

SCOTT D. SAMSON
Department of Earth Sciences
Syracuse University
Syracuse, NY 13244-1070

Education: Ph.D. (Geochemistry) University of Arizona, May 1990, Advisor: P. Jonathan Patchett
M.S. (Geology) University of Minnesota, December 1986, Advisor: E.C. Alexander
B.S. (Geology) Oregon State University, March 1984

Experience: Professor of Earth Sciences, Syracuse University, 2004- present
Jessie Page Heroy Professor/Department Chairman, 2002 – 2007
Associate Professor of Earth Sciences, 1997 – 2004
Assistant Professor of Geology, Syracuse University, 1990 – 1997

Teaching Experience

UNDERGRADUATE ONLY COURSES (one course taught every year)

EAR 101 (Dynamic Earth)

EAR 106 (Environmental Geology)

EAR 390 (Analytical Techniques in Geology)

COMMUNICATION DESIGN 352 (co-taught)/College of Visual and Performing Arts:

How the Earth Works (design a museum quality display for the Earth Sciences Department)

FRESHMAN FORUM 100 (course for first year students – discuss current events)

UNDERGRADUATE + GRADUATE COURSES (Taught once per year)

EAR 400/600 (Advanced topics in Geochemistry/topic varies each year)

EAR 400/600 – Geochemical patterns of major events on Earth (co-taught with Dr. Linda Ivany)

EAR 417/617 (Inorganic Geochemistry)

GRADUATE COURSES (Taught once a year)

EAR 600 (Radiogenic Isotope Geochemistry)

EAR 600 (Geochronology)

EAR 600 (Stable isotope Geochemistry)

Analytical Experience

I have extensive experience with the following instruments: Thermal ionization mass spectrometers (TIMS), laser ablation inductively coupled plasma mass spectrometers (LA-ICPMS), sensitive high resolution ion microprobe (SHRIMP), electron microprobe analyzer (EMP), X-ray fluorescence spectrometers (XRF). I have 25 years of experience in isotope geochemistry and ultraclean laboratory protocols.

Editorial Experience: Editorial Board of GEOLOGY (1991–1994), Reviewer for following journals: Geology, GSA Bull; Canadian J. Earth Sci; J. Geol. Soc. London; Geochimica et Cosmochimica; Precambrian Res.; J. Geology; Amer. J. Science; Nature; Tectonophysics; Earth Planet. Sci. Letters; Tectonics; Chemical Geology; J. African Earth Sciences; J. Australian Earth Sci.; Geol. Magazine; Contrib. Mineralogy Petrology, Geosphere, Geochemistry- Geophysics- Geosystems

Awards: Best Speaker Award, Geological Society of America, 1987
Elected Fellow of the Geological Society of America, 2001

Professional Affiliations: Geochemical Society, American Geophysical Union, Geological Society of America

International Associations: Host Scientist for Fulbright Scholar, Dr. Abderahim Essaifi, School of Sciences, Caddi Ayyad University, Marrakech, Morocco, 2002

Sponsored Research Support

NATIONAL SCIENCE FOUNDATION – ACTIVE GRANTS

(\$504,000) *MRI*: Acquisition of a new generation thermal ionization mass spectrometer (7/2009 – 6/2012)

(\$149,806) Collaborative Research: Identifying the Limitations and Expanding the Utility of Detrital Mineral U-Pb Geochronology to Tectonic Studies 2/2006 – 12/2011

U.S. GEOLOGICAL SURVEY – ACTIVE GRANTS

(\$20,790) Testing the Great Unconformity hypothesis by determining U-Pb ages of detrital zircon from Cambrian sedimentary rocks along the eastern margin of the USA 1/12/12 – 1/1/2013

(\$59,222) U-Pb Ages of Detrital Zircon From Cambrian Sedimentary Rocks Along the Eastern Margin of the USA: Determining Depositional Ages, Constraining Provenance, and Testing the Great Unconformity Hypothesis 7/09 – 6/11

NATIONAL SCIENCE FOUNDATION – EXPIRED GRANTS

(\$181,798) Collaborative research: Automated sequencing of the fossil record: Improved Methods and insights from Mohawkian (Ordovician) geochronology, tephrochronology, and biostratigraphy 8/05 – 7/09

(\$128,333) Upgrading the Syracuse University Earth Sciences JEOL 6300 SEM 9/05 – 8/06

(\$2,484,400) Investigating the meaningfulness of preservice programs across the continuum of teaching (IMPPACT) in science education (co-PI with John Tillotson, Dept. Science Teaching) 6/5 – 5/09

(\$239,070) Chronology and tectonic evolution of the southern Anti-Atlas orogen, Morocco 7/01-6/04

(\$109,812) Paleogeography of the Carolina terrane: Constraints from detrital zircon ages 1/00-12/02

(\$120,000) Technician support (Phase II): Radiogenic Isotope, Stable Isotope, and XRF laboratories at Syracuse University 12/99-11/01

(\$189,455) Magmatic and deformational history of the Cadomian orogenic belt, North Armorican Massif 7/99-6/01

(\$303,071) Collaborative Research: Structure of the crust and upper mantle beneath the Tibet plateau interior (INDEPTH III) 9/97-8/2000 (Co-Pi with K.D. Nelson)

(\$181,750) Origin and evolution of the Cadomia terrane: Systematic characterization of basement 2/97-1/99

(\$150,000) Technician support: Radiogenic Isotope, Stable Isotope, and XRF laboratories at Syracuse University 9/96-8/99

(\$99,885) Tectonic setting and magmatic evolution of eastern Laurentia in late Paleozoic time: constraints from high precision U-Pb dating of Alleghanian granites 1/95-12/97

(\$100,270) Structural and isotopic characterization of the Milton belt, axial zone of the southern Appalachians 6/95-5/97

(\$83,500) Acquisition of an X-ray fluorescence emission spectrometer and ancillary apparatus 1/93

(\$73,200) Collaborative Research: Structural analysis, U-Pb geochronologic, and Nd isotopic characterization of the Carolina Slate belt and Milton belt, southern Appalachians" 1/93-12/94

(\$58,859) Collaborative Research: Integrated biostratigraphy and K-bentonite chronostratigraphy in the northern Appalachian basin: Geochemical and geochronologic constraints" 6/92-5/94

NATIONAL GEOGRAPHIC SOCIETY – EXPIRED GRANTS

(\$18,000) Remote Sensing and geochronologic study of the Anti-Atlas Mountains, Morocco (co-PI with Dr. K. Hefferan, University of Wisconsin) 11/00-12/01

PEER-REVIEWD PUBLICATIONS (IN REVIEW)

Satkoski, A.M., Bickford, M.E., Samson, S.D., Bauer, R., Mueller, P. and Kamenov, G., *in review*, Geochemical and Hf-Nd isotopic constraints on the crustal evolution of Archean rocks from the Minnesota River Valley, USA: Precambrian Research

Sossa, J., Ivany, L., Schlossnagle, T., Samson, S.D., and Schellenberg, S., *in review*, Consistency in the oxygen and strontium isotopic composition of mollusc shells along 1000 km of an early Eocene shallow shelf: implications for temperature and age reconstructions: Paleoceanography

- Essaifi, A. and Samson, S.D., *in review*, Geochemical and Sr-Nd isotopic constraints on the petrogenesis and geodynamic significance of the Jebilet magmatism (Variscan Belt, Morocco): *Lithos*
- Agbossoumondé, Y., Attoh, K., Samson, S.D., and Nude, P., *in review*, Geochemical Characteristics and U-Pb Zircon LA-ICPMS Ages of Granitoids from the Pan-African Dahomeyide Orogen, West Africa: *J. African Earth Sciences*.

PEER-REVIEWD PUBLICATIONS (PUBLISHED OR 'IN PRESS')

Book chapters (reverse chronological order)

2. D'Lemos, Samson, S.D. and Strachan, R., 2008, The geological evolution of North Armorica: in, *The Geology of Central Europe* (U. Linneman, ed), The geological Society of London.

1. Patchett, P.J and Samson, S.D., 2003, Ages and growth of the continental crust from radiogenic isotopes, pp. 321-348. In *The Crust* (ed. R.L. Rudnick) Vol. 3 *Treatise on Geochemistry* (eds. H.D. Holland and K.K. Turekian) Elsevier-Pergamon, Oxford.

Peer-reviewed Journals (reverse chronological order) (* indicates student or post-doctoral author)

72. *Chakraborty, S., Moecher, D.P., Samson, S.D., 2012, Provenance of the lower Ocoee Supergroup. eastern Great Smoky Mountains: *Geological Society of America Bulletin* in press.
- 71., Ratschbacher L., Krumrei I., Blumenwitz M., Staiger M., Gloaguen R., Samson S.D., Edwards M.A., Appel E., 2011: Rifting and strike-slip shear in central Tibet and the geometry, age, and kinematics of upper crustal extension in Tibet. In: Gloaguen, R. & Ratschbacher, L. (eds). *Growth and Collapse of the Tibetan Plateau*. Geol. Soc. London Spec. Publ., vol. 353, 127-163. doi: 10.1144/SP353.8
70. *Hietpas, J., Samson, S.D., and Moecher, D.M., 2011, A direct comparison of the ages of detrital monazite versus detrital zircon in Appalachian foreland basin sandstones: Searching for the record of Phanerozoic orogenic events: *Earth and Planetary Science Letters*, 310, 488-497, doi:10.1016/j.epsl.2011.08.033
69. *Sell, B.K. and Samson, S.D., 2011, Apatite phenocryst compositions demonstrate a miscorrelation between the Millbrig and Kinnekulle K-bentonites of North America and Scandinavia: *Geology*, 39, 303–306; doi: 10.1130/G31425.1
68. Johnson, E., Sutherland, C., Logan, M., Samson, S.D. and Feely, M., 2011, Emplacement conditions of a porphyritic felsite dyke and timing of motion along the Coolin Fault at Ben Levy, co. Galway: *Irish Journal of Earth Sciences*, 29, 1-13, doi: 10.3318/IJES.2011.29.1
67. *Keating-Bitonti, C., Ivany, L., Affek, H., Douglas, P. and Samson, S.D., 2011, Warm, not super-hot, temperatures in the Early Eocene subtropics: *Geology*, 39, 771–774, doi:10.1130/G32054.1.
66. *Sell, B.K and Samson, S.D., 2011, A tephrochronologic method based on apatite trace-element chemistry: *Quaternary Research*, 76, 157-166, doi: 10.1016/j.yqres.2011.03.007
65. *Fisher, C.M., Hanchar, J.M., Samson, S.D., Blichert-Toft, Vervoort, J.D., Dhuime, B., 2011, Synthetic zircon doped With hafnium and rare earth elements for use as reference material for hafnium isotopic analyses: *Chemical Geology* 286, 32 – 47, doi: 10.1016/j.chemgeo.2011.04.013
64. Moecher, D.M., Hietpas, J., Samson, S.D., Chakraborty, S., 2011, Insights into southern Appalachian tectonics from ages of detrital monazite and zircon in Modern Alluvium: *Geosphere*, 7, 494-512, doi: 10.1130/GES00615.1
63. *Hietpas, J. Samson, S.D., Moecher, D., and Chakraborty, S., 2011, Enhancing tectonic and provenance information from detrital zircon studies: assessing terrane-scale sampling and grain-scale characterization: *Journal of the Geological Society, London*, 168, 309-318, doi: 10.1144/0016-76492009-163
62. *Hietpas, J., Samson, S.D., Moecher, D.M., and Schmitt, A.K., 2010, Recovering tectonic events from the sedimentary record: detrital monazite plays in high fidelity: *Geology*, 38, 167-170.
61. *Satkoski, A., Barr, S. and Samson, S.D., 2010, Provenance of Late Neoproterozoic and Cambrian sediments in Avalonia: Constraints from detrital zircon ages and Sm-Nd isotopic compositions in southern New Brunswick, Canada: *Journal of geology*, 188, 187-200.
60. Hibbard, J.P., Pollock, J.C., Brennan, M., Samson, S.D., and Secor, D.T., 2009, Significance of new Ediacaran fossils and U-Pb zircon ages from the Albemarle Group, Carolina terrane of North Carolina; *Journal of Geology*, 117, 487-498.
59. *Carey, A., Samson, S.D., and Sell, B., 2009, Utility and limitations of apatite phenocryst chemistry for continent-scale correlation of Ordovician K-bentonites: *Journal of Geology*, 117, 1-14.
58. *Azzolina, N.A., Siegel, D.I., Brower, J.C., Samson, S.D., Otz, M.H. and Otz, I., 2007, Can the HGM Classification of Small Non-Peat Forming Wetlands Distinguish Wetlands From Surface Water Geochemistry: *Wetlands*, 27, 884-893.
57. Ivany, L., Simaëys, S.V., Domack, E.W., and Samson, S.D., 2006, Evidence for an earliest Oligocene ice sheet on the Antarctic Peninsula: *Geology*, 34, 377-380.
56. D'Lemos, R.S., Samson, S.D., and Inglis, J.D., 2006, A newly discovered orogenic event in Morocco: Neoproterozoic ages for supposed 'Eburnian' basement of the Bou Azzer inlier, Anti-Atlas Mountains: *Precambrian Research*,

55. Moecher, D.P. and Samson, S.D., 2006, Differential zircon fertility of source terranes and natural bias in the detrital zircon record: Implications for sedimentary provenance analysis: *Earth and Planetary Science Letters*, 247, 252-266.
54. *Becker, T.P., Thomas, W.A., Samson, S.D. and Gehrels, G.E., 2005, Detrital zircon evidence of Laurentian crustal dominance in the Lower Pennsylvania deposits of the Alleghanian clastic wedge in eastern North America: *J. of Sedimentology*, 182, 59-86.
53. *Inglis, J.D., D'Lemos, R.S., Samson, S.D. and Admou, H., 2005; Geochronological Constraints on Late Precambrian intrusion, metamorphism, and tectonism in the Anti-Atlas Mountains: *Journal of Geology*, 113, 439 – 450.
52. Samson, S.D., D'Lemos, R.S., Miller, B.V. and Hamilton, M., 2005, Neoproterozoic Paleogeography of the Cadomia and Avalon terranes: constraints from detrital zircon U-Pb ages: *J. Geological Society*, London, 162, 65-71.
51. *Inglis, J.D., D'Lemos, R.S., Samson, S.D. and Miller, B.V., 2004, Timing of Cadomian deformation and magmatism within La Hague, NW France: *Journal of the Geological Society*, London, 161, 1-12.
50. *Inglis, J.D., Samson, S.D., D'Lemos, R.S., and Hamilton, M., 2004, U-Pb geochronological constraints on the tectonothermal evolution of the Paleoproterozoic basement of Cadomia, La Hague, NW France: *Precambrian Research*, 134, 293-315.
49. Samson, S.D., Inglis, J.D., D'Lemos, R.S., Admou, H., Blichert-Toft, J. and Hefferan, K., 2004, Geochronological, geochemical, and Nd-Hf isotopic constraints on the origin of Neoproterozoic plagiogranites in the Tasriwine ophiolite, Anti-Atlas orogen, Morocco: *Precambrian Research*, 135, 133-147.
48. *Inglis, J.D., Maclean, J., Samson, S.D., D'Lemos, R.S., Admou, H. and Hefferan, K., 2004, A precise U-Pb zircon age for the Bleida Granodiorite, Anti-Atlas, Morocco: consequences for the timing of deformation and terrane assembly in the eastern Anti-Atlas: *Journal of African Earth Sciences*, 39, 277-283.
47. Owens, B.E. and Samson, S.D., 2004, Nd isotopic constraints on the magmatic history of the Goochland terrane, easternmost Grenvillian crust in the southern Appalachians: In *Proterozoic tectonic evolution of the Grenville orogen in North America* (eds. Tolo, R.P., Corriveau, L., McLelland, J., and Bartholomew, M.J.) *Geological Society of America Memoir* 197, 601-608.
46. *Thomas, W.A., Becker, T.P., Samson, S.D. and Hamilton, M.A., 2004, Detrital zircon evidence of a recycled orogenic foreland provenance for Alleghanian clastic-wedge sandstones: *The Journal of Geology*, 112, 23-37.
45. Moecher, D.P., Samson, S.D., Miller, C.F., 2004, Precise time and conditions of peak Taconian granulite facies metamorphism in the southern Appalachian orogen, USA, with implications for zircon behavior during crustal melting events: *The Journal of Geology*, 112, 289-304.
44. Patchett, P.J and Samson, S.D., 2003, Ages and growth of the continental crust from radiogenic isotopes, pp. 321-348. In *The Crust* (ed. R.L. Rudnick) Vol. 3 *Treatise on Geochemistry* (eds. H.D. Holland and K.K. Turekian) Elsevier-Pergamon, Oxford.
43. Samson, S.D., D'Lemos, R.S. and Blichert-Toft, J., 2003, U-Pb geochronology and Hf-Nd isotope compositions of the oldest Neoproterozoic crust within the Cadomian Orogen: new evidence for a unique juvenile terrane: *Earth and Planetary Science Letters*, 208, 165-180.
42. Hefferan, K., Admou, H., Hilal, R., Karson, J., Saquaque, A., Samson, S., and Kornprobst, J., 2002. Proterozoic blueschist-bearing mélange in the Anti-Atlas Mountains, Morocco: *Precambrian Research*, 118, 179-184.
41. *Nagy, E.A., Samson, S.D., and D'Lemos, R.S., 2001, U-Pb geochronologic constraints on the timing of Brioverian sedimentation and regional deformation within the St. Brieuc region of the Neoproterozoic Cadomian orogen, northern France: *Precambrian Research*, 116 (1-2), 1-17.
40. D'Lemos, R.S., Miller, B.V.M., and Samson, S.D., 2001, Precise U-Pb zircon ages from Alderney, Channel Islands: growing evidence for discrete Neoproterozoic magmatic episodes in northern Cadomia: *Geological Magazine*, 138, 719-726.
39. Barr, S.M, Hamilton, M.A., white, C.E. and Samson, S.D., 2001, A late Neoproterozoic age for the Caledonia Mountain Pluton, a high Ti-V layered gabbro in the Caledonia (Avalon) terrane, southern New Brunswick: *Atlantic Geology*, 36, 157-166.
38. *Miller, B.V., Samson, S.D., and D'Lemos, R.S., 2001, U-Pb geochronological constraints on the timing of plutonism, volcanism, and sedimentation, Jersey, Channel Islands, UK: *Journal of the Geological Society*, London, 158, 243-252.
37. *Coler, D.G., Wortman, G.L., Samson, S.D., Hibbard, Stern, R., 2000, U-Pb geochronologic, Nd isotopic and geochemical evidence for the correlation of the Chopawamsic and Milton terranes, Piedmont Zone, southern Appalachian Orogen, *Journal of Geology*, 108, 363-380.
36. Samson, S.D. and Barr, S.M and White, C.E., 2000, Nd isotopic characteristics of terranes within the Avalon Zone, southern New Brunswick: *Canadian Journal of Earth Sciences*, 37, 1039-1052.
35. *Wortman, G.L., Samson, S.D., and Hibbard, J.P., 2000, Precise U-Pb zircon constraints on the earliest magmatic

history of the Carolina terrane: *Journal of Geology*.

34. *Miller, B.V., Samson, S.D., and D'Lemos, R.S., 1999, Time span of plutonism, fabric development, and cooling in a Neoproterozoic magmatic arc segment: U-Pb age constraints from syn-tectonic plutons, Sark, Channel Islands, U.K.: *Tectonophysics*, 312, 79-95.
33. Samson, S.D. and D'Lemos, R.S., 1999, Precise late Neoproterozoic U-Pb zircon age of the syn-tectonic Perelle quartz diorite, Guernsey, Channel Islands, UK: *Journal of the Geological Society*, London, 156, 47-54.
32. Karabinos, P., Samson, S.D., Hepburn, J.C. and Stoll, H., 1998, Taconian orogeny in the New England Appalachians: Collision between Laurentia and the Shelburne Falls arc: *Geology*, 26, 215-218.
31. Samson, S.D. and D'Lemos, R.S., 1998, U-Pb geochronology and Sm-Nd isotopic composition of Proterozoic gneisses, Channel Islands, U.K.: *Journal of the Geological Society*, London, 155, 609-618.
30. *Changde, W., Nelson, K.D., Wortman, G.L., Samson, S.D., Yonjun, Y., Jixiang, Li, Kidd, W.S.F., and Edwards, M., 1998, Yadong cross-structure and south Tibet detachment in the East-Central Himalaya (89°-90°E): *Tectonics*, 17, 28-45.
29. Hibbard, J.P., Shell, G.S., Bradley, P.J., Samson, S.D. and Wortman, G.L., 1998, The Hyco Shear Zone: the northern extension of the central piedmont suture in North Carolina and southern Virginia: *American Journal of Science*, 298, 85-107.
28. *Wortman, G.L., Samson, S.D., and Hibbard, J.P., 1998 Precise timing constraints on the kinematic development of the Hyco Shear Zone, southern Appalachians: *American Journal of Science*, 298, 108-130.
27. *Coler, D.G., Samson, S.D. and Speer, J.A., 1997, Nd and Sr isotopic constraints on the source of Alleghanian granites in the Raleigh Metamorphic belt and Eastern slate belt, southern Appalachians: *Chemical Geology*, 134, 257-275.
26. Samson, S.D., 1996, ⁴⁰Ar-³⁹Ar and Nd-Sr isotopic characteristics of mid-Ordovician North American K-bentonites: A test of early Paleozoic Laurentia-Gondwana interactions: *Tectonics*, 15, 1084-1092.
25. *Andersen, B. and Samson, S.D., 1996, Temporal changes in the Nd isotopic composition of sedimentary rocks in the Sevier and Taconic foreland basins: Increasing influence of juvenile sources: *Geology*, 23, 983-986.
24. *Wortman, G., Samson, S.D., and Hibbard, J.P., 1996, Discrimination of the Milton and Carolina slate belts, southern Appalachians: A Nd isotopic approach: *Journal of Geology*, 104, 239-247.
23. Samson, S.D., Coler, D.G., and Speer, J.A., 1995, Geochemical and Nd-Sr-Pb isotopic composition of Alleghanian granites in the southern Appalachians: Origin, tectonic setting, and source characterization: *Earth and Planetary Science Letters*, 134, 359-376.
22. Hibbard, J.P. and Samson, S.D., 1995, Orogenesis exotic to the Iapetan cycle in the southern Appalachians, in Hibbard, J., van Staal, C.R., and Cawood, P., eds., *New Perspectives in the Appalachian-Caledonian Orogen*, Geological Association of Canada Special Paper 41, 191-205.
21. Samson, S.D., 1995, Is the Carolina terrane part of Avalon? in Hibbard, J.P., van Staal, C.R., and Cawood, P., eds., *New Perspectives in the Appalachian-Caledonian Orogen*, Geological Association of Canada Special Paper 41, 253-264.
20. Samson, S.D., Hibbard, J.P. and Wortman, G.L., 1995, Nd isotopic evidence for juvenile crust in the Carolina terrane, southern Appalachians: *Contributions to Mineralogy and Petrology*, 121, 171-184.
19. Samson, S.D., Matthews, S.V.L., Mitchell, C.E., Goldman, D., 1995, Tephrochronology of highly altered ash beds: The use of trace element and strontium isotope geochemistry of apatite phenocrysts to correlate K-bentonites: *Geochimica et Cosmochimica Acta*, 59, 2527-2536.
18. Mitchell, C.E., Goldman, D., Delano, J.W., Samson, S.D., Bergstrom, S.M., 1994, Temporal and spatial distribution of biozones and facies relative to geochemically correlated K-bentonites in the Middle Ordovician Taconic Foredeep: *Geology*, 22, 715-718.
17. Isachsen, C.E., Bowring, S.A., Landing, E., Samson, S.D., 1994, New constraint on the division of Cambrian time: *Geology*, 22, 496-498.
16. Gehrels, G.E., McClelland, W.C., Samson, S.D., Patchett, P.J., and Orchard, M.J., 1992, Geology of the western flank of the Coast Mountains between Cape Fanshaw and Taku Inlet, southeastern Alaska: *Tectonics*, 11, 567-585.
15. McClelland, W.C., Gehrels, G.E., Samson, S.D., Patchett, P.J., 1992, Structural and geochronologic relations along the western flank of the Coast Mountains batholith: Stikine River to Cape Fanshaw, central southeastern Alaska: *Journal of Structural Geology*, 14, 475-489.
14. McClelland, W.C., Gehrels, G.E., Samson, S.D., Patchett, P.J., 1991, Protolith relations of the Gravina belt and Yukon-Tanana terrane in central southeastern Alaska: *Journal of Geology*, 100, 107-123.
13. Samson, S.D. and Patchett, P.J., 1991, The Canadian Cordillera as a modern analog of Proterozoic crustal growth: *Australian Journal of Earth Sciences*, 38, 595-611.

12. Gehrels, G.E., McClelland, W.C., Samson, S.D., and Patchett, P.J., 1991, U-Pb geochronology of detrital zircons from a continental margin assemblage in the northern Coast Mountains, southeast Alaska: *Canadian Journal of Earth Sciences*, 28, 1285-1300.
11. Samson, S.D., Patchett, P.J., McClelland, W.C., and Gehrels, G.E., 1991, Nd and Sr isotopic constraints on the petrogenesis of the west side of the northern Coast Mountains batholith, Alaskan and Canadian Cordillera: *Canadian Journal of Earth Sciences*, 28, 939-946.
10. Gehrels, G.E., McClelland, W.C., Samson, S.D., and Patchett, P.J., 1991, U-Pb geochronology of Late Cretaceous and early Tertiary plutons in the northern Coast Mountains batholith: *Canadian Journal of Earth Sciences*, 28, 899-911.
9. Gehrels, G.E., McClelland, W.C., Samson, S.D., Jackson, J.L., and Patchett, P.J., 1991, U-Pb geochronology of two pre-Tertiary plutons in the Coast Mountains batholith near Ketchikan, southeastern Alaska: *Canadian Journal of Earth Sciences*, 28, 894-898.
8. Samson, S.D., Patchett, P.J., McClelland, W.C., and Gehrels, G.E., 1991, Nd isotopic evidence for ancient crust trapped between the Alexander, Wrangellia and Stikine terranes in the Canadian Cordillera: *Tectonics*, 10, 770-780.
7. Samson, S.D., Patchett, P.J., Roddick, J.C., and Parrish, R.R., 1990, Reply to Discussion of Origin and tectonic setting of Ordovician bentonites in North America: Isotopic and age constraints: *Geological Society of America Bulletin*, 102, 1441.
6. Gehrels, G.E., McClelland, W.C., Samson, S.D., Patchett, P.J., and Jackson, J.L., 1990, Ancient continental margin assemblage in the northern Coast Mountains, southeast Alaska and northwest Canada: *Geology*, 18, 208-211.
5. Samson, S.D., Patchett, P.J., Gehrels, G.E., and Anderson, R.G., 1990, Nd and Sr isotopic characterization of the Wrangellia terrane and implications for crustal growth of the Canadian Cordillera: *Journal of Geology*, 98, 749-762.
4. Samson, S.D., McClelland, W.C., Patchett, P.J., Gehrels, G.E., and Anderson, R.G., 1989, Evidence from neodymium isotopes for mantle contributions to Phanerozoic crustal genesis in the Canadian Cordillera: *Nature*, 37, 705-709.
3. Samson, S.D., Patchett, P.J., Roddick, J.C., and Parrish, R.R., 1989, Origin and tectonic setting of Ordovician bentonites in North America: Isotopic and age constraints: *Geological Society of America Bulletin*, 101, 1175-1181.
2. Samson, S.D., Kyle, P.R., and Alexander, E.C., Jr., 1988, Correlation of North American bentonites by using apatite chemistry: *Geology*, 6, 444-447.
1. Samson, S.D. and Alexander, E.C., Jr., 1987, Calibration of the interlaboratory ^{40}Ar - ^{39}Ar dating standard, MMhb-1: *Chemical Geology (Isotope Geoscience Section)*, 66, 27-34.

ABSTRACTS (Read/presented at Professional Meetings)

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