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PROFESSIONAL EXPERIENCE

- 2007-2009 Consulting Scholar, Mugello Valley Archaeological Project, sponsored by Southern Methodist University, Franklin & Marshall College, and University of Pennsylvania Museum, Vicchio, Italy.
- 2006-2009 Member, Professional Standards Committee, Franklin & Marshall College.
- 2005-2006 Chairperson, Department of Geosciences, Franklin & Marshall College.
- 1997-2001 Chairperson, Department of Geosciences, Franklin & Marshall College.
- 1996- Professor, Department of Geosciences, Franklin & Marshall College.
- 1990-1996 Associate Professor, Department of Geosciences, Franklin & Marshall College.
- 1983-1990 Assistant Professor, Department of Geology, Franklin & Marshall College.
Taught courses in solid earth geophysics; exploration geophysics; introductory geology; environmental geology; quantitative geology; independent studies; Fundamental Physics II.
Research in archaeomagnetic secular variation; archaeomagnetic dating; environmental geophysics; archaeological prospecting; Quaternary paleomagnetism of clinkers; radiocarbon geophysics.
- 1982 Graduate Research Assistant, University of Arizona.
- 1974-1980 Research in paleomagnetism and radiocarbon geophysics.
Supervised the paleomagnetism laboratory on a day-to-day basis, and directed lab assistants.
- 1980-1981 Instructor, Department of Geosciences, University of Arizona.
Taught course in paleomagnetism. Co-taught courses in Geophysical Theory of Plate Tectonics; Geophysical Field Methods.
- 1977-1980 Geophysicist, Newmont Exploration Ltd., Tucson, Arizona.
Developed FORTRAN computer programs on a UNIVAX computer for data base management, graphics, and modeling of geophysical data.
- 1975 Geophysicist (Summer), Amoco Production Co., Denver, Colorado.
Compiled data on seismic velocities.
- 1972-1974 Associate Engineer, Fairchild Space and Electronics Co., Germantown, Maryland.
Member of the Space Power Subsystems group. Responsible for revising, maintaining, and running the group's FORTRAN computer programs on an IBM 370 system. Helped develop electronic testing units.

ACADEMIC BACKGROUND

- 1982 Ph.D. Geophysics, University of Arizona.
Dissertation: Archaeomagnetic Secular Variation of Directions and Paleointensities in the American Southwest.
- 1977 M.S. Geophysics, University of Arizona.
Thesis: An Archaeomagnetic Paleointensity Study of Some Hohokam Potsherds from Snaketown, Arizona.

PUBLICATIONS

Rob Sternberg and Sara Bon-Harper. Geoarchaeology of the Podere Funghi, Mugello Valley Archaeological Project, Italy. *Keck Symposium Abstract Volume*; Keck Geology Consortium Annual Meeting, Franklin & Marshall College, April 16-18, 2009, forthcoming.

Rob Sternberg. Magnetic Signatures of Rocks and Soils Affected by Burning Coal Seams. Accepted for *Coal Fires Atlas of the World*, Glenn B. Stracher, Ellina V. Sokol, and Anupma Prakash, eds., Elsevier, forthcoming.

Rob Sternberg and Sara Bon-Harper. Intra-Site Testing Using Magnetometry and Shovel Test Pits in the Podere Funghi near Poggio Colla (Florence, Italy). Accepted for *Proceedings of the 37th International Symposium on Archaeometry*; 12-16 May 2008; Siena, Italy, forthcoming.

Rob Sternberg, Archaeomagnetism in *Archaeometry – A semicentennial review*. *Archaeometry*, 50(6), 983-998, 2008.

Rob Sternberg, Andrew Sparks, and Oscar Knutson. Magnetic surveys over burning and remediated coal seam fires in western North Dakota. *Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental Problems*. SAGEEP 21, DOI:10.2113/1.2963279, 389-398. 2008.

Rob Sternberg and Egon H.E. Lass. An archaeomagnetic study of two hearths from Kebara Cave, Israel. In *Kebara Cave, Mt. Carmel, Israel: The Middle and Upper Paleolithic Archaeology, Part I*, Ofer Bar-Yosef and Liliane Meignen, eds., American School of Prehistoric Research, Bulletin 49, Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, 123-130, 2007.

Rob Sternberg and Jeffrey L. Eighmy. Simulations of the statistical archaeomagnetic dating method. In *Proceedings of the 34th International Symposium on Archaeometry*; 3-7 May 2004; Zaragoza, Spain, 97-102, 2006.

Stacey Lengyel and Rob Sternberg. Historic archaeomagnetic results from the eastern U.S., and comparison with secular variation models. In *Timescales of the Geomagnetic Field*, James E.T. Channell, Dennis V. Kent, William Lowrie, and Joseph G. Meert, eds. American Geophysical Union Geophysical Monograph Series 145 Washington, D.C., 267-277, 2004.

Sternberg, Robert. Archaeomagnetic research. In *Tel Yin'am I: The Late Bronze Age, Excavations at Tel Yin'am, 1976-1989*, Harold A. Liebowitz, ed., Texas Archeological Research Laboratory, Studies in Archaeology 42, University of Texas, Austin, 265-273, 2003.

R. S. Sternberg. Magnetic properties and archaeomagnetism. In *Handbook of Archaeological Sciences*, D. R. Brothwell, and A. M. Pollard, eds., John Wiley & Sons, Chichester, 73-79, 2001.

Andrew P. de Wet, Rob Sternberg, and Jeff Winick. Interpreting land-use history by integrating aerial photographs, near-surface geophysics, and field observations into a digital database. *Environmental and Engineering Geoscience Journal*, 5(2), 235-254, 1999.

Rob Sternberg, Egon Lass, Eric Marion, Kaushik Katari, and Matthew Holbrook. Anomalous archaeomagnetic directions and site formation processes in Israel. *Geoarchaeology*, 14(5), 415-439, 1999.

Rob Sternberg. Introduction: Magnetism and site formation processes in archaeology—2. *Geoarchaeology*, 14(5), 375, 1999.

Andrew P. de Wet and Rob Sternberg. Geophysical investigation of an abandoned landfill. in *The Symposium on the Application of Geophysics to Engineering and Environmental Problems Conference Proceedings*, Michael H. Powers, Lynn Cramer and Ronald S. Bell, eds.; Oakland, March 14-18; Environmental and Engineering Geophysical Society, Wheat Ridge, Colorado, 143-152, 1999.

Rob Sternberg. Introduction: Magnetism and site formation processes in archaeology. *Geoarchaeology*, 13(1), 1, 1998.

R. S. Sternberg. Archaeomagnetic dating. In *Chronometric Dating in Archaeology*, M. Aitken and R. E. Taylor, eds., Plenum Press, New York, 323-356, 1997.

- R.S. Sternberg, W.L. Deaver, E.A. Kuter, and A.L. Kiley. A relational North American archaeomagnetic database. *Journal of Geomagnetism and Geoelectricity*, 49, 519-522, 1997.
- Robert S. Sternberg and Randall H. McGuire. Summary of Archaeomagnetic Work at Wind Mountain. Appendix 3, In *Mimbres Mogollon Archaeology*, Anne I. Woosely and Allan J. McIntyre, eds., University of New Mexico Press, Albuquerque, 1996, p. 329-333.
- R. S. Sternberg. Physics and archaeology. In *Encyclopedia of Applied Physics*, vol. 14, George L. Trigg, ed., VCH Publishers, Weinheim, 69-85, 1996.
- R. S. Sternberg. Use of a laptop computer and spreadsheet software for geophysical surveys. In *Microcomputers in Geology*, H. Kuerzl and D. F. Merriam, eds., Pergamon Press, Oxford, 93-107, 1992.
- R. S. Sternberg and P.E. Damon. Implications of dipole moment secular variation from 50-10 Ka for the radiocarbon record. *Radiocarbon*, 34(2), 189-198, 1992.
- R. S. Sternberg. Radiocarbon fluctuations and the geomagnetic field. In *Radiocarbon After Four Decades*, R.E. Taylor, A. Long, and R. Kra, eds., Springer Verlag, New York, 93-116, 1992.
- R. S. Sternberg, R. C. Lange, B. A. Murphy, W. L. Deaver, and L. S. Teague. Archaeomagnetic dating at Las Colinas, Arizona, USA. *Archaeometry '90*, Proceedings of the 27th International Symposium on Archaeometry, E. Pernicka and G.A. Wagner, Birkhäuser Verlag, Basel, 597-606, 1991.
- J. L. Eighmy and R. S. Sternberg (editors). *Archaeomagnetic Dating*. University of Arizona Press, Tucson, 1990, 450 p.
- R. S. Sternberg. The geophysical basis of archaeomagnetic dating. In *Archaeomagnetic Dating*, *ibid.*
- R. S. Sternberg and R. H. McGuire. Techniques for constructing secular variation curves and for interpreting archaeomagnetic dates. In *Archaeomagnetic Dating*, *ibid.*
- R. S. Sternberg and R. H. McGuire. Archaeomagnetic secular variation in the American Southwest, A.D. 700-1450. In *Archaeomagnetic Dating*, *ibid.*
- P. E. Damon and R. S. Sternberg. Global production and decay of radiocarbon. *Radiocarbon*, 31(3), 697-703, 1989.
- R. S. Sternberg. Archaeomagnetic paleointensity in the American Southwest during the past 2,000 years. *Physics of the Earth and Planetary Interiors*, 56, 1-17, 1989.
- R. S. Sternberg. Secular variation of archaeomagnetic direction in the American Southwest, A.D. 750-1425. *Journal of Geophysical Research*, 94, 527-546, 1989.
- R. S. Sternberg. Archaeomagnetism and magnetic anomalies in the American Southwest. *Geophysics*, 52, 368-371, 1987.
- V. Markgraf, J. P. Bradbury, R. M. Forester, G. Singh, and R. S. Sternberg. San Agustin Plains, New Mexico: age and paleoenvironmental potential reassessed. *Quaternary Research*, 22, 336-343, 1984.
- R. S. Sternberg and P. E. Damon. Atmospheric radiocarbon: implications for the geomagnetic dipole moment. *Radiocarbon*, 25, 239-248, 1983.
- P. E. Damon, C. Radnell, and R. Sternberg. Modeling of atmospheric radiocarbon fluctuations for the past three centuries. *Radiocarbon*, 25, 249-258, 1983.
- R. Sternberg. Archaeomagnetism of baked clays: results from SW USA. *Geomagnetism of Baked Clays and Recent Sediments*. K. M. Creer, C. E. Barton, and P. Tucholka, eds., Elsevier, Amsterdam, 158-167, 1983.
- V. Markgraf, J. P. Bradbury, R. M. Forester, W. McCoy, G. Singh, and R. Sternberg. Paleoenvironmental reassessment of the 1.6-million-year-old record from San Agustin Plains, New Mexico. *New Mexico Geological Society Guidebook*, 34th Field Conference, Socorro Region II, 291-297, 1983.
- G. Lazear, P. E. Damon, and R. Sternberg. The concept of DC gain in modeling secular variations in atmospheric ^{14}C . *Radiocarbon*, 22, 318-327, 1980.
- J. L. Eighmy, R. S. Sternberg, and R. F. Butler. Archaeomagnetic dating in the American Southwest. *American Antiquity*, 45, 507-517, 1980.
- R. S. Sternberg and P. E. Damon. Sensitivity of radiocarbon fluctuations and inventory to geomagnetic and reservoir parameters. In *Radiocarbon Dating*, R. Berger and H. Suess, eds., Univ. California Press, Berkeley, 691-717, 1979.

R. S. Sternberg and P. E. Damon. Re-evaluation of possible historical relationship between magnetic intensity and climate. *Nature*, 278, 36-38, 1979.

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REPORTS

Elizabeth S. Friedman and Rob Sternberg. Artifacts, Archaeometry, and ASOR, 2002-2003 and beyond. *Society for Archaeological Sciences Bulletin*, 26(3/4), 6-7, Winter, 2003.

Rob Sternberg. The Society for Archaeological Sciences: The first 25 years (more or less). *Society for Archaeological Sciences Bulletin*, 26(2), 1, 7-8, Summer, 2003.

R. Sternberg. Book Reviews – *The Practical Impact of Science on Near Eastern and Aegean Archaeology* (Pike and Gitin). *Society for Archaeological Sciences Bulletin*, 24(3/4), 27-30, Winter, 2001.

R.S. Sternberg. Daniel Wolfman: 1939-1994 [obituary], *Society for Archaeological Sciences Bulletin*, 19(3/4), 5-6, 1996.

R.S. Sternberg. Conference report: Science & archaeology, *Society for Archaeological Sciences Bulletin*, 19(3/4), 7-8, 1996.

Rob Sternberg and Randy Richardson. Keck workshop on teaching geophysics, *Keck Symposium Abstract Volume*; Keck Geology Consortium Annual Meeting, College of Wooster, April 10-12, 1997, p. 1-6.

R. Sternberg. Symposium Report—Geophysics and Archaeology; American Geophysical Union, Baltimore, 23-27, 1994. *Society for Archaeological Sciences Bulletin*, 17(4), 4-5, Oct.-Dec., 1994.

R. Sternberg and J. Burton. Meeting Review - 58th Annual Meeting of the Society for American Archaeology, Archaeological Science Symposium. *Society for Archaeological Sciences Bulletin*, 16(3), 10-12, July-September, 1993.

R. S. Sternberg. Meeting Review - International Symposium on Archaeometry, 1992 (Dating). *Society for Archaeological Sciences Bulletin*, 15(4), 11-12, October-December, 1992.

R. Sternberg. Book Reviews – *Current Scientific Techniques in Archaeology* (Parkes), and *Archaeometry: An Introduction to Physical Methods in Archaeology and the History of Art* (Leute). *Society for Archaeological Sciences Bulletin*, 13(4), 4-8, October-December, 1990.

R. Sternberg, G. Harbottle and J. Burton. Meeting Review - International Symposium on Archaeometry, 1990. *Society for Archaeological Sciences Bulletin*, 13(3), 4-5, July-September, 1990.

R. S. Sternberg. Archeomagnetic dating, In *McGraw-Hill Yearbook of Science and Technology 1991*, S. P. Parker, ed., McGraw-Hill, New York, 93-95, 1990 [popular].

R. S. Sternberg and R. H. McGuire. Summary of Archaeomagnetic Work for the Pittsburg and Midway Project. In *Anasazi and Navajo Land Use in the McKinley Mine Area Near Gallup, New Mexico*. Office of Contract Archaeology, Univ. of New Mexico, Albuquerque, 1982.

R. S. Sternberg, G. Harbottle, and J. Burton. Meeting Review - International Symposium on Archaeometry. *Society for Archaeological Sciences Bulletin*, 13(3), 4-5, July-September, 1990

W. Ewen, D. Rusta, and R. Sternberg. Power subsystem simulation studies for the TIMATION IIIA spacecraft. *Ninth Intersociety Energy Conversion Engineering Conference Proceedings*, American Society of Mechanical Engineers, 26-35, 1974.

ABSTRACTS AND CONFERENCE PRESENTATIONS

I. Weaver, R. Sternberg, and R.H. Tykot. Magnetic fingerprinting of Central Mediterranean obsidian source groups. American Geophysical Union 2009 Joint Assembly, Toronto, May 24-27, 2009.

Patricia E. Gible and Robert S. Sternberg. Telling time with bricks: Archeomagnetic dating of distilling features at the Alexander Schaeffer Farm. Council for Northeast Historical Archaeology, St. Mary's City, Maryland, Oct. 24-26, 2008.

Rob Sternberg, Sara Bon-Harper, and Erin Bradley. Intra-site testing using magnetometry and shovel test pits in the Podere Funghi near Poggio Colla (Florence, Italy). International Symposium on Archaeometry, Siena, Italy, May 12-16, 2008.

Andrew Sparks, Rob Sternberg, and Oscar Knudtson. Magnetic surveys over burning and remediated coal seam fires in western North Dakota. Symposium on the Application of Geophysics to Engineering and Environmental Problems, Philadelphia, April 6-10, 2008.

Rob Sternberg. The IGY and American Popular Culture. International Union of Geodesy and Geophysics, Perugia, Italy, July 2-13, 2007.

S. Lengyel and R. Sternberg. An Assessment of Archaeomagnetic Contemporaneity. Society for American Archaeology, Austin, TX, April 25-29, 2007.

M Gold, T. Eaton, R. Sternberg, P. Rubin, E. Klosko, and B. Brennan. Ambient noise and site response characteristics at the broadband seismographic stations of the Lamont Cooperative Seismographic Network. Seismological Society of America, Eastern Section, Ottawa, Oct. 1-4, 2006.

Rob Sternberg and Egon Lass. Archaeomagnetism at Ashkelon: Implications for geomagnetic secular variation and for archaeological site formation processes. American Schools of Oriental Research Annual Meeting, Philadelphia, Nov. 16-19, 2005.

Isaac Weaver, Rob Sternberg, and Robert H. Tykot. Magnetic Properties Of Central Mediterranean Obsidians: An Archaeological Fingerprint? Geological Society of America, Northeastern Section, Saratoga Springs, NY, March 14-16, 2005.

Rob Sternberg and Caitlin Lippincott. Magnetic Surveys Over Clinkers and Coal Seam Fires in Western North Dakota. Geological Society of America, Denver, Nov. 7-10, 2004.

Rob Sternberg and Jeffrey L. Eighmy. Simulations of the statistical archaeomagnetic dating method. International Symposium on Archaeometry, Zaragoza, Spain, May 3-7, 2004.

Allan Gilbert and Rob Sternberg. Historical Geoarchaeology at the Rose Hill Manor Site, Bronx, NY. Society for American Archaeology, Quebec, March 31-April 4, 2004.

Rob Sternberg, Allan S. Gilbert, and Stephen Crabtree. A pilot paleointensity study of 19th and 20th century bricks from the New York City area. Am. Geophys. Union Chapman Conference on Timescales of the Geomagnetic Field., Gainesville, Florida, March 9-11, 2003.

E. Figueroa, R.S. Sternberg, J.A. Delle, N.D. Lawrence, B.G. McAdoo, and M.E. Savina. Soil Magnetism and Magnetic Anomalies at the Marshall's Pen Archaeological Site, Mandeville, Jamaica. Am. Geophys. Union Spring Mtg., Washington, D.C., May 28-May 31, 2002.

Rob Sternberg. An Undergraduate Course on Archaeometry at a Liberal Arts College. 33rd International Archaeometry Symposium, Amsterdam, April 22-26, 2002.

Rob Sternberg, James Delle, Matt Mittenthal, Mary Savina, Brian McAdoo, Susan DeYoung, Angela Hutchison, Aaron Shear. An integrated magnetism and susceptibility survey at an 18th century slave village at Marshall's Pen, Mandeville, Jamaica. Archaeometry 2000, Mexico City, May 14-19, 2000.

Robert S. Sternberg, James A. Delle, Mary E. Savina, Brian G. McAdoo. Delineation of a Jamaican Slave Village using field geophysics. *13th Keck Research Symposium in Geology Proceedings*, p. 267-271, Whitman College, April 13-15, 2000.

Rob Sternberg, Brian McAdoo, Mary Savina, James Delle. Geophysical Prospection at Marshall's Pen. Society for American Archaeology Annual Meeting, Philadelphia, April 5-9, 2000.

Matt Mittenthal, Rob Sternberg, Mary Anne Levine, Andy deWet. Magnetic survey of an Archaic Native American village near Alpine, New York. Geological Society of America, Northeastern Section, New Brunswick, New Jersey, March 13-15, 2000; *Geological Society of America Abstracts with Programs*, 32(1), 47, 2000.

Jason Stine, Elizabeth Fish, Rob Sternberg, Don Wise. Tracing the Fishing Creek Metabasalt on land and under the Susquehanna River of southeastern Pennsylvania using GPS-controlled magnetic surveys. Geological Society of America, Northeastern Section, New Brunswick, New Jersey, March 13-15, 2000; *Geological Society of America Abstracts with Programs*, 32(1), 47, 2000.

Rob Sternberg. Environmental Magnetism Workshop. *12th Keck Research Symposium in Geology Proceedings*, p. 8-10, Carleton College, April 8-10, 1999.

Rob Sternberg. The American Southwest archaeomagnetic secular variation curve: History, applications and prospects. 24th General Assembly European Geophysical Society, April 19-23, The Hague. *Geophysical Research Abstracts* 1(1), 161, 1999 [invited].

Rob Sternberg, Michael Middleton, Carrie Bruno, Will Burdick, Theresa Franz, Kate Jacovino, Amanda Mahoney, Jess Martin, Paul Rollins, Jason Shellenhamer and Sheila Wille. Geophysical surveys at the Breneman Site (36LA53), Pennsylvania. Middle Atlantic Archaeological Conference,

Harrisburg, Pennsylvania, April 9-11, 1999.

S.A. Tavernier, R.S. Sternberg, R.C. Smith II, and D.U. Wise. A magnetic survey of the Fishing Creek Metabasalt, Lancaster County, Pennsylvania. 34th Annual Meeting, GSA Northeastern Section, Providence, Rhode Island, March 22-24; *Geological Society of America Abstracts with Programs*, 31(2), 45, 1999.

Andrew P. de Wet and Rob Sternberg. Integrated geophysical investigation of an abandoned landfill. in *The Symposium on the Application of Geophysics to Engineering and Environmental Problems Conference Proceedings*, Oakand, March 14-18, 1999.

Rob Sternberg, Mike Jackson, Pete Solheid, Tekla Harms, Bob Varga, Megan Murphy and Karyn Novakowski. The Keck Geology Consortium Workshop on Environmental Magnetism at the Institute for Rock Magnetism. 12th Northeastern Paleomagnetic and Rock Magnetic Workshop. Lehigh University, Oct. 17, 1998.

David Dahari, Andrew de Wet, and Rob Sternberg. Characterization of sub-surface features at a former industrial site using non-invasive near-surface geophysical techniques. Am. Geophys. Union Spring Mtg., May 26-May 29, Boston. *EOS, Trans. AGU*, 79(17), Spring Meet. Suppl., S64-S65, 1998.

R.S. Sternberg and E.H.E. Lass. Effects of archaeological site formation processes and their effects on archaeomagnetic results from Israel. 63rd Annual Meeting of the Society for American Archaeology, March 25-29, 1998, Seattle.

Rob Sternberg. Geomagnetism and paleomagnetism in the undergraduate classroom. 11th Northeastern Paleomagnetic and Rock Magnetic Workshop. NASA Goddard Space Flight Center, Nov. 8, 1997.

Rob Sternberg. Seismology exercises using NEIC CD-ROMs for undergraduate geoscience majors. GSA Annual Mtg., Oct. 20-23, Seattle. *GSA Abstracts with Programs*, 29(6), A-368, 1997.

Andrew P. de Wet, Rob Sternberg, and Jeffrey A. Winick. Integrating near-surface geophysics and a GIS database for interpreting land-use history. GSA Annual Mtg., Oct. 20-23, Seattle. *GSA Abstracts with Programs*, 29(6), A-448, 1997.

Rob Sternberg and Egon Lass. Archaeological site formation processes on archaeomagnetic results from Israel. 8th Scientific Assembly of the IAGA, August 4-15, 1997, Uppsala, Sweden.

Rob Sternberg, Bill Prothero, Mark Giorso, Mohan Ramamurthy, Randy Richardson, Jack Stanesco, Dorothy Stout, and Barbara Tewksbury. Spheres of Influence—How to Teach Earth Systems Science. Am. Geophys. Union Spring Mtg., May 26-May 30, Baltimore. *EOS, Trans. AGU*, 78(17), Spring Meet. Suppl., S52, 1997.

Jeffrey A. Winick, Andrew P. deWet, and Robert S. Sternberg. Near-surface geophysics: Helping to interpret land-use history. Geological Society of America, 32nd Annual Meeting, Northeastern Section. King of Prussia, Pennsylvania, March 17-19, 1997.

Cathy Seyler, R. Ramanantoandro, and R. Sternberg. Structural interpretation of a magnetic anomaly over the Wissahickon Schist (Conestoga Quadrangle, Pennsylvania). Geological Society of America, 32nd Annual Meeting, Northeastern Section. King of Prussia, Pennsylvania, March 17-19, 1997.

Dawn James, Jim Kauahikaua, and Rob Sternberg. Using geophysical magnetic surveying methods in locating a buried Hawaiian fishpond wall. Geological Society of America, 32nd Annual Meeting, Northeastern Section. King of Prussia, Pennsylvania, March 17-19, 1997.

Rob Sternberg, Egon Lass, and Jeff Winick. Archaeomagnetism of Early Arab Period samples from Bir Abu Matar, Israel. 10th Northeastern Paleomagnetic and Rock Magnetic Workshop. University of Delaware, Newark, Nov. 9, 1996.

Rob Sternberg, Will Sheppard, Ann Chernoff, Adrienne Kiley, Kathy Jacobs, Matt Hall, Dawn James, and Rick McDonough. A total magnetic study at two historic potteries in Waynesboro, Pennsylvania, USA. International Symposium on Archaeometry. University of Illinois, Champaign-Urbana, May 20-24, 1996.

William L. Deaver, Barbara A. Murphy, and Robert S. Sternberg. The Classic period of central and southern Arizona: An archaeomagnetic timeline of events. 61st Annual Meeting, Society for American Archaeology, New Orleans, April 10-14, 1996.

R. Sternberg. Workshop on secular variations in the rates of production of cosmogenic nuclides on Earth: Paleomagnetic averages of geomagnetic latitude. Workshop on secular variations in the rates of production of cosmogenic nuclides on Earth, Santa Fe, 2-5 Feb. 1996; *Radiocarbon*, 38(1),

169-170, 1996 [invited].

Ann Chernoff, Rob Sternberg, Will Sheppard, Matt Hall, Kathy Jacobs, Dawn James, and Rick McDonough. Archaeomagnetic studies at two historic potteries in Waynesboro, PA. 9th Northeastern Paleomagnetic and Rock Magnetic Workshop. University of Rhode Island, Kingston, Oct. 23, 1995.

Adrienne Kiley, Rob Sternberg, and Egon Lass. An archaeomagnetic study at Tel Megadim, Israel. 9th Northeastern Paleomagnetic and Rock Magnetic Workshop. University of Rhode Island, Kingston, Oct. 23, 1995.

R.S. Sternberg, W.L. Deaver, and E.A. Kuter. A microcomputer-based relational North American archaeomagnetic database. XXI General Assembly of the IUGG (International Union of Geodesy and Geophysics), July 2-14, 1995, Boulder, Colorado.

K. Katari and R. S. Sternberg. Secular variation analysis of archaeomagnetic data from Tel Ashkelon, Israel. Am. Geophys. Union Spring Mtg., May 30-June 2, Baltimore. *EOS, Trans. AGU*, 76(17), Spring Meet. Suppl., S99, 1995.

M.E. Savina, J. Williams, R. Wilson, E. Russell, R. Sternberg, J. Daly, and M. Greene. Integrated geomorphologic and geophysical studies of landscape evolution at archaeological sites: an example from Grevena, northwest Greece. Geological Society of America, Annual Meeting, Oct. 24-27, Seattle. *Abstracts with Programs, Geological Society of America Annual Meeting*, 26(7), A-93 1994.

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Elizabeth Kuter and Rob Sternberg. Progress report on the North American archaeomagnetic database. 8th Northeastern Paleomagnetic and Rock Magnetic Workshop. Franklin & Marshall College, Lancaster, Oct. 1, 1994.

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E. M. Marion, R. S. Sternberg, and E.H.E. Lass. Archaeomagnetic results from the Iron Age and early Persian Period at Tel Ashkelon, Israel. Am. Geophys. Union Spring Mtg., May 23-27, Baltimore. *EOS, Trans. AGU*, 75(16), 128, 1994.

R. Sternberg. Archaeomagnetism and archaeomagnetic dating. Geological Society of American Annual Meeting, Oct. 25-28, Boston. *Abstracts with Programs*, 25(6), A-187, 1993 [invited].

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X. G. Liu and R. Sternberg. Paleointensities and petrochemistry of clinkers from southeastern Montana. Am. Geophys. Union Spring Mtg., May 24-28, Baltimore. *EOS, Trans. AGU*, 74(16), 113, 1993.

R. S. Sternberg. ^{14}C , ^{10}Be , and the Late Quaternary dipole moment. 5th Northeastern Paleomagnetic and Rock Magnetic Workshop. University of Michigan, Ann Arbor, Oct. 17, 1992.

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- R. S. Sternberg and E. Lass. First Archaeomagnetic Directional Results From Israel. Int. Union of Geodesy and Geophysics, XX General Assembly, Vienna, Aug. 11-24, 1991.
- R. S. Sternberg and P.E. Damon. Implications of dipole-moment secular variation from 50,000 to 10,000 years for the radiocarbon record. 14th Int. Radiocarbon Conf., Tucson, May 20-24, 1991; *Radiocarbon*, 33(2), 247, 1991.
- R. Sternberg and W.L. Deaver. Symposium Co-organizers and moderators: Analysis of Large Archaeomagnetic Data Sets. Symposium organizers and moderators; 56th Annual Meeting, Society for American Archaeology, New Orleans, April 24-28, 1991.
- R. Sternberg, R.C. Lange and B.A. Murphy. A large archaeomagnetic data set from Las Colinas: Factors affecting precision and accuracy. 56th Annual Meeting, Society for American Archaeology, New Orleans, April 24-28, 1991.
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- Rob Sternberg. Paleomagnetism of clinker deposits in southeastern Montana. 2nd Northeastern Paleomagnetic and Rock Magnetic Workshop. Lehigh University, Bethlehem, PA, Sept. 24, 1988.
- R. S. Sternberg. A computerized archaeomagnetic database: plans and prospects. Symposium on New Trends in Geomagnetism. Co-sponsored by the Czechoslovak Acad. Sci. and IAGA, Prague, June 27-July 2, 1988.
- P. E. Damon and R. S. Sternberg. Global production and decay of radiocarbon. 13th Int. Radiocarbon Conf., Dubrovnik, Yugoslavia, June 20-25, 1988.
- R. S. Sternberg. Separation of the archaeomagnetic total vector field into dipole and nondipole components. Am. Geophys. Union Spring Mtg., Baltimore, May 16-20, 1988. *EOS, Trans. AGU*, 69, 341, 1988.
- S. J. Dunlap and R. S. Sternberg. Paleomagnetism of the Mesozoic York Haven diabase near Harrisburg, PA. Am. Geophys. Union Spring Mtg., Baltimore, May 16-20, 1988. *EOS, Trans. AGU*, 69, 337-338, 1988.
- Rob Sternberg. Archaeomagnetic secular variation. 1st Northeastern Paleomagnetic and Rock Magnetic Workshop. Syracuse University, Syracuse, NY, Sept. 26, 1987.
- R. Sternberg. Archaeomagnetic secular variation in southwestern U.S.A. Int. Union of Geodesy and Geophysics, XIX General Assembly, Vancouver, Canada, Aug. 9-22, 1987.
- R. Sternberg. Presentations on "Archaeomagnetic dating; the second generation," and "An integrated geophysical survey at the Hans Herr House, Lancaster County, Pennsylvania. GSA Penrose Conference on Archaeological Geology; St. Simons Island, Ga., December 6-11, 1986.
- R. Sternberg. Archaeomagnetism in the American Southwest. 54th Annual Mtg. of the Soc. of Exploration Geophysicists, Atlanta, December 2-6, 1984. *Geophysics*, 50, p. 290, 1985.
- R. Sternberg. Archaeomagnetic paleointensities in the American Southwest. Am. Geophys. Union Spring Mtg., Cincinnati, May 14-17, 1984. *EOS, Trans. AGU*, 65, 204, 1984.
- V. Markgraf, J. P. Bradbury, R. M. Forester, G. Singh, and R. Sternberg. Reassessment of the 1.6 m yr record from San Agustin Plains, New Mexico. 7th Biennial American Quaternary Association Mtg., Seattle, June 28-30, 1982.
- R. S. Sternberg and P. E. Damon. Atmospheric radiocarbon: implications for the geomagnetic dipole moment. 11th Int. Radiocarbon Conf., Seattle, June 20-26, 1982.
- P. E. Damon, C. Radnell, and R. Sternberg. Modeling of atmospheric radiocarbon fluctuations for the past three centuries. 11th Int. Radiocarbon Conf., Seattle, June 20-26, 1982.

- R. Sternberg. North American archaeomagnetic data. U.S. Geological Survey, Geomagnetic Workshop, Golden, Colorado, April 13-15, 1982. *EOS, Trans. AGU*, 63, 650, 1982.
- R. H. McGuire and R. S. Sternberg. A revision of the virtual geomagnetic pole curve for the US Southwest (AD 1100-1400) and its implications for archaeomagnetic dating. 47th Ann. Mtg., Soc. Am. Archaeology, Minneapolis, April 13-18, 1982.
- R. S. Sternberg and R. H. McGuire. Archaeomagnetic secular variation in the American Southwest. Am. Geophys. Union Fall Mtg., San Francisco, December 7-11, 1981. *EOS, Trans. AGU*, 62, 852, 1981.
- R. Sternberg and P. E. Damon. A finite-difference solution for the radiocarbon dipole moment. Am. Geophys. Union Spring Mtg., Baltimore, May 25-29, 1981. *EOS, Trans. AGU*, 62, 272, 1981.
- R. Sternberg and R. H. McGuire. An archaeomagnetic paleointensity test of Hohokam chronologies. 21st Symposium for Archaeometry, Brookhaven National Laboratory, N. Y., May 18-22, 1981.
- R. S. Sternberg, R. F. Butler, and R. H. McGuire. Some paleomagnetic considerations for archaeomagnetic dating. 45th Ann. Mtg., Soc. Am. Archaeology, Philadelphia, May 1-3, 1980.
- R. H. McGuire, R. S. Sternberg, and R. F. Butler. Exchange of archaeomagnetic information between the archaeologist and geophysicist. 45th Ann. Mtg., Soc. Am. Archaeology, Philadelphia, May 1-3, 1980.
- G. Lazear, P. E. Damon, and R. Sternberg. The concept of steady state gain in linear system modeling of secular variations in atmospheric ^{14}C . 10th Int. Radiocarbon Conf., Bern and Heidelberg, August 19-26, 1979.
- R. S. Sternberg and R. F. Butler. Use of Southwest Indian hearths in reconstructing paleosecular variation. Am. Geophys. Union Spring Mtg., San Francisco, Dec. 4-8, 1978. *EOS, Trans. AGU*, 59, 1059, 1978.
- P. E. Damon and R. S. Sternberg. The use of radiocarbon as a boundary condition for geomagnetic field models. Am. Geophys. Union Spring Mtg., San Francisco, Dec. 4-8, 1978. *EOS, Trans. AGU*, 59, 1057, 1978.
- J. Eighmy, R. Sternberg, and R. Butler. Recent archaeomagnetic results from the Southwest. 43rd Ann. Mtg., Soc. Am. Archaeology, Tucson, May 4-6, 1978.
- P. E. Damon and R. S. Sternberg. A statistical re-evaluation of a proposed relationship between magnetic intensity and temperature. Am. Geophys. Union Spring Mtg., San Francisco, Dec. 5-9, 1978. *EOS, Trans. AGU*, 58, 1127, 1977.
- R. S. Sternberg and R. F. Butler. An archaeomagnetic study of some Hohokam potsherds from Snaketown, Arizona. Am. Geophys. Union Spring Mtg., San Francisco, Dec. 5-9, 1978. *EOS, Trans. AGU*, 58, 1123, 1977.
- R. S. Sternberg and P. E. Damon. Implications of the terrestrial radiocarbon inventory for the history of the solar modulation function. Topical Conf. on Solar and Interplanetary Phys., Co-sponsored by APS, AGU, and AAS, January 12-15, 1977.
- R. Sternberg and P. Damon. Sensitivity of ^{14}C fluctuations to reservoir and geomagnetic field parameters. 9th Int. Radiocarbon Conf., Los Angeles and San Diego, June 20-26, 1976.

ORGANIZED SYMPOSIA

- Rob Sternberg, Annick Chauvin, and Stacey Lengyel (session co-organizers). Magnetism and Other Geophysical Techniques Applied to Archaeology. American Geophysical Union, 2009 Joint Assembly, The Meeting of the Americas, May 24-27, 2009, Toronto, Canada.
- Rob Sternberg, Subir Banerjee and Mike Jackson (co-organizers). Keck Geology Consortium Workshop: Environmental Magnetism. Sept. 24-27, 1998, University of Minnesota, Minneapolis.
- Rob Sternberg and Randy Richardson (co-organizers). Keck Geology Consortium Workshop: Teaching Geophysics. March 14-16, 1996, Tucson.
- R. S. Sternberg (organizer). 8th Annual Northeastern Paleomagnetism Workshop, Sept. 30-Oct. 1, 1994, Lancaster, Pa.
- R. S. Sternberg and B. Ellwood (co-organizers). Geophysics and Archaeology I and II, at the Spring Meeting of the American Geophysical Union, May 23-27, 1994, Baltimore.
- R. E. Taylor, R. S. Sternberg, and J. Burton (co-organizers and moderators). Archaeological Science: Past Achievements/Future Directions; jointly sponsored by the Society for American

Archaeology and the Society for Archaeological Sciences, at the 58th Annual Meeting of the Society for American Archaeology, April 14-17, 1993, St. Louis.

R. S. Sternberg and W. Deaver (co-organizers and moderators). Analysis of Large Archaeomagnetic Data Sets; sponsored by the Society for Archaeological Sciences, at the 56th Annual Meeting of the Society for American Archaeology, April 23-28, 1991, New Orleans.

GRANTS (external)

Rob Sternberg and Sara Bon-Harper. *Geoarchaeology of the Poggio Colla Archaeology Field Site*. Keck Geology Consortium, \$36,300, 2008-2009.

R. Sternberg and J. Delle. *The Use of Field Geophysics for the Delineation of a Jamaican Slave Village*. Keck Foundation, 1999-2000; part of Keck Foundation grant to the National Consortium of Geology Departments at Twelve Liberal Arts Colleges, \$56,413, 1997-1999.

Andrew de Wet and Rob Sternberg. *Acquisition of Magnetic Mapping System for Environmental, Archaeological and Geologic Surveys*. National Science Foundation, Division of Earth Sciences, Instrumentation and Facilities Program, RUI Research Instrumentation, EAR-9810581, \$56,673, 1998-2000.

Robert S. Sternberg. *Travel grant to attend the IAGA General Assembly, Uppsala, Sweden*. National Science Foundation, \$731, August 4-15, 1997.

Rob Sternberg. *Keck Workshop on Environmental Magnetism*. Keck Geology Consortium, \$11,729, 1997-98.

Rob Sternberg. *Keck Workshop on Teaching Geophysics*. Keck Geology Consortium, \$11,410, 1995-96.

R. S. Sternberg. *Development of a North American Archaeomagnetic Relational Database Management System*. National Science Foundation, Earth Sciences, EAR-9219778, \$45,173, 1993-1995.

M. Savina and R. Sternberg. *Archaeological Geology in Grevena, Northern Greece*. Keck Foundation, 1993-94; part of Keck Foundation grant to the National Consortium of Geology Departments at Ten Liberal Arts Colleges, 1993-1995.

P. E. Damon, M. Hughes, R. M. Kalin, C. P. Sonett, and R. Sternberg. *Solar Modulation of Terrestrial ¹⁴C Production During the Little Ice Age and Medieval Warm Epoch (Solar wind, Flares and Irradiance)*. National Science Foundation, Atmospheric Sciences, ATM-8919535, \$158,315, 1990-1993.

R. S. Sternberg. *Geophysical Exploration: Near-Surface Applications to Geology and Archaeology*. National Science Foundation, Instrumentation and Laboratory Improvement Program, USE-8951278, \$64,300, 1989-1991.

R. S. Sternberg. *Collaborative Research: Archaeomagnetic Investigations of Geomagnetic Field Behavior in North and South America*. National Science Foundation, Experimental and Theoretical Geophysics, EAR-87221466, \$67,000, 1988-1990. Collaboration with K. L. Verosub and B. M. Moskowitz, University of California at Davis (\$138,000 for their component).

E. Belt, J. Diemer, and R. Sternberg. *Early Paleocene Fluvial Paleogeography and Paleohydraulics, Western Williston Basin, Montana*. Keck Foundation, \$85,000, 1986-88; part of Keck Foundation grant to the National Consortium of Geology Departments at Ten Liberal Arts Colleges, \$450,000, 1986-1988.

R. S. Sternberg. *Archaeomagnetic Secular Variation and Dating in Israel*. American Philosophical Society, \$2100, 1986.

Principal proposal author and graduate research associate. *The Radiocarbon Dipole Moment; An Improved Model and its Extension Through the Bristlecone Pine Chronology*. National Science Foundation, EAR-8116196, \$60,000, 1982-1984.

R. F. Butler and R. S. Sternberg. *Archaeomagnetic Study of Secular Variation*. National Science Foundation, EAR-7919726, \$46,000, 1979-1981.

Principal proposal author and graduate research assistant. *An Archaeomagnetic Study of Potsherds from Hohokam, Mogollon, and Anasazi Indian Cultures*. National Science Foundation, EAR-7722340, \$55,000, 1977-1979.

GRANTS (internal)

- R. Sternberg. *Magnetic Surveying at Oplontis, the Roman Villa of Nero's Wife*. Franklin & Marshall Faculty Research Fund, \$1000, 2008.
- R. Sternberg. *High precision magnetometry at the Poggio Colla Archaeology Field Site, Italy*. Franklin & Marshall Faculty Research Fund, \$1000, 2007.
- R. Sternberg. *Magnetic Surveys Over Burning Coal Seams, North Dakota*. Franklin & Marshall Faculty Research Fund, \$1000, 2007.
- R. Sternberg and E. Bradley. *High Precision Magnetometry at an Etruscan Archaeological Site as Part of the Mugello Valley Archaeological Program*; Franklin & Marshall College Coutros Scholar Program, 2007.
- R. Sternberg and A. Craig. *High Precision Magnetometry Applied to Archaeology*; Franklin & Marshall College Coutros Scholar Program, 2006.
- R. Sternberg and A. Craig. *High Precision Magnetometry Applied to Archaeology*; Franklin & Marshall College Coutros Scholar Program, 2006.
- R. Sternberg. *Geoarchaeological Reconnaissance at the Poggio Colla Archaeology Field Site, Italy*. Franklin & Marshall Faculty Research Fund, \$1000, 2005.
- R. Sternberg and K. Dougherty. *Archaeological geophysics/Shad Fishing Along the Susquehanna River in the Mid-19th Century*; Franklin & Marshall College Hackman Scholar Program, 2005.
- R. Sternberg and I. Weaver. *Paleomagnetism of Historic Bricks*; Franklin & Marshall College Hackman Scholar Program, 2004.
- R. Sternberg, S. Crabtree, and J. Gosses. *Archaeomagnetism of Israeli and Italian Samples*; Franklin & Marshall College Hackman Scholar Program, 2002.
- R. S. Sternberg. *Faculty Development to Support NTW 117*. Franklin & Marshall Faculty Development Fund, \$500, 2002.
- R. Sternberg and M. Mittenenthal. *The Use of Field Geophysics for the Delineation of a Jamaican Slave Village*; Franklin & Marshall College Hackman Scholar Program, 1999.
- R. Sternberg, A. de Wet and J. Winick. *Near Surface Geophysical Surveys and Material Properties*; Franklin & Marshall College Hackman Scholar Program, 1996.
- R. Sternberg and A. Kiley. *Completion of a North American Archaeomagnetic Database*; Franklin & Marshall College Hackman Scholar Program, 1995.
- Linda S. Fritz and Rob S. Sternberg. *Fe-57 Mössbauer Effect Studies*, Franklin & Marshall Faculty Research Fund, \$2400, 1994-1998.
- R. Sternberg and K. Katari. *Rock Magnetism of Some Geologic and Archaeological Samples*; Franklin & Marshall College Hackman Scholar Program, 1994.
- R. S. Sternberg. *SAS Bulletin Production*. Franklin & Marshall Faculty Development Fund, \$1500, 1993.
- R. Sternberg and E. M. Marion. *Archaeomagnetism at Ashkelon, Israel*; Franklin & Marshall College Hackman Scholar Program, 1993.
- R. Sternberg and A. Sheaffer - *Paleomagnetic Studies of Southwestern Archaeomagnetic Samples and Paleocene Clinkers*, Franklin & Marshall College Hackman Scholar Program, 1992.
- R. S. Sternberg. *Measurement of Archaeomagnetic Samples from the American Southwest*. Franklin & Marshall Faculty Research Fund, \$1000, 1991-1993.
- R. S. Sternberg. *SAS Bulletin Production*. Franklin & Marshall Faculty Development Fund, \$590, 1991.
- R. S. Sternberg. *Compilation of a North American Archaeomagnetic Database*. Franklin & Marshall Faculty Research Fund, \$920, 1990-1992.
- R. S. Sternberg. *Paleomagnetism of Neogene and Quaternary Volcanic Rocks of the Cascade Range, Northwestern U.S.* Franklin & Marshall Faculty Research Fund, \$1000, 1986.
- R. S. Sternberg. *Archaeomagnetism at Tel Yin'am, Galilee, Israel*. Franklin & Marshall Faculty Research Fund, \$840, 1984.

PUBLIC LECTURES

- Global Warming: Hot Topic or Just Hot Air? Quest for Learning, Lancaster, March, 22, 2007.
- Global Warming. Lancaster Clisophic Society 6 October, 2006.
- Archaeology and Israel. Temple Shaarai Shomayim Adult Jewish Growth Speaker Series, Jan. 10, 2002.

Israel Geology—Earthquakes and Water Resources. Temple Shaarai Shomayim, Lancaster, Sept. 15, 22, 1996
 Magnetism and archaeology—Poles apart? Millersville University, March 28, 1996.
 Magnetism and archaeology—Poles apart? University of Maryland Baltimore County, Sept. 21, 1994.
 Science and the environment. *Heritage and Horizons* program, Lancaster, Pa., March 30, 1993
 Magnetism and archaeology—Poles apart? Carleton College, Oct. 19, 1992.
 Science and the environment. *Quest* program, Lancaster, Pa., Oct. 1, 1992
 Recent advances in archaeomagnetic dating. SUNY Binghamton, May 10, 1991.
 Secular variation of the earth's magnetic field and its relation to dating techniques in archaeology. University of Konstanz, Department of Physics, July 10, 1990.
 Archaeomagnetic secular variations and archaeomagnetic dating in the southwestern USA. Swiss Federal Institute of Technology, Zurich, July 5, 1990.
 Secular variation of the earth's magnetic field and its relation to dating techniques in archaeology. University of Cologne, Geology Institute, May 23, 1990.
 Archaeomagnetism and dating techniques in archaeology. University of Geneva, Department of Mineralogy, February 28, 1990.
 Archaeomagnetic Dating in the American Southwest. Oberlin College, jointly sponsored by the Geology Department and the Curricular Committee on Archaeology, March, 1989.
 Archaeomagnetism of American Indian sites. The Paul J. McNerney Memorial Lecture, Millersville University; part of the 1984-1985 program of AAAS lectures, Lancaster, Pa. section, February 7, 1985.

PROFESSIONAL SOCIETIES AND SERVICE

Geoarchaeology, editorial board, 1995-
 Society for Archaeological Sciences, member
 General Secretary, 2002-
 President, 1997-1999
 President-elect, 1995-1997
 Bulletin editor, 1991-1995
 Treasurer, 1990-1991
 Bulletin associate editor, 1988-1990
 Assistant Secretary-Treasurer, 1988-1990
 Organizing Committee, 79th Annual Meeting of the Eastern Section of the Seismological Society of America, 10/14/07-10/16/07, Strasburg, PA
 Panel member: NSF Directorate of Geosciences Committee of Visitors, to assess the integrity of the merit-review system for evaluating proposals as well as the results of education and human resources programs, June 19-20, 1997, Arlington, VA.
 Panel member: *Spheres of Influence: Shaping the Future of Earth Systems Education*, a workshop organized by the American Geophysical Union and funded by the National Science Foundation, Nov. 15-17, 1996, Washington, D.C.
Geoarchaeology, guest editor of two special issues on magnetism and site formation processes, 13(1) 1998; 14(4) 1999.
 Lamont-Doherty Cooperative Seismographic Network, member of organizing committee
 Administrator of blog, <http://shakingearth.blogspot.com>
 American Geophysical Union, member
 Geological Society of America, member
 Society for American Archaeology, associate member
 Archaeological Institute of America, associate member
 International Society for Archaeological Prospection, member
 American Association of University Professors, member