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EDUCATION

B.A. - Colgate University (Chemistry)
Ph.D. - California Institute of Technology (Geochemistry)

EMPLOYMENT

2010 - Provost Emeritus, New College of Florida
2009 -10 Executive Liaison for Foundation Relations, New College of Florida
2006-09- Provost and Vice President for Academic Affairs, New College of Florida
2007 - Dean of the College of Arts & Sciences Emeritus and Jesse Earl Hyde Professor of Geological Sciences Emeritus, CWRU
2001-03 Dean, College of Arts & Sciences, CWRU
2000-01 Interim Dean, College of Arts & Sciences, CWRU
1999-06 Jesse Earl Hyde Professor of Geological Sciences, CWRU
1999-00 Acting Chair, Department of Communication Sciences, CWRU
1993-00 Associate Dean, College of Arts & Sciences, CWRU
1993-94 Acting Chair, Department of Statistics, CWRU
1977-82 Chair, Department of Geological Sciences, CWRU
1976-99 Professor, Department of Geological Sciences, CWRU
1976 Industry Fellow, Marathon Oil Company
1973-76 Associate Professor, Department of Geological Sciences, CWRU
1967-73 Assistant Professor, Department of Geological Sciences, CWRU

PROFESSIONAL SOCIETIES

American Association for the Advancement of Science
American Association of Petroleum Geologists
American Geophysical Union
Clay Minerals Society
Geochemical Society
Geological Society of America
National Association of Geology Teachers
Northern Ohio Geological Society
Ohio Academy of Science
Society Sedimentary Geology
Soil Science Society of America

ORGANIZATIONAL POSITIONS

- 1978-81 Clay Minerals Society, Councilor
- 1986 Geological Society of America, Nomination Committee
- 1987-90 Geological Society of America, Day Medal Committee
- 1988 Northern Ohio Geological Society, President
- 1988-91 Geochemical Society, Director
- 1991-94 Clay Minerals Society, Publications Committee
- 1992-95 Clay Minerals Society, Councilor
- 1998 Clay Minerals Society, Annual Meeting Chair
- 1999-02 AAAS Section on Geology and Geography, Electorate Nominating Committee (Chair 2002)
- 2004 Clay Minerals Society, Bailey Award Committee
- 2005-08 Clay Minerals Society, Finance and Budget Committee
- 2010- Clay Minerals Society, Policy and Administration Committee
- 2011- Geochemical Society Treasurer

ADVISORY AND REVIEW PANELS

- 1974-78 Joint Oceanographic Institutions Deep Earth Sampling (JOIDES) Inorganic Geochemistry Panel
- 1978-81 NSF Earth Sciences Advisory Panel (Chairman, 1980-1981)
- 1985 NSF Earth Sciences Advisory Panel (substitute member)
- 1992 Ad hoc panel to evaluate CNRS program, Dynamique et Bilan de la Terre, Toulon, France
- 1993 U.S. Department of Energy, Basic Energy Sciences Review Panel, *Continental Drilling*
- 1993 U.S. Department of Energy, Basic Energy Sciences Review Panel, *Sedimentary Basins*, Chair
- 1994 NSF Peer Review Panel, Geological Record of Global Change
- 1993-95 Ohio Department of Natural Resources Erosion Hazard Working Group
- 1999 NSF Workshop *Directions and Priorities in Low Temperature Geochemistry for the Year 2000 and the Decade Beyond*
- 2000-01, 2005 NSF Peer Review Panel, Partnerships for Innovation Program
- 2001 NSF Graduate Research Fellowship Panel
- 2002 NSF Division of Earth Sciences Committee of Visitors
- 2007 NSF Panel for *Critical Zone Observatories*
- 2010 Conicyt (Chile) Chair, Panel of International Experts to evaluate proposals to the Fondap (Centers of Excellence) Program

ACCREDITING BOARDS

- 1995- 07 Higher Learning Commission of The North Central Association of Colleges and Schools, Consultant-Evaluator (accreditation visits to University of Chicago, Illinois Institute of Technology, Hamline University, Aurora University, Marquette University; Northwestern University, Oklahoma State University, South Dakota School of Mines and Technology, and de Paul University)

ACCREDITING BOARDS (cont.)

- 1997 New England Association of Schools and Colleges - Member of accreditation committee for Brown University
- 2002 New England Association of Schools and Colleges - Member of accreditation committee for Suffolk University
- 2005-06 Higher Learning Commission of The North Central Association of Colleges and Schools, Accreditation Review Council
- 2007 Southern Association of Colleges and Schools, Onsite Review Committee for Texas Lutheran University
- 2009 Southern Association of Colleges and Schools, Onsite Review Committee for Rhodes College

EDITORIAL POSITIONS

- 1976-79 Associate Editor, *Geochimica et Cosmochimica Acta*
- 1979-87 Associate Editor, *Marine Micropaleontology*
- 1987-95 Associate Editor, *Paleontology/Paleoclimatology/Paleoecology*
- 1996-00 Editorial Committee, *Annual Reviews of Earth and Planetary Science*

HONORS

- Geochemistry Fellow, awarded jointly by the Geochemical Society and the European Association of Geochemistry
- Fellow, American Association for the Advancement of Science
- Fellow, Geological Society of America
- Fellow, Ohio Academy of Science
- Brindley Lectureship, Clay Minerals Society
- Phi Beta Kappa
- Sigma Xi
- Savin Nunatak, Palmer Peninsula, Antarctica, named in recognition of field work done with Clair Patterson, 1965-66

COMMUNITY SERVICE

- 1995-01 Trustee, Cleveland Hearing and Speech Center
- 1995-01 Ohio Department of Natural Resources Coastal Resources Advisory Council
- 2002 Trustee, National History Day
- 2002-06 Trustee, Cleveland Council on World Affairs (Program Committee chair, 2004 - 06)

BOARDS OF PUBLICLY HELD CORPORATIONS

- 1985-88 Inland Vacuum Industries Inc.
- 1989-92 JRM Holdings, Inc.

SOCIAL MEMBERSHIP

- The Union Club of Cleveland

REFEREED PUBLICATIONS

- 1963 - Bennett, Jr., L.C., and Savin, S.M. The natural history of the Hardangerfjord, 6. Studies of the sediments of parts of the Ytre Samlafjord with the continuous seismic profiler. *Sarsia*, 14, 79-94.
- 1970 - Savin, S.M., and Epstein, S. The oxygen and hydrogen isotope geochemistry of ocean sediments and shales. *Geochim. Cosmochim. Acta*, 34, 25-42.
- 1970 - Savin, S.M., and Epstein, S. The oxygen isotopic compositions of coarse grained sedimentary rocks and minerals. *Geochim. Cosmochim. Acta*, 34, 323-329.
- 1970 - Hecht, A.D., and Savin, S.M. Oxygen-18 studies of recent planktonic foraminifera: Comparisons of phenotypes and of test parts. *Science*, 170, 69-71.
- 1971 - Douglas, R.G., and Savin, S.M. Isotopic analysis of planktonic foraminifera from the Cenozoic of the Northwestern Pacific. Initial Reports of the Deep Sea Drilling Project, 6, 1123-1127.
- 1971 - Lyons, J.B., Savin, S.M., and Tamburi, A.J. Basement ice, Ward Hunt Ice Shelf, Ellesmere Island, Canada *Jour. Glaciology*, 58, 93-100.
- 1971 - Hecht, A.D., and Savin, S.M. Oxygen-18 studies of recent planktonic foraminifera. *Science*, 173, 167-169.
- 1972 - Hecht, A.D., and Savin, S.M. Phenotypic variation and oxygen isotope ratios in recent planktonic foraminifera. *Jour. of Foraminiferal Res.*, 2, 55-67.
- 1972 - Yund, R.A., McCallister, R.H., and Savin, S.M. An experimental study of nepheline-kalsilite exsolution. *Jour. Petrol.*, 13, 255-272.
- 1973 - Eslinger, E.V., and Savin, S.M. Mineralogy and oxygen isotope geochemistry of the hydrothermally altered rocks of the Ohaki-Broadlands, New Zealand geothermal area. *Amer. Jour. Science*, 273, 240-267.
- 1973 - Savin, S.M. and Douglas, R.G. Stable isotope and trace element geochemistry of recent planktonic foraminifera from the South Pacific. *Bull. Geol. Soc. Amer.*, 84, 2337-2342.
- 1973 - Eslinger, E.V., and Savin, S.M. Oxygen isotope geothermometry and mineralogy of the burial metamorphic rocks of the Precambrian Belt Supergroup, Glacier National Park, Montana. *Bull. Geol. Soc. Amer.* 54, 2549-2560.
- 1973 - Eslinger, E.V., Mayer, L.M., Durst, T.L., Hower, J., and Savin, S.M. An X-ray technique for distinguishing between detrital and secondary quartz in the fine grained fractions of sedimentary rocks. *Jour. Sed. Petrol.*, 43, 540-543.

- 1973 - Douglas, R.G., and Savin, S.M. Oxygen and carbon isotope analyses of Cretaceous and Tertiary foraminifera from the Central North Pacific, DSDP Leg 17, Initial Reports of the Deep Sea Drilling Project, 17, 591-605.
- 1973 - Savin, S.M. Oxygen and hydrogen isotope studies of minerals in ocean sediments. Proc. Intl. Symposium on Hydrogeochemistry and Biogeochemistry, The Clark Co., 372-391
- 1974- Savin, S.M. and Stehli, F.G. Interpretation of oxygen isotope paleotemperature measurements,: Effects of the $^{18}\text{O}/^{16}\text{O}$ ratio of seawater, depth stratification of foraminifera, and selective solution, in Methodes quantitatives d'études des variations du climat au cours du Pleistocène, Colloque International du CNRS, 219, 183-201.
- 1975 - Oxygen isotope measurements of Tertiary and Cretaceous foraminifera and nannofossils from Sites 305 and 306, Initial Reports of the Deep Sea Drilling Project, 32, 509-520.
- 1975 - Savin, S.M., Douglas, R.G., and Stehli, F.G. Tertiary marine paleotemperatures. Bull. Geol. Soc. Amer., 86, 1499-1510.
- 1976 - Yeh, H.W., and Savin, S.M. The extent of oxygen isotope exchange between clay minerals and sea water. Geochim. Cosmochim. Acta, 40, 723-748.
- 1976 - Yeh, H.W., and Savin, S.M. The extent of oxygen isotope exchange between clay minerals and sea water. Geochim. Cosmochim. Acta, 40, 723-748.
- 1976 - Eslinger, E.V., and Savin, S.M. Mineralogy and $^{18}\text{O}/^{16}\text{O}$ ratios of the fine-grained quartz and clay from Site 323. Initial Reports of the Deep Sea Drilling Project, 35, 489.
- 1976 - Kalhan, S.C., Savin, S.M., and Adam, P.A.J. Measurement of glucose turnover in the human newborn with glucose-1- ^{13}C . Jour. Clin. Endocr. Metab., 43, 704.
- 1976 - Kalhan, S.C., Savin, S.M., and Adam, P.A.J. Glucose-1- ^{13}C as a tracer for the measurement of systemic glucose production. Proc. Second Intl. Conference on Stable Isotopes, E.R. Klein and P.D. Klein, eds., CONF-751027, 330-335.
- 1976 - Adam, P.A.J., Kalhan, S.C., and Savin, S.M. Fuel metabolism in the infant of the diabetic mother: Attenuated mobilization of alternate fuels. Symposium on Diabetes and Other Endocrine Disorders During Pregnancy and in the Newborn, Natl. Foundation March of Dimes, New York, A.R. Liss, Inc., publ., 1976, 51-67.
- 1977 - Yeh, H.W., and Savin, S.M. The mechanisms of burial metamorphic reactions in argillaceous sediments 3. Oxygen isotope evidence. Bull. Geol. Soc. Amer., 88, 1321-1330.

- 1977 - Kalhan, S.C., Savin, S.M, and Adam, P.A.J. Estimation of glucose turnover using stable tracer glucose -1-¹³C. *Jour. Lab. Clin. Med.*, 89, 285.
- 1977 - Kalhan, S.C., Savin, S.M, and Adam, P.A.J. Attenuated glucose production rate in the newborn infants of insulin-dependent diabetic mothers. *New England Jour. Med.*, 296, 375-376.
- 1977 - Savin, S.M. History of the earth's surface temperature during the past 100 million years. *Ann. Rev. Earth and Planet, Sci.*, 5, 319-355.
- 1978 - Douglas, R.G., and Savin, S.M. Oxygen isotopic evidence for the depth stratification of Tertiary and Cretaceous planktonic foraminifera. *Marine Micropaleontology*, 3, 175-196.
- 1979 - Eslinger, E.V., Savin, S.M., and Yeh, H.W. Oxygen isotope geothermometry of diagenetically altered shales. In P.A. Scholle and P.R. Schulger, eds. *Aspects of Diagenesis*, Soc. Econ. Paleontologists and Mineralogists Spec. Publ. No. 26, 113-124.
- 1979 - Barry, R., Fritz, H., Imbrie, J., Kutzbach, J., Mitchell, J.M, and Savin, S.M. Status and opportunities in paleoclimatic research. *Quaternary Research*, 12, 6-17.
- 1979 - Kalhan, S.C., D'Angelo, L., Savin, S.M., and Adam, P.A.J. Glucose production in pregnant women at term gestation: Sources of glucose for human fetus. *Jour. Clinical Investigation*, 63, 388-394.
- 1980 - Woodruff, F., Savin, S.M., and Douglas, R.G. Biological fractionation of oxygen and carbon isotopes by recent benthic foraminifera. *Marine Micropaleontology* 5, 3-11.
- 1980 - Kalhan, S.C., Bier, D.M., Savin, S.M., and Adam, P.A.J. Estimation of glucose turnover and ¹³C recycling in the human newborn by simultaneous 1-¹³C glucose tracers. *Jour. Clin. Endocr. Metab.*, 50, 456-460.
- 1980 - Savin, S.M. Oxygen and hydrogen isotope effects in low temperature mineral-water interactions. In P.Fritz and J.Fontes, eds. *Handbook of Environmental Isotope Geochemistry*, Vol. 1, Elsevier Publishing Co., 283-327.
- 1980 - Haq, B.U., Worsley, T.R., Burkle, L.H., Douglas, R.G., Keigwin, L.D., Jr., Opdyke, N., Savin, S.M., Sommer, M.A., Vincent, E., and Woodruff, F. Late Miocene marine carbon-isotopic shift and synchronicity of some phytoplanktonic biostratigraphic events. *Geology*, 8, 427-431.
- 1981 - Woodruff, F., Savin, S.M., and Douglas, R.G. Miocene stable isotope record: A detailed deep Pacific Ocean study and its paleoclimatic implications. *Science*, 212, 655-668.
- 1981 - Savin, S.M., and Yeh, H.W. Stable isotopes in ocean sediments. In C. Emiliani, ed., *The Sea*, Vol. VII, John Wiley-Interscience, 1521-1554.

- 1981 - Savin, S.M., Douglas, R.G., Keller, G., Killingley, J.S., Shaughnessy, L., Sommer, M.A., Vincent, E., and Woodruff, F. Miocene benthic foraminiferal isotope records: A synthesis. *Marine Micropaleontology*, 6, 423-450.
- 1982 - Kalhan, S.C., Gilfillan, C., Tserng, K.Y., and Savin, S.M. Glucose production I in type 1 glycogen storage disease. *Jour. Pediatrics*, 101, 159-160.
- 1982 - Savin, S.M. Stable isotopes in climatic reconstructions. In *Climate in Earth History*, Geophysics Study Committee, National. Research Council, National. Academy Press, 164-171.
- 1982 - Harrover, R.D., Norman, D.I., Savin, S.M., and Sawkins, F.J. Stable oxygen isotope and crystalline size analysis of the DeLong Mountain, Alaska, cherts: An exploration tool for submarine exhalative deposits. *Economic Geology*, 77, 1761-1766.
- 1983 - Loutit, T.S., Kennett, J.P. and Savin, S.M. Miocene equatorial and southwest Pacific paleoceanography from stable isotope evidence. *Marine Micropaleontology*, 8, 215-233.
- 1983 - Kalhan, S.C., Ricanati, E.S., Tsereng, K-Y., and Savin, S.M. Glucose turnover in chronic uremia: Increased recycling with diminished oxidation of glucose. *Metabolism*, 32, 1155-1162.
- 1984 - Savin, S.M., and Lee, M.C. estimation of subsurface temperatures from oxygen isotope ratios of minerals, Editions Technic, *Thermal Phenomena in Sedimentary Basins*, Intl. Colloquium. Bordeaux, France, June 7-10, 1983, 65-70.
- 1985 - Savin, S.M., Abel, L.J., Barrera, E., Hodell, D., Keller, G., Kennett, J.P., Killingley, J. Murphy, M., and Vincent, E. The evolution of Miocene surface and near-surface marine temperatures : oxygen isotopic evidence. In J.P. Kennett, ed. *The Miocene Ocean: Paleoceanography and Biogeography*. GSA Memoir, 163, 49-82.
- 1985 - Barrera. E., Keller, G., and Savin, S.M. Evolution of the Miocene ocean in the eastern north Pacific as inferred from oxygen and carbon isotope ratios of foraminifera. In J.P. Kennett, ed. *The Miocene Ocean: Paleoceanography and Biogeography*, GSA memoir, 163, 83-102.
- 1985 - Lee, M., and Savin, S.M. Isolation of diagenetic overgrowths on quartz and grains for oxygen isotopic analysis. *Geochim. Cosmochim. Acta*, 49, 497-501.
- 1985 - Woodruff, F., and Savin, S.M. $\delta^{13}\text{C}$ values of Miocene Pacific benthic foraminifera: Correlations with sea level and biological productivity. *Geology*, 13, 119-122.
- 1985 - Lee, M., Aronson, J.L., and Savin, S.M., K/Ar dating of the time of gas emplacement in the Rotiegendes Sandstone. *Amer. Assoc. Petrol. Geol. Bull.*, 69, 1381-1385.

- 1985 - Savin, S.M., and Douglas, R.G. Sea level, climate, and the Central American Land Bridge, In F.G. Stehli and S.D. Webb, *The Central American Land Bridge*, Plenum Press, 303-324.
- 1985 - Schrieber, M., Kalhan, S.C., McCullough, A., and Savin, S.M. Branched chain amino acid metabolism in chronic renal failure and hemodialysis. *Proc. EDTA European Renal Association*, 22, 116-120.
- 1986 - Mullen, K., Denne, S., McCullough, A., Savin, S.M., Bruno, D., Tavell, A., and Kalhan, S.C. Leucine metabolism in stable cirrhosis. *Hepatology*, 6, 622-630.
- 1987 - Barrera. E., Huber, B.T., Savin, S.M., and Webb, P.N. Antarctic marine temperatures: Late Campanian through Paleocene. *Paleoceanography*, 2, 21-48.
- 1987 - Barrera. E., and Savin, S.M. Effect of sample preparation on the $\delta^{18}\text{O}$ value of fine-grained calcite. *Chemical Geology (Isotope Geoscience Section)* 66, 301-305.
- 1988 - Kalhan, S.C., Gilfillan, C.A., Tserng, K-Y., and Savin, S.M. Glucose-alanine relations in normal human pregnancy. *Metabolism*, 37, 152-158.
- 1988 - Girard, J.P., Aronson, J.L., and Savin, S.M. Separation, K/Ar dating and $^{18}\text{O}/^{16}\text{O}$ ratio measurements of diagenetic K-feldspar overgrowths: An example from the lower cretaceous arkoses of the Angola Margin. *Geochim. Cosmochim. Acta*, 52, 2207-2214.
- 1988 - Savin, S.M. and Lee, M. Isotopic studies of phyllosilicates. In S.W. Bailey, editor, *Hydrous Phyllosilicates, Reviews in Mineralogy*, 19, 189-224.
- 1988 - Kalhan, S.C., Hertz, R.H., Rossi, K.Q., and Savin, S.M. Glucose-alanine relationship in diabetes in human pregnancy. *Metabolism*, 37, 152-158.
- 1989 - Woodruff, F., and Savin, S.M. Miocene deep water oceanography. *Paleoceanography*, 4, 87-140.
- 1989 - Lee, M., Aronson, J.L., and Savin, S.M. Isotopic study of diagenesis of the Permian Rotligendes Sandstone, North Sea. *Amer. Assoc. Petrol. Geol. Bull.*, 73, 195-215.
- 1989 - Girard, J-P., Savin, S.M. and Aronson, J.L. Diagenesis of the lower cretaceous arkoses of the Angola Margin: Petrologic, K/Ar dating and $^{18}\text{O}/^{16}\text{O}$ evidence. *Jour. Sed. Petrol.*, 59, 519-538.
- 1989 - Savin, S.M., and Woodruff, F. Isotopic evidence for temperatures and productivity in the Tertiary oceans. In W.C. Burnett and S.R. Riggs, eds, *Phosphate Deposits of the World Vol. III: Genesis of Neogene to Modern Phosphorites*, Cambridge Univ. Press, 241-259.
- 1990 - Woodruff, F., Savin, S.M., and Abel, L.J. Miocene Benthic foraminiferal oxygen and carbon isotopes, Site 709, Indian Ocean. *Proc. Deep Sea Drilling Project*, 115, 519-528.

- 1991 - Feng, X., and Savin, S.M. Oxygen isotope studies of zeolites: Stilbite, analcime, heulandite and clinoptilolite I. Analytical techniques. *Geoch. Soc. Spec. Publ.*, 3, 271-283.
- 1991 - Woodruff, F., and Savin, S.M. Mid-Miocene isotope stratigraphy in the deep sea: High resolution correlation, paleoclimatic cycles and sediment preservation. *Paleoceanography*, 6, (6), 755-806.
- 1991 - Kalhan, S.C., Hertz, R.H., Rossi, K.O., and Savin, S.M. Glucose-alanine relationship in diabetes in human pregnancy, *Metabolism*, 40, 629-633.
- 1992 - Clauer, N., Savin, S.M., and Chaudhuri, S. Isotopic compositions of clay minerals as indicators of the timing and conditions of sedimentation and burial diagenesis. In N.Clauer and S. Chaudhuri, eds., *Isotopic Signatures and Sedimentary Records*, Springer-Verlag, 239-286.
- 1993 - Giral, S., Savin, S.M., Girard, J-P., and Nahon, D.B. Oxygen isotope geochemistry of kaolinites from lateritic profiles: Implications for pedology and paleoclimatology, *Chemical Geology*, 107, 237-240.
- 1993 - Feng, X., and Savin, S.M. Oxygen isotope studies of zeolites: stilbite, analcime, heulandite, and clinoptilolite II. Kinetics and mechanisms of isotopic exchange between zeolites and water vapor, *Geochim. Cosmochim. Acta*, 57, 4219- 4238.
- 1993 - Feng, X., and Savin, S.M. Oxygen isotope studies of zeolites: stilbite, analcime, heulandite, and clinoptilolite III. Oxygen isotope fractionation between stilbite and water or water vapor, *Geochim. Cosmochim. Acta*, 57, 4239-4247.
- 1993 - Girard, J-P., Flicoteaux, R., Walter, A-V., Savin, S.M. and Nahon, D. Oxygen and carbon isotopic composition of structural carbonate in weathering apatites from laterites, *Applied Geochemistry*, 8(6), 617-632.
- 1994 - Kalhan, S.C., Denne, S.C., Patel, D.M., Nuamah, I.F., and Savin, S.M. Leucine kinetics during a brief fast in diabetes in pregnancy, *Metabolism*, 43(3), 378-384.
- 1996 - Girard, J-P., and Savin, S.M. Intracrystalline fractionation of oxygen isotopes between hydroxyl and non-hydroxyl sites in kaolinite measured by thermal dehydroxylation and partial fluorination, *Geochim. Cosmochim. Acta*, 60 (3) 469-487.
- 1997 - Elliott, W.C., Savin, S.M., Dong, H., and Peacor, D.R. A paleoclimate interpretation derived from pedogenic clay minerals from the Piedmont Province, Virginia, *Chemical Geology*, 142, 201-211.
- 1997 - Barrera, E., Savin, S.M., and Thomas, E. Evidence for thermohaline circulation reversals controlled by sea level change in the latest Cretaceous, *Geology*, 25, 715-718.
- 1998 - Savin, S.M. and Hsieh, J.C.C. The hydrogen and oxygen isotope geochemistry of pedogenic clay minerals: Principles and theoretical background, *Geoderma*, 82, 227-253.

- 1998 - Hsieh, J.C.C., Savin, S.M., Kelly, E.F., and Chadwick, O.A., Measurement of soil water ^{18}O values by direct equilibration of soil samples with CO_2 , *Geoderma*, 82, 255-268.
- 1998 - Hsieh, J.C.C., Chadwick, O.A., Savin, S.M., and Kelly, E.F., Oxygen isotopic composition of soil water: Quantifying evaporation and transpiration, *Geoderma*, 82, 269-293.
- 1998 - Raghavan, C.V., Super, D.M., Chatburn, R.L., Savin, S.M., Farnaroff, A.A., and Kalhan, S.C., Estimation of total body water in very-low-birthweight infants using anthropometry with and without bioelectric impedance and $\text{H}_2[^{18}\text{O}]$, *American Journal of Clinical Nutrition*, 68, 668-674.
- 1998 - Giral-Kacmarcik, S., Savin, S.M., Nahon, D.B., Girard, J-P., Lucas, Y., and Abel, L.J. Oxygen isotope geochemistry of kaolinite in laterite-forming processes, Manaus, Amazonas, Brazil, *Geochim. Cosmochim. Acta*, 62, 1865-1879.
- 1998 - Kalhan, Satish, C., Rossi, K.Q., Gruca, L.L., Super, D.M. and Savin, S.M., Relation between transamination of branched chain amino acids and urea synthesis: evidence from human pregnancy. *American Journal of Physiology*, 275 (Endocrinology and Metabolism), E423-E431.
- 1999 - Bechtel, A., S.M. Savin, and S. Hoernes. Oxygen and hydrogen isotopic composition of clay minerals of the Bahloul Formation in the region of the Bou Grine zinc-lead ore Deposit (Tunisia): evidence for fluid-rock interaction in the vicinity of salt dome cap rock. *Chemical Geology*, 156, 191-207.
- 1999 - Miller, K.G., Barrera, E., Olsson, R.K., Sugarman, P.J., Browning, J.V., and Savin, S.M., Ice drives early Maastrichtian eustasy: Global $\delta^{18}\text{O}$ and New Jersey sequences, *Geology*, 27, 783-786.
- 1999 - Barrera, E.B. and Savin, S.M., Evolution of late Campanian-Maastrichtian marine climates, *in* Barrera, E., and Johnson, C., *The Evolution of Cretaceous Ocean-Climate Systems*, Geological Society of America, Special Paper 332, 245-282.
- 2002 – Hailemichael, M., Aronson, J., and Savin, S.M. Delta ^{18}O in mollusk shells from Pliocene Lake Hadar and modern Ethiopian lakes: implications for the history of the Ethiopian Monsoon, *Paleogeography, Paleoclimatology, Paleocology* 186, 81-99.
- 2003 – Ylagan, R.F., Alataner, S.P., Savin, S.M., Aronson, J.L., Belkin, H.E., and Pozzuoli, A., Geothermometry, geochronology, and mass transfer associated with hydrothermal alteration of a rhyolitic haloclastite from Ponza Island, Italy, *Geochimica et Cosmochimica Acta*, 67, 275-288.
- 2003 – Ziegler, K., Hsieh, J.C.C., Chadwick, O.A., Kelly, E.F., Hendricks, D.M., and Savin, S.M., Halloysite as a kinetically controlled end product of arid-zone basalt weathering, *Chemical Geology*, 202, 461-478.

- 2004 – Alexandre, A., Meunier, J.-D., Llorens, E., Hill, S.M., and Savin, S.M., Investigation of silcrete formation: oxygen isotope ratio of silcrete quartz cement, Lake Eyre Basin (Australia), *Chemical Geology*, 211, 261-274.
- 2005 – Guliy, V.N., Mitchell, G.G, and Savin, S. M., Полигенность месторождений докембрия: апатит-карбонатные руды Алданского щита (Polygenetic origin of Precambrian beds: apatite-carbonate ores of the Aldan Shield). *Ukrainian Geologist*, 2, 56-67.
- 2008 – Aronson, J., Halle Michael, M., and Savin, S.M., Hominid environments at Hadar from paleosol studies in a framework of Ethiopian climate change. *Journal of Human Evolution*, 55, 532-550.

BOOKS

- 1993 - Swart, P., Lohmann, K.C., McKenzie, J., and Savin, S.M., editors. *Climate Change in Continental Isotopic Records*, American Geophysical Union, Geophysical Monograph, v. 78, American Geophysical Union.
- 1995 - Thurman, Harold V. And Savin, S.M. *Laboratory Exercises in Oceanography*, Prentice-Hall.

CONFERENCE AND BOOK REVIEWS

- 1980 - Pre-Pleistocene Climates. *Nature*, 286, 553-554.
- 1983 - Savin, S.M. Stable Isotopes, Proc. Fourth Intl. Conference, H.L. Schmidt et al., *Geochim. Cosmochim. Acta*, 47, 2297-2298.
- 1985 - Savin, S.M. Stable Isotopes in Sedimentary Geology, M. Arthur et al., *Economic Geology*, 83, 522.
- 1988 - Savin, S.M. Mesozoic and Cenozoic Oceans, K.J. Hsu, ed., *Economic Geology*, 83, 1296-1297.
- 1990 - Savin, S.M. Isotope Chronostratigraphy: Theory and Methods, D.F. Williams and W.E. Full, eds., *Geochim. Cosmochim. Acta*, 54, 2346.

FIELD GUIDE CHAPTERS

- 1983 - Eggleston, T.L., Norman, D.I., Chapin, C.E., and Savin, S.M. Geology, alteration and genesis of this Luis Lopez Manganese District, New Mexico. *New Mexico Geological Society Guidebook*, 34th Field Conference, 241-246.

POPULAR ARTICLES

- 1987-Tevsz, M.J., and Savin, S.M. Lake shores in retreat. *Gamut*, 21, 21-35.
- 1988-Savin, S.M. The great earthquake of '86, *Gamut*, 23, 52-60.

TELEVISION PRODUCTIONS

- 1985 - *The Lake at our Doors*- (Co-produced with M.Tevezs, Cleveland State University) Broadcast by WEWS-TV (Cleveland), 1985, over commercial cable channels, by Toledo educational TV station and by WVIZ (Cleveland Public Television). Included in WVIZ-TV cable instructional network to area educational institutions.
- 1985 - *The Legacy of the Glacier*- (Co-produced with M.Tevezs, Cleveland State University) Broadcast by WVIZ. Included in WVIZ-TV cable instructional network to area educational institutions.