society of America, Abstracts with Programs, v. 28, p. 39.
- *Morgia*, *N.D.*, and **Darling, R.S.**, A quartz + corundum assemblage from the western Adirondacks: Geological Society of America, Abstracts with Programs, v. 28, p. 85.
- **Darling, R.S.**, and Ireland, J.S., Synthetic fluid inclusions in quartz: Rocks and Minerals, v. 71, p. 193.
- **Darling, R.S.**, and Florence, F.P., Apatite LREE chemistry of the Port Leyden nelsonite, western Adirondacks: Implications for the origin of nelsonite: Geological Society of America, Abstracts with Programs, v. 27, p. 38.
- **Darling, R.S.**, and Florence, F.P., An occurrence of nelsonite in the western Adirondack Highlands: Where is the parent magma?: Geological Society of America, Abstracts with Programs, v. 26, p. 13.
- **Darling, R.S.**, The Box-Vein of Lyonsdale, NY: Fluid inclusion evidence for a former basement rock-hosted Na-Ca brine: Geological Society of America, Abstracts with Programs, v. 26, p. 13.
- 1994 Florence, F.P., and **Darling, R.S.**, Moderate P-high T metamorphism and melting in the western Adirondack highlands: Wide of the bull's-eye but on the mark: Geological Society of America, Abstracts with Programs, v. 26, p. 17.
- *LaForce*, *M.J.*, **Darling**, **R.S.**, and Hay, R.E., Geophysical investigation of the Port Leyden nelsonite: Geological Society of America, Abstracts with Programs, v. 26, p. 30-31.

- 1993 *Dwyer, T.R.*, and **Darling, R.S.**, Deglacial lake level fluctuations at Canandaigua Lake, NY: Geological Society of America, Abstracts with Programs, v. 25, p. 13.
- 1993 *Garside, A.R.*, and **Darling, R.S.**, CaCl₂-NaCl-H₂O Fluid inclusions in the Box Vein of Lyonsdale, NY. A fossil shield brine in northern New York?: Geological Society of America, Abstracts with Programs, v. 25, p. 17.
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- Link, P.K., Stewart, D.E., Geslin, J.K., Mahoney, J.B., and **Darling, R.S.**, Paleozoic allochthons on the east edge of the Idaho Batholith, Smoky Mountains, Blaine and Camas Counties, Idaho: Geological Society of America, Abstracts with Programs, v. 18, p. 391.

Maps:

- 1992 Stewart, D.E., Geslin, J.K., Mahoney, J.B., **Darling, R.S.**, and Link, P.K., Geologic map of the Baker Peak quadrangle, Blaine and Camas Counties, Idaho: Idaho Geological Survey Technical Report 92-1.
- Darling, R.S., Geologic map and cross sections of the northern half of the Dollarhide Mtn. quadrangle, Blaine and Camas Counties, Idaho: Idaho Geological Survey Technical Report 89-1.

Book Reviews:

1995 **Darling, R.S.**, Review of *Petrogenesis of Metamorphic Rocks, 6th edition, Complete Revision of Winkler's Textbook* (authored by K. Bucher and M. Frey), Northeastern Geology and Environmental Sciences, v. 17, p. 213.

MANUSCRIPTS REVIEWED:

2019-2020	manuscript for: Minerals
2018-2019	manuscript for: Precambrian Research
2016-2017	manuscript for: Canadian Journal of Earth Sciences
2015-2016	manuscript for: Geosphere
2014-2015	two manuscripts for: Lithos
2013-2014	manuscript for: American Mineralogist
2012-2013	manuscript for: Geosphere
2011-2012	manuscript for: Geosphere

2010-2011	manuscript for: Geosphere
2009-2010	manuscript for: Geosphere
2008-2009	manuscript for: Geological Society of America, Special Volume.
2005	manuscript for: Geology
2001-2002	manuscript for: American Mineralogist
1999-2000	manuscript for: Economic Geology
1999-2000	manuscript for: Geological Materials Research
1998-1999	manuscript for: American Mineralogist
1998-1999	manuscript for: Chemical Geology
1995-1996	manuscript for: Computers and Geosciences
1995	manuscript for: Chemical Geology
1994-1995	manuscript for: New York State Environmental Science and Education
1994-1995	manuscript for: Geology
1992-1993	manuscript for: Geology
1992-1993	manuscript for: Geochimica et Cosmochimica Acta
1992-1993	manuscript for: Geology
1991-1992	manuscript for: Geochimica et Cosmochimica Acta
1991-1992	manuscript for: U.S. Geological Survey Bulletin

GRANT PROPOSALS REVIEWED:

2008-2009	proposal for: CUNY Research Foundation Grant Program.
2007-2008	proposal for: National Science Foundation.
2007-2008	proposal for: National Science Foundation.
2007-2008	proposal for: CUNY Research Foundation Grant Program.
2005	proposal for: NSF-EAR program
2003	proposal for: NSF-NATO program
2001-2002	proposal for: NSF-NATO program
1999-2000	proposal for: NERC

SUNY Cortland University SERVICE

Committees Served and Chaired:

Fall 2017 – Spr. 2019	Geology Department Curriculum Committee
Fall 2016 – Spr. 2017	Geology Department Personnel Committee
Fall 2012 – Fall 2016	Brauer Education Center, subcommittee of CEOE.
Fall 2013 – Spr. 2014	Math-Science SubSchool Personnel Comittee
Fall 2012 – Spr. 2015	Associate Chair, Center for Environmental & Outdoor Ed (CEOE).
Fall 2009 – Spr. 2010	Dean of Arts and Sciences, Search Committee.
Fall 2007 – Spr. 2008	Chemistry Department Chair, Search Committee.
Fall 2007 – Spr. 2008	Assistant Professor of Inorganic Chemistry, Search Committee.
Fall 2007 – Spr. 2008	Assistant Professor of Physical Chemistry, Search Committee.
Fall 2005 – Spr. 2008	School of Arts & Sciences Curriculum Committee.
Fall 2005 – Spr. 2007	Geology Department Personnel Committee.
Fall 2004 – Spr. 2005	Math-Science Subschool Personnel Committee.
Fall 2002 – Fall. 2004	Task Force on College Curriculum Review.
Fall 2001 – Spr. 2004	College Curriculum Review Committee.
Fall 1999 – Spr. 2000	Geology Department Personnel Committee.
Fall 1993 – Spr. 1996	Geology Department Newsletter Committee.
Fall 1996 – Spr. 1997	Geology Dept. Search Comm., 1-year position in Paleo./Stratigraphy.

Committees Served:

Teaching Awards Committee
Center for Environmental & Outdoor Ed. Committee
Math-Science Sub-school Pers. Committee
Stewardship subcommittee of CEOE.
Workplace Violence Advisory Board.
Geology Department Personnel Committee
Faculty Development Committee
University-wide Advisory Council on Distinguished Teaching Professors
College Registrar, Search Committee.
Educational Policy Committee.
Task Force on Outdoor Education Facilities.
Geology Dept. Search Comm., position in Hydrogeology.
Educational Policy Committee.
Math-Science Sub-school Pers. Committee, representing the Physics Dept.
School of Arts & Sciences Curriculum Committee.
Bowers Hall Renovation Advisory Committee.
Teaching Awards Committee.
Student Identification Number Task Force.
Faculty Development Committee.
Geology Department Search Comm., position in Structural Geology.
Geology Department Rep. to Math/Science Sub-School Pers. Committee.
College Curriculum Review Committee.
Geology Department Search Committee, position in Geomorphology.
Dean, School of Arts and Sciences Search Committee.
Geology Dept. Search Comm., position in Paleontology/Stratigraphy.
Geology Dept. Search Comm., position in Hydrogeology/Geochemistry.
Director of Libraries Search Committee.
Representative to Faculty Senate from Committee on Committees.
Chemistry Instructional Support Technician Search Committee.
Committee on Committees.

Advisement

Fall 2012 – present	Geology Club Faculty Advisor.
Fall 2002 – Spr. 1998	Geology Club Faculty Advisor.

REFERENCES

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