**SCOTT D. SAMSON**

Department of Earth & Environmental 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

Fellow Forensic and National Security Sciences Institute (2014 – present)

Jessie Page Heroy Professor/Department Chairman, 2002 – 2007

Associate Professor of Earth Sciences, 1997 − 2004

Assistant Professor of Geology, Syracuse University, 1990 − 1997

***Awards:*** Best Speaker Award, Geological Society of America, 1987

Elected Fellow of the Geological Society of America, 2001

William Wasserstrom Award for Graduate Teaching, 2012

Ranked in the top 95% of the world’s scientific researchers by Research Gate

***Teaching Experience***

**UNDERGRADUATE ONLY COURSES** (one course taught every year)

EAR 101 ***(***Dynamic Earth); EAR 106 (Environmental Geology); EAR 390 (Analytical Techniques in Geology)

**Undergraduate + graduate courses** (Taught once per year)

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

EAR 455/655 – Geochemical patterns of major events on Earth (co-taught with Dr. Linda Ivany)

EAR 417/617 (Inorganic Geochemistry); EAR 400/600 Isotope geochemistry & Geochronology

***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 30 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, G-cube, Rapid Comm. Mass Spectrometry

***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 from:*** National Science Foundation (19 grants), U.S. Geological Survey (2 grants) National Geographic Society (1 grant) as follows:

***Sponsored Research Support***

**National Science Foundation – Current grants**

($221,171) Collaborative research: Double-double dating of detrital monazite and detrital zircon: quantifying sediment recycling in tectonic studies 6/2016 – 7/2021

($332,267) Seasonality, summer cooling, and calibrating the approach of the icehouse in late Eocene Antarctica 4/2016 – 3/2021

**National Science Foundation - Expired grants**

($942,852) MRI: Acquisition of an electron microprobe 8/2016 – 7/2017

($138,975) Collaborative Research: Use and Abuse of Zircon Thermometry - Integrating Modeling, Trace Element Chemistry and Isotopes to Maximize the Use, Limit the Abuse 4/2015 - 3/2019

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

($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

**U.S. Geological Survey - Expired grants**

($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

($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

**Peer-reviewed Publications (Published)**

**Book chapters (reverse chronological order)**

3. Bickford, M.E., Satkoski, A.M., Samson, S.D., Wooden, J.L., Bauer, R.L., Schmitz, M.D., Mueller, P.A. and Kamenov, G.D.,

2019, Paleoarcehan gneisses in the Minnesota River Valley and northern Michigan, USA. In, Earth’s oldest rocks, https://doi.org/10.1016/B978-0-444-63901-1.00027-7

2. Linnemann, U., D’Lemos, R.S., Drost, K., Jeffries, T., Gerdes, A., Romer, R.L., Samson, S.D, and Strachan, R.A., 2008,

Cadomian tectonics. *In*: McCann, T. (ed.) *The geology of Central Europe. Volume 1: Precambrian and Paleozoic*. Geological Society, London, 103-154.

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****)***

98. \*Zotto, S., Moecher, D., and Samson, S.D., *in review*, Detrital monazite and zircon provenance analysis for lower Pennsylvanian clastic sequences, central Appalachian basin: the critical role of recycling in Appalachian sourced Laurentian pancontinental river systems: Journal of Geology

97. \*Makovsky, K., Samson, S.D., Moecher, Amidon, W., *in review*, Timing of Grenville Magmatism in the French Broad Massif, Southern Blue Ridge, North Carolina, USA: New in situ Zircon U-Pb Geochronology and Implications for Timing of Rodinian Orogenesis in Eastern Laurentia: Precambrian Geology.

96. Moecher, D., Harris, F., Larkin, E., Quinn, R., Walsh, K., Loughry, D., Anderson, E., Samson, S.D., Satkoski, A., 2020, Zircon U-Pb Geochronology and Nd-Pb Isotope Geochemistry of Blue Ridge Basement in the Eastern Great Smoky Mountains, U.S.A.: Implications for the Proterozoic Tectonic Evolution of the Southeastern Laurentian Margin: American Journal of Science

95. \*Zotto, S.,Moecher, D., Thigpen, R., Samson, S.D., 2020, Persistence of Grenville dominance in Laurentian detrital zircon age systematics explained b sedimentary recycling: Evidence from detrital zircon double-dating and detrital monazite textures and geochronology: Geology

94. \*Triantafyllou, A., Berger, J., Baele, JM., Mattielli, N., Ducea, M., Sterckx, S., Samson, S.D., Hodel, F., Ennih, N., 2020, Episodic magmatism during the growth of a Neoproterozoic oceanic arc (Anti-Atlas, Morocco)” Precambrian Research, v. 339.

93. Martin, A., Kadel-Harder, I., Owens, B., Kitajima, K., Samson, S.D., Verma, S., 2019, Five hundred million years of punctuated addition of juvenile crust during extension in the Goochland terrane, central Appalachian Piedmont province: International Geology Review.

# 92. Maneiro, K., Baxter, E. Samson, S.D., Marschall, H., Hietpas, J., 2019, Detrital garnet geochronology: Application in tributaries of the French Broad River, Southern Appalachian Mountains, USA: Geology, v.47, 1189-1192.

91. Moecher, D., Kelly, E.M., Hietpas, J. and Samson, S.D., 2019, Proof of Recycling in Clastic Sedimentary Systems from Textural Analysis and Geochronology of Detrital Monazite: Implications for Detrital Mineral Provenance Analysis: Geological Society of America Bulletin, 131, 1115-1132, <https://doi.org/10.1130/B31947.1>

90. Schmitz, M.D.,Southwick, D.L., Bickford, M.E., Mueller, P.A. and Samson, S.D., 2018, Neoarchean and

Paleoproterozoic events in the Minnesota River Valley subprovince, with implications for southern Superior

craton evolution and correlation: Precambrian Research, 316, 206-226.

89. Samson, S.D., Moecher, D. and Satkoski, A., 2018, Inherited, enriched, heated or recycled? Examining potential causes of Earth’s most zircon fertile magmatic episode: Lithos (Invited Review), 314-315, 350-359, <https://doi.org/10.1016/j.lithos.2018.06.015>

88. \*Bonich, M., Samson, S.D., and Fedo, C., 2017, Incongruity of detrital zircon ages of granitic bedrock and its derived alluvium: An example from the Stepladder Mountains, SE California: Journal of Geology, 125, 337-350, <https://doi.org/10.1086/691146>

87. \*O’Sullivan, G., Chew, D. and Samson, S.D., 2016, Detecting magma-poor orogens in the detrital record: Geology, 44, 871-874

86. Inglis, J., Hefferan, K., Samson, S.D., Admou, H. and Saquaque, A., 2016, Determining age of Pan African metamorphism using Sm-Nd garnet-whole rock geochronology and phase equilibria modeling in the Tasriwine ophiolite, Sirwa, Anti-Atlas Morocco: Journal of African Earth Sciences, <http://dx.doi.org/10.1016/j.jafrearsci.2016.06.021>

85. \*Levy, Z., Siegel, D., Glaser, P., Samson, S.D., Dasgupta, S., 2016, Peat porewaters have contrasting geochemical fingerprints for groundwater recharge and discharge due to matrix diffusion in a large, northern bog-fen complex: Journal of Hydrology, 541, 941-951.

84. \*Sell, B., Samson, S.D., Mitchell, C., McLaughlin, P., Koenig, A. and Leslie, S., 2015, Stratigraphic correlations using trace elements in apatite from Late Ordovician (Sandbian-Katian) K-bentonites of eastern North America: Geological Society of America Bulletin, doi: 10.1130/B31194.1

83. Moecher, D.P., McDowell, S.M., Samson, S.D., and Miller, C.F., 2014, Ti-in-zircon thermometry and crystallization modeling support “hot” Grenville granite hypothesis: Geology, 42, 267-270.

82. Hefferan, K., Abderrahmane Soulaimani, A., Samson, S.D., Admou, H., Inglis, J., Saquaque, A., Latifa, C., Heywood, N., 2014, A reconsideration of Pan African orogenic cycle in the Anti-Atlas Mountains, Morocco: Journal of African Earth Sciences, 98, 34-36, doi: <https://doi.org/10.1016/j.jafrearsci.2014.03.007>

81. Essaifi, A., Samson, S.D., Goodenough, K., 2014, Geochemical and Sr–Nd isotopic constraints on the petrogenesis

and geodynamic significance of the Jebilet magmatism (Variscan Belt, Morocco): Geological Magazine, 151,

666-691, doi: 10.1017/S0016756813000654

80. \*Hietpas, J., Samson, S.D., Speir, J. and Moecher, D.P., 2013, Assessing detrital garnet chemical composition as a

quantitative provenance tool: a multivariate statistical approach: Journal of Sedimentary Research, 83, 1181-1197

79. \*Satkoski, A.M., Wilkinson, B.H., Hieptas, J. and Samson, S.D., 2013, Likeness among detrital zircon populations – An

approach to the comparison of age frequency data in time and space: Geological Society of America Bulletin, doi:

10.1130/B30888.1

78. Owens, B., Samson, S.D., and King, S.E., 2013, Geochemistry of the Arvonia Formation, Chopawamsic Terrane, Virginia: Implications for Source Area Weathering and Provenance: American Journal of Science, 313, 242-266.

77. Agbossoumondé, Y., Attoh, K., Samson, S.D., and Nude, P., 2013, Geochemical Characteristics and U-Pb Zircon

Ages of Granitoids from the Pan-African Dahomeyide Orogen, West Africa: J. African Earth Sci., 79, 1-9.

76. \*Satkoski, A.M., Bickford, M.E., Samson, S.D., Bauer, R., Mueller, P. and Kamenov, G., 2013, Geochemical and Hf-

Nd isotopic constraints on the crustal evolution of Archean rocks from the Minnesota River Valley, USA:

Precambrian Research, 224, 36-50.

75.\*Sossa, J., Ivany, L., Schlossnagle , T., Samson, S.D., and Schellenberg, S., 2012, The fidelity of oxygen and strontium

isotope values from shallow shelf settings: Implications for temperature and age reconstructions: Palaeogeography,

Palaeoclimatology, Palaeoecology, [342–343](http://www.sciencedirect.com/science/journal/00310182/342/supp/C), 27–39, doi:10.1016/j.palaeo.2012.04.021

[74. Azzolina](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f77298276_Nicholas_A_Azzolina%2f), N.A, [Siegel](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f79121948_Donald_I_Siegel%2f), D.I., [Brower](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f78779161_James_C_Brower%2f), J.C., [Samson](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f72264862_Scott_D_Samson%2f), S.D., [Otz](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f78384109_Martin_H_Otz%2f), M.H., [and Otz](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fresearcher%2f77350827_Ines_Otz%2f) , I., 2012, Can the HGM classification of

small, non-peat forming wetlands distinguish wetlands from surface water geochemistry?: [Wetlands](https://exchange.syr.edu/owa/redir.aspx?C=da678b26ab604704ab9d12eaf6d5b446&URL=https%3a%2f%2fwww.researchgate.net%2fpublication%2fjournal%2f0277-5212_Wetlands), 27, 884-893.

73. Barr, S., Hamilton, M., Samson, S.D., Satkoski, A., and White, C., 2012, Provenance variations in northern Appalachian

Avalonia based on detrital zircon age patterns in Ediacaran and Cambrian sedimentary rocks, New Brunswick and

Nova Scotia, Canada, Canadian Journal of Earth Sciences, 49, 533-546, doi:10.1139/E11-070

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, 124, 1278-1292.

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., Simaeys, 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,

147, 75-78.

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,

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