BOOK REVIEWS

Vic Baker, Book Review Editor

THE NEW SCIENCE OF GEOLOGY: STUDIES IN THE EARTH SCIENCES IN AN AGE OF REVOLUION. *Martin J.S. Rudwick, 2004. Ashgate variorum, Aldershot, Hampshire, UK, and Burlington, VT, USA, xviii + 316 p. Hardcover, £59.50.*

The Variorum Collected Studies Series provides two great services to scholars. First, it gathers in one place articles from many years of diverse periodicals by a single author. These articles often would be impossible to find in a single library. Secondly, the series offers the author a chance to place previously unpublished work (or work published originally in a different language) in the context of many years of scholarship.

The New Science of Geology assembles fourteen articles by noted historian of earth science Martin J.S. Rudwick between two covers. Of these, one appears for the first time, one for the first time in English, seven first appeared in edited books, and six in journals. All share a focus on the late eighteenth and early nineteenth centuries, on sciences related to geology, and all have "stood the test of time."

A variorum edition provides Rudwick the opportunity to consider and emphasize the threads that have held his researches together. He divides the articles into three broad themes: Earth-history and the history of geology; Cuvier and earth-history; and geology in the age of Lyell. The first section considers "general issues and syntheses": the historicizing of knowledge of the Earth (in three articles), relations between science and religion, and the "emergence of a visual language" for geology. In all of these, the author counters "modern mythmaking." He argues that Bishop Ussher provides no pre-modern foil to geochronology but rather was part of the enterprise. He argues that the now commonly assumed divide between secular science and religious fundamentalism blinds us to understanding the varieties of relations between science and religion in earth-history.

The rest of the book allows Rudwick to delve deeply into the research practices of Cuvier, Lyell, and their contemporaries. Rudwick places Cuvier against the earlier efforts of Jean André de Luc to calibrate evidences of Earth's history. He examines Cuvier and his collaborator Alexandre Brongniart's reading of the stratigraphic "documents" of this history and on Cuvier's cultivation of distant collaborators and his use of engravings of fossil bones as "proxies" in his publications.

The section "Age of Lyell" devotes more space to Lyell's contexts than to his own researches. Without examining each of these in turn, suffice it to say that examined issues include: (1) how it became accepted in geology to employ artistic renderings of past life-forms, (2) field and institutional practices of geologists in the 1830s, and (3) how debates among geologists related to their field experiences and to the production of scientific knowledge.

Readers who have kept up with Martin Rudwick's books since *The Meaning of Fossils* (1972) will certainly recognize the continuities of his themes in these articles with those explored at great depth in his books. We've all been challenged in these books to

re-examine our historiographic assumptions by his ways of approaching subjects we thought we understood. The articles in this book, which most of us have probably read in a scattered way, help us to refocus our appreciation of a most influential historian of science.

It is, however, absolutely incorrect to see this variorum edition as a swan song. Martin Rudwick has two more volumes immediately in the wings. So stay alert.

Gregory A. Good, Visiting Scholar, Department of History and Philosophy of Science, University of Cambridge, Cambridge, UK. Greg.good@mail.wvu.edu

INTERESTING PUBLICATIONS

Gerald M. Friedman, CONTRIBUTING EDITOR

Since the start of this journal, Founding Editor Gerald M. Friedman has prepared this column. Contributors wishing to list recent books and papers of interest to our membership are requested to send them to Professor Gerald M. Friedman, Northeastern Science Foundation, Rensselaer Center of Applied Geology, P.O. Box 746, Troy, NY 12181-0746, U.S.A.; Fax: 518-273-3249; E-mail: gmfriedman@juno.com

AALTO, K.R., 2004, Rock stars: Clarence King (1842-1901): pioneering geologist of the west: *GSA Today*, v. 14, no. 2, p. 18-19.

ABRAHAM, SPENCER, 2004, The Bush administration's approach to climate change: *Science*, v. 305, p. 616.

ALLAN, J.C. and KOMAR, P.D., 2004, Environmentally compatible cobble berm and artificial dune for shore protection: *Shore & Beach*, v. 72, no. 1, p. 9-18.

ALLEN, PETER, 2003, A Geological Survey in Transition. British Geological Survey, Keyworth, 205 p.

ALLEN, P.A. and ALLEN, J.R., 2005, Basin Analysis: Principles and Applications. Second Edition. Blackwell Publishing Company, 560 p.

ALLMON, W.D., 2005, Frontiers of paleontology: *Geotimes*, February, p. 7.

ANGEL, ROSS and ROSS, NANCY, 2005, Looking forward to the past: a session in honor of Paul Ribbe and the reviews in mineralogy and geochemistry: *Elements*, v. 1, no. 2, p. 62-63.

ANONYMOUS, 2003, From the archives: Sir Albert Ernest Kitson (1868-1937): *Geoscientist*, v. 13, no. 9, p. 17.

ANONYMOUS, 2004a, Biomedicine: deadly communication: *Science*, v. 304, p. 491.

ANONYMOUS, 2004b, Chinese climate change: *Science*, v. 304, p. 485.

ANONYMOUS, 2004c, Cold snaps in the Cretaceous: *Geological Society of America Bulletin*, v. 116, p. 368.

ANONYMOUS, 2004d, Editorial: in appreciation of geomicrobiology: *Nature*, v. 2, p. 610.

ANONYMOUS, 2004e, From the archives: George Mercer Dawson (1841-1901): *Geoscientist*, v. 14, no. 9, p. 11.

ANONYMOUS, 2004f, Spinning down: *Science*, v. 304, p. 485.

ANONYMOUS, 2005, February 20, 1962: first American orbits Earth: *Geotimes*, February, p. 57.

ANONYMOUS, British Geological Survey Sheet Explanations: Kilmarnock, Loughborough, Alresford, Guildford, and Bristol. Available from BGS, Keyworth, Nottingham, NG12 5GG, UK +44(0)115 936 3241, sales@bgs.ac.uk, ,9, ,18 with map sheets.

ASHWORTH, Jr., W.B., 2004, Vulcan's Forge and Fingal's Cave. Volcanoes, Basalt, and the Discovery of Geological Time. Linda Hall Library of Science, Engineering, and Technology, Kansas City, MO 64110-2498.

BALCO, GREG, STONE, JOHN, ROVEY, C.W., and JENNINGS, CARRIE, 2004, Numerical Ages for Plio-Pleistocene Tills By Al-26/Be-10 Dating of Buried Paleosols *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 123-124.

BARCLAY, W.J. ET AL., 2005, The Old Red Sandstone of Great Britian. Geological Conservation Review Series, no. 31, Joint Nature Conservation Committee, Petersborough.

BARNOSKY, A.D., KOCH, P.L., FERANEC, R.S., WING, S.L., and SHABEL, A.B., 2004, Assessing the causes of Late Pleistocene extinctions on the continents: *Science*, v. 306, no. 5693, p. 70-75.

BARRETT, M.L., 2005, A History of Produced Saltwater Disposal in U.S. Gulf Coast Petroleum Fields, 1901-1970 *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

BATTARBEE, R.W. and STICKLEY, C.E., 2004, Past Climate Variability Through Europe and Africa. Developments in Paleoenvironmental Research Series 6, Springer Verlag, 610 p.

BAXTER, STEPHEN, 2003, Revolutions in the Earth. James Hutton and the true age of the world. Weidenfield and Nicolson, London, 245 p.

BENDIG, DANIEL, 2004, Under-explored plays in the Northwestern Appalachian basin: opportunities for the independent?: *Houston Geological Society Bulletin*, March, p. 19.
BERNOULLI, DANIEL, GASPERINI, LUCA, BONATTI, ENRICO, and STILLE, PETER, 2004, Dolomite formation in pelagic limestone and diatomite, Romanche fracture zone, equatorial Atlantic: *Journal of Sedimentary Research*, v. 74, no. 6, p. 924-932.
BERTIE, D.M., 2004, Hugh Miller's graptolite revisited: *The Geological Curator*, v. 8, no. 2, p. 43-45.
BESSUDNOVA, Z.A., 2003, The contributions of the Moscow University Natural History Museum to the History of Geology in Russia in 19th Century. *In* M.S. Pinto, ed., Proceedings of the 27th INHIGEO Meeting on Geological Resources and History. University of Aveiro, Portugal, p. 151-157.
BOWDEN, A.J., BUREK, C.V., and WILDING, R., 2005, History of Palaeobotany. Geological Society Special Publication, no. 241, 312 p.
BRAITHWAITE, C.J.R., RIZZI, G., and DARKE, G., eds., 2005, The Geometry and Petrogenesis of Dolomite Hydrocarbon Reservoirs. Geological Society of London Special Publication No. 235, 424 p.
BRICE, WILLIAM, 2004, History of geology division receives bequest: *GSA Today*, v. 14, no. 2, p. 22.
BRICE, W.R., 2005, Oil and the Greek Fire *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
BRIGHAM-GRETTE, JULIE, APFELBAUM, MICHAEL, ASIKAINEN, CELESTE, and FRANCUS, PIERRE, 2004, Sedimentological Expression of Paleoclimate Since 150 KA from El-Gygytgyn Crater Lake, Northeastern Siberia *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 128-129.
BRINKMAN, P., 2003, Bartholomew James Sulivan's discovery of fossil vertebrates in the Tertiary Beds of Patagonia: *Archives of Natural History*, v. 30, p. 56-74.
BROOK, ANTHONY, 2000a, Dr. Frederick Dixon of Worthing: surgeon and geologist part I – life and times: *Outcrop*, v. 21, p. 19-31.
BROOK, ANTHONY, 2000b, Dr. Frederick Dixon of Worthing: surgeon and geologist part II – geology: *Outcrop*, v. 22, p. 25-42.
BROOK, ANTHONY, 2000c, Enquiry re Frederick Dixon and Martin Venables: *Sussex Family Historian*, v. 14, p. 143-144.
BROOK, ANTHONY, 2000d, Sussex fossil collectors: a preliminary list: *Outcrop*, v. 22, p. 2.
BROOK, ANTHONY, 2001a, Aspects of Murchison. West Sussex Geological Society, Occasional Publication, No. 2, December, 32 p.
BROOK, ANTHONY, 2001b, Mr. Dean and Mr. Mantell: *Outcrop*, v. 23, p. 22-23.
BROOK, ANTHONY, 2001c, On priority and rivalry in 19th century geology: *Outcrop*, v. 24, p. 9-11.
BROOK, ANTHONY, 2001d, When was Dixon's geology of Sussex published?: *Outcrop*, v. 24, p. 16-18.
BROOK, ANTHONY, 2002a, A plaque, please, for Dr. Mantell: *HOGG Newsletter of the History of Geology Group of the Geological Society of London*, v. 16, p. 18.
BROOK, ANTHONY, 2002b, Eastern Yorkshire and early geology: *Outcrop*, v. 25, p. 5.
BROOK, ANTHONY, 2002c, Gideon Mantell Memento Mori – 1. West Sussex Geological Society, Mantell Memorial Series, March, 32 p.
BROOK, ANTHONY, 2002d, Gideon Mantell Memento Mori – 2. West Sussex Geological Society, Mantell Memorial Series, June, 36 p.
BROOK, ANTHONY, 2002e, Gideon Mantell Memento Mori – 3. West Sussex Geological Society, Mantell Memorial Series, October, 40 p.
BROOK, ANTHONY, 2002f, Gideon Mantell's inaugural publication: *Geology Today*, no. 18, no. 6, p. 223-225.
BROOK, ANTHONY, 2002g, Mantell-piece: *Geoscientist*, v. 12, p. 18.
BROOK, ANTHONY, 2002h, Reading geology: *Outcrop*, v. 26, p. 29-30.
BROOK, ANTHONY, 2002i, The very first Mantell-piece: *Worthing Archaeological Society Newsletter*, Summer, p. 4-5.
BROOK, ANTHONY, 2002j, Three days in a palindromic spring. conference report: *HOGG Newsletter of the History of Geology Group of the Geological Society of London*, v. 16, p. 3-7.
BROOK, ANTHONY, 2003a, Gideon Mantell and the times: *Outcrop*, v. 27, p. 38-44.
BROOK, ANTHONY, 2003b, Gideon Mantell Memento Mori – 4. West Sussex Geological Society, Mantell Memorial Series, March, 44 p.
BROOK, ANTHONY, 2003c, Gideon Mantell, the SAS, and the ILN: *Sussex Past and Present*, v. 101, p. 5-6.

BROOK, ANTHONY, 2003d, John Henry Pull and Shepherd's crowns. West Sussex Geological Society, Occasional Publication No. 3, 40 p.
BROOK, ANTHONY, 2003e, Publications on about or concerning Dr. Gideon Mantell. Published in January 2003 on the West Sussex Geological Society Website www.wsgs.tk
BROOK, ANTHONY, 2003f, Some fugitives recaptured: *Brighton and Hove Geological Society Newsletter*, no. 71, p. 6-8.
BROOK, ANTHONY, 2003g, Yesterday a naturalist, today a geologist!: *West Sussex History*, v. 72, p. 17-19.
BROOK, ANTHONY, 2004a, Gideon Mantell and St. Michael's, Lewes. The Sussex Archaeological Society Website www.sussexpast.co.uk
BROOK, ANTHONY, 2004b, Iguanodons in the Sussex weald – part 1: *Outcrop*, v. 29, p. 8-19.
BROOK, ANTHONY, 2004c, On William Smith, serendipity, and the literary gazette: *Outcrop*, v. 30, p. 30-38.
BROOK, ANTHONY, 2004d, Sussex, geology, and the county magazine: *Outcrop*, v. 30, p. 10-15.
BROOK, ANTHONY, 2004e, The geological propensities of Michael Faraday: *Brighton and Hove Geological Society Newsletter*, no. 76, p. 7-9.
BROOK, ANTHONY, 2004f, The mysteries of the Mantell memorial: *HOGG (Newsletter of the History of Geology Group of the Geological Society of London)*, v. 20, p. 14-17.
BROOK, ANTHONY, 2004g, The Primary Publications of Sir Roderick Murchison, *in* John Morton, King of Siluria: How Roderick Murchison Changed The Face of Geology. Brocken Spectre Publishing, Horsham, p. 235-241.
BROOK, ANTHONY, 2005, Sold at auction: letters from the pioneers of geology: *HOGG (Newsletter of the History of Geology Group of the Geological Society of London)*, v. 23, p. 20-25.
BROWN, LOUIS, 2004, Centennial History of the Carnegie Institution of Washington. Volume 2, The Department of Terrestrial Magnetism, Cambridge University Press, Cambridge, 300 p.
BROWNE, J. and TORRENS, H.S., 2004, William Henry Fitton (1780-1861) Physician and Geologist, in H.G.C. Matthew and B. Harrison, eds., Oxford Dictionary of National Biography, 60 vols., Oxford University Press, Oxford, v. 19, p. 755-756.
BUCHER, KURT and FREY, MARTIN, 2002, Petrogenesis of Metamorphic Rocks. Seventh Edition. Springer, 341 p.
BUREK, C.V., 2003, Catherine Raisin, a role-model professional geologist: *Geology Today*, v. 19, no. 3, p. 107-111.
BURNS, S.J., MCKENZIE, J.A., and VASCONCELOS, CRISOGONO, 2000, Dolomite formation and biogeochemical cycles in the Phanerozoic: *Sedimentology*, v. 47, p. 49-61.
CAMPBELL, J.M., 2004, Late Pleistocene Disturbance Regime and Plant Community Endemism in the Prairie/Forest Mosaic of North-Central Texas *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 109.
CARNEIRO, ANA, 2004, Geology as Government Science in Nineteenth-Century Portugal. Organizing Committee, ed., Volume of Abstracts 32nd International Geological Congress, 20-28, August. Florence, Italy, part 2, p. 1351.
CANEIRO, ANA, AREIAS, DORES, LEITÃO, VANDA, and TEIXEIRA PINTO, L., 2003, The Role of Travels in the Internationalisation of Nineteenth-Century Portugese Geological Science. *In* S.A.C.A.D.M. Paula, ed., Travels of Learning a Geography of Science in Europe. Kluwer, Dordrecht and Boston, p. 249-297.
CERNAJSEK, TILLFIED, 2000, 150 Jahre Geologische Bundesanstalt in Wien: Eine der ältesten wissenschaftlichen Anstalten Österreichs jubilierte: *Geohist. Blätt*., v. 3, p. 159-162.
CHAMBERS, P., 2003, Die Archaeopteryx Saga – Das Rätsel des Urvogels. Robner & Bernhard bei Zweiausendeins, 304 p.
CHEMLA, KARINE, 1999, The Rivers and the Sea: Analysing Needham's Metaphor for the World History of Science: *In* Habib S. Irfan Raina Dhruv, ed., Situating the History of Science Dialogues with Joseph Needham, Oxford Unviersity Press, Oxford, p. 220-244.
CHESEBRO, B., 2004, A fresh look at BSE: *Science*, v. 305, p. 1918-1920.
COE, A.L. et al., 2003, The Sedimentary Record of Sea-Level Change. Cambridge University Press, Cambridge, 288 p.
COLLIE, M. and DIEMER, J., eds., 2004, Murchison's Wanderings in Russia. British Geological Survey, 474 p.

CONDIE, K.C., 2001, Mantle Plumes and Their Record in Earth History. Cambridge University Press, Cambridge, 320 p.
CORSI, PIETRO, 2003, The Italian Geological Survey: The Early History of a Divided Community, *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 271-300.
DEACON, MARGARET, RICE, A.L., and SUMMERHAYES, C.P., eds., 2001, Understanding the Oceans: A Century of Ocean Exploration. UCL Press, London, 300 p.
DILEK, Y. and ROBINSON, P.T., eds., 2003, Ophiolites in Earth History. Geological Society of London, Special Publication, no. 218, 717 p.
DONOVAN, S.K., 2003, Comment on "type and figured specimens in the geology museum, University of the West Indies, Mona Campus, Jamaica: *The Geological Curator*, v. 7, no. 10, p. 363-364.
DU NULIN and LIU YAMIN, 2004, The contribution of Professor Wang Yuelun to the Precambrian research in China: *Newsletter History of Geology for 2004*, p. 40-45.
DWYER, M.A., LOOGER, L.L., and HELLINGA, H.W., 2004, Biochemistry: computational design of a biologically active enzyme: *Science*, v. 304, p. 1967-1970.
EAGLESON, P.S., 2002, Ecohydrology: Darwinian Expression of Vegetation Form and Function. Cambridge University Press, UK, 443 p.
ERNST, W.G. and COLEMAN, R.G., eds., 2000, Tectonic Studies of Asia and the Pacific Rim: A Tribute to Benjamin M. Page (1911-1997). Geological Society of America, 328 p.
ERNST, W.G. and NELSON, C.A., 1998, eds., Integrated Earth and Environmental Evolution of the Southwestern U.S. Geological Society of America, 502 p.
EVANS, K.R., HORTON, JR., J.W., THOMPSON, M.F., and WARME, J.E., 2005, The sedimentological record of meteorite impacts: an SEPM research conference: *The Sedimentary Record*, v. 3, no. 1, p. 4-8.
FASTOVSKY, D.E. and WEISHAMPEL, D.B., 2005, The evolution and extinction of the dinosaurs. Cambridge University Press, Cambridge, 2nd edition.
FEDOROFF, NINA and BROWN, N.M., 2004, Mendel in the kitchen: A scientist's view of genetically modified foods. Joseph Henry Press, Washington, D.C., 366 p.
FEDOTOV, S.A., 2003, Studies of Volcanology and Seismology. Their Development and Importance in Kamchatka, History of Russian Science (Studies and Articles, 1973-2002). Second Publication, Petropavlowsk-Kamchatsky, 184 p.
FERRARI, GRAZIANO, 2003, Letters in the earth sciences: their historic value and present-day scientific relevance: *Nuncius*, v. 18, p. 345-354.
FIGUEIRÔA, S.F.dM., 1999, Applied science in Latin American countries: the case of the Geological and Mineralogical Survey of Brazil, 1906-1934. Special Issue: Social History of Science: *Science Tech. Soc.*, v. 4, p. 303-318.
FINKELSTEIN, MAX and STONE, JAMES, 2004, Paddling the Boreal Forest: Rediscovering A.P. Low. Natural Heritage Books, Toronto, 319 p.
FISHER, H., KUMKE, T., LOHMANN, G., FLÖSER, G., MILLER, H., VON STORCH, H., and NEGENDANK, J.F.W., eds., 2004, The Climate in Historical Times. Springer, Berlin, Germany, 487 p.
FLAHERTY, K.J., 2005, Old McDonald is a Field, E-I-E-I-OIL! *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FLIS, LINDA, 2005a, From Drillbit to Burner Tip: The Story of Natural Gas *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FLIS, LINDA, 2005b, Lighting the Frontier: The Story of Colorado's Florence Oil Field *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FORD, T.D., 2004a, Review of a history of the Matlocks by P.J. Naylor: *Peak District Mines Historical Newsletter*, v. 110, p. 7.
FORD, T.D., 2004b, Review of Northamtonshire Stone by D.S. Sutherland: *Mercian Geologist*, v. 16, p. 62-64.
FORD, T.D., 2004c, Review of The Practice of British Geology by H.S. Torrens: *Geology Today*, v. 20, p. 40.
FORTEY, R., 2002, Fossils: The Key to the Past. Smithsonian Institution Press, 232 p.

FORTEY, RICHARD, 2004, The Earth – An intimate history. Harper Collins, UK, 480 p.
FRANCIS, K.J., 2003, Death enveloped all nature in a shroud: *Diss. Abstr. Int*., v. 63, p. 2674.
FRANCUS, P., 2004, Image Analysis, Sediments, and Paleoenvironments. Developments in Paleoenvironmental Research Series 7, Springer Verlag, 350 p.
FRIEDRICH, W.L., 2000, Fire in the Sea. The Santorini Volano: Natural History and the Legend of Atlantis. Cambridge University Press, (translated by Alexander R. McBirney)
FRIÈS, GÉRARD and PARIZE, OLIVIER, 2003, Anatomy of ancient passive margin slope systems: Aptian gravity-driven deposition on the Vocontian paleomargin, western Alps, south-east France: *Sedimentology*, v. 50, p. 1231-1270.
FRITSCHER, B., 2004a, Alfred Wegener, *in* R.C. Selley, L.R.M. Cocks, and I.R. Plimer, eds., Encyclopedia of Geology. Elsevier Academic Press, London, v. 3, p. 246-253.
FRITSCHER, B., 2004b, Eduard Suess, *in* R.C. Selley, L.R.M. Cocks, and I.R. Plimer, eds., Encyclopedia of Geology. Elsevier Academic Press, London, v. 3, p. 233-242.
FRITSCHER, B., 2004c, Mineralogie und Kultur im Wien der Donaumonarchie: Zu Leben und Werk Gustav Tschermaks, *in* T. Cernajsek and J. Seidl, eds., Zwischen Lehrkanzel und Grubenhunt: Zur Entwicklung der Geo- und Montanwissenschaften in Österreich vom 18. bis zum 20. Jahrhundert, (=Jahrbuch der Geologischen Bundesanstalt), v. 144, no. 1, p. 67-75.
FULLER, JOHN, 2004, The origins of stratigraphy 1719-1801: John Strachey and William Smith in the Bath area: *GA Guide*, no. 65, 52 p.
FULLER, J.G.C.M., 2005a, The Prehistory of Subsurface Exploration, 1533-1799. Order , the Great Crime and Symphony of Nature *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FULLER, J.G.C.M., 2005b, Henry Darwin Rogers (1808-1866): Organic Metamorphism in Pennsylvania and the Origin of Petroleum, 1863 *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FULLER, J.G.C.M., 2005c, Henry Darwin Rogers and the Origin of Petroleum Organic Metamorphism in Pennsylvania, 1863 *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
FULLER, J.G.C.M., 2005d, Stratigraphic Stand-Off at the 49th Parallel, 1956. In Memory of Laurence L. Sloss *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
GAMBURTSEV, A.G. and GAMBURTSEVA, N.G., 2003, Grigorii Aleksandrovich Gamburtsev, 1903-1955. Nauka, Moscow, 299 p.
GATES, A.E., 2003, A to Z of Earth Scientists. Notable Scientists. Facts on File, New York, 336 p.
GAUDANT, J., 2004, Lieux de mémoire et géologues du Bassin de Paris et protection du patrimoine naturel: Journées d'étude de printemps (20-22 mai 2004).
GLADFELTER, E.H., 2002, Agassiz's Legacy: Scientists' Reflections on the Value of Field Experience. Oxford University Press, 437 p.
GLIKO, A.O. and KOZENKO, A.B., 2003, Ob'edinennyi institut fiziki Zemli RAN [The Joint Institute of Geophysics, Russian Academy of Sciences]: *Vop. Ist. Est. Tekh*., v. 24, no. 3, p. 119-124.
GOODENOUGH, KATHRYN, PICKETT, ELIZABETH, KRABBENDAM, MAARTEN, and BRADWELL, TOM, 2004, Exploring the Landscape of Assynt. The British Geological Survey, 56 p.
GRADSTEIN, FELIX, OGG, JIM, and SMITH, ALAN, eds., 2005, A Geologic Time Scale 2004. Cambridge University Press, Cambridge, 384 p.
GRADY, M.M., 2003, Astrobiology: The search for life beyond the earth: *Geology Today*, v. 19, no. 3, p. 99-103.
GREENE, M.T., 2003, Genesis and Geology Revisited: The Order of Nature and the Nature of Order in Nineteeth-Century Britian. *In* D.C. Lindberg and Numbers, R.L., eds., When Science and Christianity Meet, Chicago University Press, Chicago, p. 139-159.
GRIGELIS, A., 2004, 32nd International Geological Congress – towards a global geological renaissance: *Geological Horizons*, no. 2, p. 9-18.
GRIGELIS, A. and JUODKAZIS, V., 2004, Geosciences in the Lithuanian Academy of Sciences: *Geological Horizons*, no. 1, p. 46-51.

GRIGELIS, A. and MICHNO, S., 2004, On Domeyko's Pathways in Gierwiaty: *Geological Horizons*, no. 2, p. 40-47.
GUNTAU, MARTIN, 2000, Der Geologe Kurd von Bülow (1899-1971) und seine wissenschaftlichen Arbeiten: *Geohist. Blätt*, v. 3, p. 11-19.
GUNTAU, M., 2004a, Autobiographien von Geologen, Paläontologen, Mineralogen und Geophysikern, in Kurzfassungen zu den Vorträgen der Tagung der Arbeitskreise für Geschichte der Geowissenschaften und Geographie Biographien und Autobiographien in der Geschichte der Geowissenschaften und Geographie, 4-6 June 2004, Leibniz-Institut für Länderkunde in Leipzig, p. 45-47.
GUNTAU, M., 2004b, V.V. Tikhomirov and the Trends of Development in the History of Geology in the Second Half of the XXth Century, in V.V. Tikhomirov: A Geologist and a Historian of Science on the occasion of the 90th anniversary, Moscow, OGNT, p. 119-135 (in Russian).
GUNTAU, M., 2004c, Zu biographischen Arbeiten über Leben und Werk von Geowissenschaftlern: *Geohistorische Blätter*, v. 7, p. 81-92.
HALLAM, S.J., PUTNAM, NIK, PRESTON, C.M., DETTER, J.C., ROKHSAR, DANIEL, RICHARDSON, P.M., and DELONG, E.F., 2004, Reverse methanogenesis: testing the hypothesis with environmental genomics: *Science*, v. 305, p. 1457-1462.
HALLETT, D., 2002, Petroleum Geology of Libya. Elsevier, 508 p.
HARTWIG, W.C., ed., 2002, The Primate Fossil Record. Cambridge University Press, Cambridge, 544 p.
HAUBELT, J., 2005, Geological and Geotechnical Works of Eduard Suess, On Various Aspects of the Works by Eduard Suess, and Mining Symposium, Pribram 2005 and National Technical Museum, Prague 2005. (These lectures were presented in Czech, in the Czech Regional Symosia. At present the pertinent texts are in press, to appear in the Symposia Proceedings).
HEAVENS, ALAN, 2005, The star-formation history of the universe: *American Scientist*, v. 93, p. 36.
HECK, W.A., 2005, The Exctraterrestrial Origin of Oil: "Or Are We Fossil Fools and Thomas Gold Was, Like His Name, a Four Nine Five Pure Genius" *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.
HILL, C.L., 2004, Mammoth (Mammuthus) Fossils in Middle Wisconsinan Interstadial (Pre-Last Glacial Maximum) Contexts from the Upper Missouri River Basin, USA *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 143.
HIRN, A. and LAIGLE, M., 2004, Silent heralds of megathrust earthquakes?: *Science*, v. 305, p. 1917.
HOFMAN, J.L., 2004, Evolution of Human Occupation on the High Plains: Grass, Bison, and People *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 35-40.
HOLDEN, CONSTANCE, 2004, Kennewick man: court battle ends, bones still off-limits: *Science*, v. 305, p. 591.
HOSKIN, MICHAEL, 2003, Discovery of Thomas Wright's a new theory of the earth: *Journal of the History of Astronomy*, v. 34, p. 94.
HOWARTH, R.J., 2002, Professor William Antony Swithin Sarjeant, 1935-2002: *Proceedings of the Geologists' Association*, v. 114, p. 367-374.
HOWARTH, R.J., 2003, Fitting geomagnetic fields before the invention of least squares: II. William Whiston's isoclinic maps of Southern England (1719 and 1721): *Annuals of Science*, v. 60, p. 63-84.
HOWARTH, R.J., 2004, Not just a petrographer: the life and work of Felix Chayes (1916-1993): *Earth Sciences History*, v. 23, p. 343-364.
HOWARTH, R.J., 2004a, Review of mind over magma: the story of igneous petrology by D. Young: *Journal of Historical Geography*, v. 30, p. 569-570.
HOWARTH, R.J., 2004b, William Antony Swithin Sarjeant (1935-2002): *INHIGEO Newsletter*, v. 36, p. 23-29.
HOWARTH, R.J. and LEAKE, B.E., 2002, The Life of Frank Coles Phillips (1902-1982) and The Structural Geology of the Moine Petrofabric Controversy. The Geological Society, London, 95 p.
HUDSON, TRAVIS, 2005, Metal Mining and the Environment. The AGI Environmental Awareness Series. pubs@agiweb.org
HUSS, G.R., 2005, Meteoritic nanodiamonds: messengers from the stars: *Elements*, v. 1, no. 2, p. 97-100.
ISSAR, A.S. and ZOHAR, M., 2004, Climate Change - Environment and Civilization in the Middle East. Springer Verlag, 274 p.
JIANG ZHI, 2004, The originality in the studies of Earth material science: *Newsletter History of Geology for*

2004, p. 71-72.
JOHNSON, C.M., BEARD, B.L., and AL-BAREDE, FRANCIS, eds., 2004, Geochemistry of Non-Traditional Stable Isotopes. Reviews in Mineralogy and Geochemistry. Volume 55. Mineralogical Society of America and Geochemical Society, Washington, DC, 454 p.
KAYI, H.A. and MANCKTELOW, N.S., 2001, Tectonic Modeling: A Volume in Honor of Hans Ramberg. Geological Society of America, 270 p.
KNUEPFER, P.L.K. and PETERSON, J.F., 2002, eds., Geomorphology in the public eye: political issues, education, and the public: *Geomorphology*, v. 47, nos. 2-4, p. 95-105.
KÖLBL-EBERT, MARTINA, 2002, British geology in the early nineteenth century: a conglomerate with a female matrix: *Earth Science History*, v. 21, p. 3-25.
KÖLBL-EBERT, M., 2004a, Buckland, Mary (née Morland: 1797-1857), *in* B. Lightman, ed., The Dictionary of Nineteenth-century British Scientists, Thoemmes Continuum, v. 1, p. 325-326.
KÖLBL-EBERT, M., 2004b, James Hutton (essay), *in* D. Hoffmann, H. Laitko, and St. Müller-Wille, eds., Lexikon der bedeutenden Naturwissenschaftler, Spektrum Akademischer Verlag, v. 2, p. 253-257.
KÖLBL-EBERT, M., 2004c, Murchison, Charlotte, née Hugonin (1788-1869), *in* Lawrence Goldman, ed., Oxford Dictionary of National Biography. Oxford University Press.
KÖLBL-EBERT, M., 2004d, Murchison, Roderick Impey, *in* D. Hoffmann, H. Laitko, and St. Müller-Wille, eds., Lexikon der bedeutenden Naturwissenschaftler, Spektrum Akademischer Verlag, v. 3, p. 55.
KÖLBL-EBERT, M., 2004e, Stensen, Niels, *in* D. Hoffmann, H. Laitko, and St. Müller-Wille, eds., Lexikon der bedeutenden Naturwissenschaftler, Spektrum Akademischer Verlag, v. 3, p. 324-325.
KOVACH, R.L., 2004, Early Earthquakes of the Americas. Cambridge University Press, Cambridge, 280 p.
KOZÁK, J.T., 2004, Historical depictions of geophysical character: *Ceskoslovensky casopis pro fyziku (Czechoslovak journal for Physics)*, v. 4, no. 54, p. 164-167.
KULYK, CHRISTINE, 2003, Written in stone: *Geology Today*, v. 19, no. 3, p. 93.
LAMB, SIMON, 2004, Devil in the Mountain: A Search for the Origin of the Andes. Princeton University Press, 355 p.
LANDAU, Y.E., 2004, An investigation, interrupted: Panspermia, ALH84001, and the Columbia shuttle disaster: *Geochemical News*, no. 120, p. 15-17.
LAPO, A.V., 2004, E.S. Korzhenevskaja's career: *Geology of Coal Deposits*, v. 14, p. 259-268.
LAPORTE, L.F., 2004, Rock stars: George Gaylord Simpson (1902-1984): *GSA Today*, v. 14, no. 9, p. 16-17.
LARSON, PETER and DONNAN, KRISTIN, 2004, Bones Rock! Everything You Need to Know to be a Paleontologist. Invisible Cities Press.
LEAKEY, M.G. and HARRIS, J.M., eds., 2003, Lothagam: The Dawn of Humanity in Eastern Africa. Columbia University Press, New York, 688 p.
LEIGGI, PATRICK and MAY, PETER, 2005, Vertebrate Paleontology Techniques: Methods of Preparing and Obtaining Information. Cambridge University Press, Cambridge.
LEMOINE, M., 2004, De Wegener a la tectonique des plaques: sept fois sept ans de reflexion: COFRHIGEO.
LENTZ, D.R., ed., 2003, Geochemistry of Sediments and Sedimentary Rocks. Evolutionary Considerations to Mineral Deposit Environments. Geological Association of Canada. GeoTExt 4. Canada, 184 p.
LEVOIR, ROGER and NORMAN, DAVID, 2004, Charles Darwin Geologist: *GA Magazine*, v. 3, no. 4, p. 10-11.
LITVINENKO, A.P., 2003, Geological Service of the Central Areas of Russia – History, Discovery, People. Geoinformcentre, Moscow, 396 p.
LLOYD, GEOFFREY and SIVIN, NATHAN, 2002, The Way and the World: Science and Medicine in Early China and Greece. Yale University Press, New Haven, London, 277 p.
LOBACHEVA, S.V., 2004, From a history of domestic paleontology: *Paleontological Magazine*, v. 1, p. 97-100.
LOCKLEY, M., 2000, The Eternal Trail – A Tracker Looks at Evolution. Perseus Books, Reading, MA.
LONG, S.L., TAYLOR, P.D., BAKER, S., and COOPER, J., 2003, Some early collectors and collections of fossil sponges represented in the Natural History Museum, London: *The Geological Curator*, v. 7, no. 10, p. 353-362.
LORD, BARRY and DEXTOR LORD, GAIL, 1997, The Manual of Museum Management. The Stationary Office, London, 261 p.
LOVE, J.D., REED, JR., J.C., and PIERCE, K.L., 2003, Creation of the Teton Landscape: A Geologic Chronicle of Jackson Hole and the Teton Range: Grand Teton Natural History Association.
LOYNACHAN, T.E., BROWN, K.W., COOPER, T.H., and MILFORD, M.H., 2005, Sustaining Our Soils

and Society. The AGI Environmental Awareness Series. pubs@agiweb.org

LÜDECKE, C., 2004, International Magnetic and Meteorological Cooperation in Antartica (1901-1904), *in* A. Elzinga, T. Nordin, D. Turner, and U. Wråkberg, eds., Antarctic Challenges. Historical and Current Perspectives on Otto Nordenskjöld's Antarctic Expedition 1901-1903, Royal Society of Arts and Sciences, Acta Regiae Societatis Scientiarum et Litterarum Gothoburgensis, Interdisciplinaria 5, Royal Academy of Sciences, Göteborg, p. 247-261.

LUNDSTROM, SCOTT, 2004, The Glaciated Landscape in the Grand Traverse Bay Region of Michigan: Impact of the Greatlakean Advance *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 154-155.

MACHEL, H.G. and LONNEE, JEFF, 2002, Hydrothermal dolomite – a product of poor definition and imagination: *Sedimentary Geology*, v. 152, nos. 3-4, p. 163-171.

MACPHEE, DANIEL, MAARTEN DE WIT, ET AL., 2003, How the Cape Got its Shape: The Geological History of the Cape Peninsula (folded map and guide). Map Studio (Cape Town), Explore Series, www.mapstudio.co.za.

MACQUEEN, R.W., ed., 2004, Proud Heritage: People and Progress in Early Canadian Geoscience. Geoscience Canada Reprint Series, no. 8, Geological Association of Canada.

MAIER, GERHARD, 2004, African Dinosaurs Unearthed. The Tendaguru Expeditions. Indiana University Press, Bloomington.

MANDEL, R.D., 2004, Looking Across the Forest-Praire Border: A Perspective on Late Quaternary Landscape Evolution in Stream Valleys of the Central Great Plains, USA *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 41-46.

MARABINI, STEFANO and VAI, G.B., 2003, Marsili's and Aldrovandi's early studies on the gypsum geology of the Apennines, *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 187-204.

MARTI, JOAN and ERNST, G.G.J., eds., 2005, Volcanoes and the Environment. Cambridge University Press, 500 p.

MARTIN, R.A., 2004, Missing Links: Evolutionary Concepts and Transitions through Time. Jones and Bartlett, Sudbury, Massachusetts, 303 p.

MASON, ALAN, 2002, William Anthony Swithin Sarjeant, 1935-2002: *Geological Society of New Zealand. Historical Studies Group*, v. 25, p. 3-4.

MASON, JOSEPH, 2004, Abrupt Boundaries in Eolian Systems of the Midcontinent: Influence of Climate, Vegetation, Topography, and Groundwater *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 47-52.

MATHER, J.D., TORRENS, H.S., and LUCAS, K.J., 2004, Joseph Lucus (1846-1926) – a Victorian Polymath and a Key Figure in the Development of British Hydrogeology, *in* J.D. Mather, ed., 200 Years of British Hydrogeology. Special Publication 225, Geological Society of London, p. 67-88.

MAYR, ERNST, 2004, What Makes Biology Unique?: Considerations on the Autonomy of a Scientific Discipline. Cambridge University Press, New York, 246 p.

MAZUR, ALAN, 2004, True Warnings and False Alarms: Evaluating Fears About the Health Risks of Technology, 1948-1971. Resources for the future, Washington, D.C., 199 p.

MCKAIN, D.L., 2005, 2005 Symposium on the History of Oil Industry Field Excursion *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute. International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

MIDDLETON, G.V., 2004, Short Biographies: Frank Dawson Adams (1859-1942); Robert Bell (1841-1917); Reginald Aldworth Daly (1871-1957); John William Dawson (1820-1899); Joseph William Winthrop Spencer (1851-1921), *in* R.W. Macqueen, ed., Proud Heritage: People and Progress in Early Canadian Geoscience. Geological Association of Canada, Geoscience Reprint Series, no. 8, p. 209-217.

MIDDLETON, G.V., 2005, Timetable of Petroleum Geology *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute. International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

MILANOVSKY, E.E., 2004, Two Hundred Years of Geological School of the Moscow University – In Portraits of its Founders and Outstanding Figures (1804-2004). Academic Project, Moscow, 448 p.

MILLER, HUGH, 2003, The Cruise of Betsy With Rambles of a Geologist (with introduction and additional notes by Michael Taylor and preface by T.C. Stout). National Museums of Scotland, Edinburgh, 576 p.

MORELLO, NICOLETTA, 2003a, Georg Agricola (1494-1555) e la conduzione della miniera: tecnica e impresa, in S. Cavachiocchi, ed., Atti della XXXIV settimana di studi 'Economia e energia secc. XII-XVIII" Instituto Internazionale di Storia economica. F. Datini. Le Monnier, Firenze, p. 947-980.

MORELLO, NICOLETTA, 2003b, The Birth of Stratigraphy in Italy and in Europe, *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 251-264.

MORELLO, NICOLETTA, 2003c, The Geophysics of Athanasius Kircher, *in* W. Schröder, ed., Alte und neue Probleme der Physik und Geophysik, Herausgegeben, Bremen/Potsdam, IV, Heft 1, p. 110-119.

MORELLO, NICOLETTA, 2003d, The Question on the Nature of Fossils in the 16th and 17th Centuries, *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p.127-152, 251-264.

MORELLO, NICOLETTA, 2003e, Wernerian References in Tommaso Antonio Catullo, *in* H. Albrecht and R. Ladwig, eds., Abraham Gottlob Werner and the Foundation of the Geological Sciences. Selected papers from the International Werner-Symposium in Freiberg, 19th to 24th September 1999, 2nd edition, Freiberger Forschungshefte, D 207 Montan und Technikgeschichte, Freiberg, p. 283-290.

MORRELL, JACK, 2005, John Phillips and the Business of Victorian Science. Ashgate Publishing, Aldershot, 437 p.

MOTA, T.S., 2004, The Shadow of an Institution: the Portuguese Geological Survey in the Interwar Period. Organizing Committee, ed., Volume of Abstracts 32nd International Geological Congress, 20-28, August, Florence, Italy, part 2, p. 1352.

MUSSETT, A.E. and KHAN, M.A., Looking into the Earth: An introduction to Geological Geophysics. Cambridge University Press, Cambridge, 496 p.

NELSON, DAVID, HU, F.S., and GRIMM, ERIC, 2004, Dynamics of Middle Holocene Climate, Vegetation, and Fire on the Northern Praire Peninsula *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 53-55.

NELSON, R.A., 2003, Exploration for Fault-Related Fractured Reservoirs: Houston Geological Society Bulletin, November, p. 27.

NEMCOK, MICHAL, SCHAMEL, STEVEN, and GAYER, ROD, 2005, Thrustbelts: Structural Architechture, Thermal Regimes, and Petroleum Systems. Cambridge University Press, Cambridge, 500 p.

NIEDEK, I. and FRATER, H., 2003, Naturkatastrophen: Wirbelstürme, Beben, Vulkanausbrüche – Entfesselte Gewalten und ihre Folgen. Springer, Heidelberg, 253 p.

NORDT, LEE, 2004, C4 Grassland Dynamics in the North American Great Plains: A 12,000 Year Record Based on Stable Carbon Isotopes of Paleosol Organic Matter *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 56-58.

NORMAN, CARL, 2003, In remembrance of Warren L. Calvert: *Houston Geological Society Bulletin*, November, p. 13.

NORWICK, S.A., 2002, Metaphors of nature in James Hutton's theory of the Earth with proofs and illustrations: *Earth Science History*, v. 21, p. 26-45.

OKADA, HAKUYU, 2001, Founders of sedimentology: *Journal of Sedimentary Society Japan*, no. 53, p. 121-124.

OKADA, HAKUYU, 2002, Founders of sedimentology: proposers of the word "sedimentary": *Journal of Sedimentary Society Japan*, no. 55, p. 29-34.

OKADA, HAKUYU, 2003a, Founders of sedimentology: pioneers in lithology: *Journal of Sedimentary Society Japan*, no. 57, p. 27-33.

OKADA, HAKUYU, 2003b, Founders of sedimentology: pioneers in sedimentary petrology: *Journal of Sedimentary Society Japan*, no. 56, p. 41-45.

OKADA, HAKUYU, 2004a, Founders of sedimentology: from graded bedding to the turbidity current theory: *Journal of Sedimentary Society Japan*, no. 59, p. 55-61.

OKADA, HAKUYU, 2004b, Founders of sedimentology: Henry Clifton Sorby: father of sedimentology: *Journal of Sedimentary Society Japan*, no. 58, p. 115-120.

OKADA, HAKUYU, 2004c, Sedimentology in Japan – a Legacy: *Journal of Sedimentary Society Japan*, no. 58, p. 5-12.

OLDROYD, DAVID, 2003, A Manichean view of the history of geology: *Annuals of Science*, v. 60, p. 423-436.

OLDROYD, DAVID and YANG, J.-Y., 2002, Bailey Willis (1857-1949): geological theorizing and Chinese geology: *Annuals of Science*, v. 60, p. 1-37.

PALSSON, SVEINN, 2004, Icelandic Ice Mountains on the Basis of a Journey to the Most Prominent of Them in 1792-1794. Icelandic Literary Society, 182 p. (orders through hib@islandia.is)

PELLEGRINO, CHARLES, 2004, Ghosts of Vesuvius: A New Look at the Last Days of Pompeii, How Towers Fall, and Other Strange Connections. William Morrow and Company.

PETROV, O.V., JAMOJDA, F.I., ET AL., 2003, To the all-Russia Geological Institute – 120 years: *Regional Geology and Metallogeny*, no. 17, p. 5-9.

PINTO, M.S., 2004a, Portuguese Institutions, Museums and Scientific Societies in the History of Geology and Mineralogy of Portugal (XVIII Century). Organizing Committee, ed., Volume of Abstracts 32nd International Geological Congress, 20-28, August, Florence, Italy, part 2, p. 1353.

PINTO, M.S., 2004b, The Italian Comtribution to the Geology of Portugal (XVIII and XIX Centuries). Organizing Committee, ed., Volume of Abstracts 32nd International Geological Congress, 20-28, August, Florence, Italy, part 2, p. 1123.

PRINCIPE, CLAUDIA ET AL., 2004, Chronology of Vesuvius activity from AD 79 to 1631 based on archeomagnetism of lavas and historical sources: *Bulletin of Volcanology*, v. 66, p. 703-724.

PTTC TECHNOLOGY CONNECTIONS PETROLEUM TECHNOLOGY TRANSFER COUNCIL AND THE DEPARTMENT OF GEOGRAPHY WEST VIRGINIA UNIVERSITY, 2001, Appalachian Update: Trenton- Black River Exploration and Production. National Research Center for Coal and Energy. West Virginia University, Morgantown, WV, May 1, 2001, abstracts with programs.

READ, J.F., 1976, Calcretes and Their Distinction From Stromatolites. *In* Walter, M.R., ed., Developments in Sedimentology, v. 20, p. 55-71.

REPCHECK, JACK, 2003, The Man Who Found Time. James Hutton and the Discovery of the Earth's Antiquity. Simon & Schuster, London, Perseus, Cambridge, MA, 247 p.

REZANOV, I.A., 2004, The history of geology in the works of A.P. Pavlov: 150th anniversary of his birth: *Questions of History of Natural Scsiences and Technology*, no. 4, p. 50-59.

RHODES, F.H.T. and MALAMUD, B.D., 2003, Language of the Earth. Second Edition, Academic Press, 450 p.

RIDING, ROBERT, 2000, Microbial carbonates: the geological record of calcified bacterial-algal mats and biofilms: *Sedimentology*, v. 47, p. 179-214.

ROBERT, J.S., 2004, Embryology, Epigenesis, and Evolution: Taking Development Seriously. Cambridge University Press, Cambridge, 174 p.

ROBERTSON, JAMES, ed., 2002, Hugh Miller – My Schools and Schoolmasters. B & W Publishing, 536 p.

ROBINSON, ERIC, 2003, Historical notes: Bowerbank: a forgotten geologist: *Geology Today*, v. 19, no. 6, p. 219-222.

ROOS, A.M., 2001, Thomas Philpot and chemical theories of the tides in seventeenth-century England: *Ambix*, v. 48, p. 125-136.

ROSE, E.P.F., 2004, Napoleon Bonaparte's Egyptian campaign of 1798: the first military operation assisted by geologists?: *Geology Today*, v. 20, no. 1, p. 24-29.

RÖSLER, H.J., 2001, Aus dem Werdegang eines ostdeutschen Mineralogen – Studium an der Bergakademie Freiberg/Sachsen in den Jahren 1947 bis 1949 und 1950 bis 1951: *Geohist. Blätt*, p. 65-74.

ROYER, D.L., BERNER, R.A., MONTANEZ, I.P., TABOR, N.J., and BEERLING, D.J., 2004, CO_2 as a primary driver of Phanerozoic climate: *GSA Today*, v. 14, no. 3, p. 4-10.

ROZWADOWSKI, H.M., 2002, The Sea Knows No Boundaries: A Century of Marine Science Under ICES. University of Washington Press, Seattle, 410 p.

RUDDIMAN, WILLIAM, 2001, Earth's Climate: Past and Future. W.H. Freeman and Co., New York, 465 p.

RUDWICK, MARTIN, 2003, Roy Porter, historian of geology. In memoriam Roy Porter: *Hist. Sci*., v. 41, p. 251-256.

SARJEANT, W.A.S., 2003, Letters of W.A.S. Sarjeant: *Saskatoon History Review*, v. 17, p. 1-6.

SARTI, CARLO, 2003a, The Geology Collections in Aldrovandi's Museum *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 153-167.

SARTI, CARLO, 2003b, The Istituo della Scienze in Bologna and its Geological and Palaeontological Collections in the 18th Century, *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 205-219.

SCHAFFER, SIMON, 2003, Enlightenment brought down to Earth. In memoriam Roy Porter: *Hist. Sci*., v. 41, p. 257-268.

SCHOLLE, P.A., 2005, The Changing Image of the Oil Industry as Reflected in Postcards of the 19th and 20th Centuries *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

SCHOLTZ, C.H., 2002, The Mechanics of Earthquakes and Faulting. Cambridge University Press, Cambridge, 496 p.

SCHREIBER, B.C. and EL TABAKH, MOHAMED, 2000, Deposition and early alteration of evaporites: *Sedimentology*, v. 47, p. 215-238.

SCHRÖDER, WILFRIED, 2001, Why research into the history of geosciences?: *Acta Geodaetic. Geophys. Hung*., v. 36, p. 225-229.

SCHUBERT, B.W., 2004, Ozark Caves and Late Pleistocene Mammalian Paleoecology *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 172-173.

SCHUBERT, GERALD, TURCOTTE, D.L., and OLSON, PETER, 2001, Mantle Convection in the Earth and Planets. Cambridge University Press, Cambridge, 956 p.

SCHUBERTH, KONRAD, 2001, Paul Assman (1881-1967): Erforscher der Geologie Oberschlesiens: *Geohist. Blätt*, v. 4, p. 35-46.

SCHULTZ, J., 2005, The Ecozones of the World: The Ecological Divisions of the Geosphere. Second Edition, Springer-Verlag, 350 p.

SCOTCHMOOR, J.G., SPRINGER, D.A., BREITHAUPT, B.H., and FIORILLO, A.R., 2003, eds., Dinosaurs. The Science Behind the Stories. American Geological Institute. Alexandria, VA, 192 p.

SEIBOLD, E., 2004a, Martin Schwarzbach (7 Dezember 1907-24 Dezember 2003): *International Journal of Earth Sciences (Geologische Rundschau)*, v. 93, p. 652-655.

SEIBOLD, E., 2004b, Vohersagen in den Geowissenschaften. Abhandlungen der Akademie der Wissenschaften und der Literatur, Mathematisch-Naturwissenschaftliche Klasse, v. 2, p. 147-149.

SENGÖR, A.M.C., 2001, Is The Present the Key to the Past or is the Past the Key to the Present? James Hutton and Adam Smith versus Abraham Gottlob Werner and Karl Marx in Interpreting History. Geological Society of America, Boulder, Colorado.

SENGÖR, A.M.C., 2003, The Large Wavelength Deformations of the Lithosphere: Materials for a History of the Evolution of Thought from the Earliest Times to Plate Tectonics. Geological Society of America, 333 p.

SEVER, MEGAN, 2005, Mummy tar in ancient Eqypt: *Geotimes*, February, p. 12.

SHAFER, S.L. and BARTLEIN, P.J., 2004, Simulated Changes in Grassland-Forest Boundaries in the Continental United States Under Potential Future Climate Change *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 65-68.

SIGALA, J.L.D., BOTTERO, V., YOUNG, D.B., SHEVCHENKO, A., MERCURIO, F., and VERMA, I.M., 1963, Biomedicine: activation of transcription factor NF-kB requires ELKS, and IkB kinase regulatory subunit: *Science*, v. 304, p. 1963-1966.

SINGH, HARWANT, 2005, The Occurrence and Exploration of Malaysian Oil and Gas Resources *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

SKELTON, L.H., 2005, The Hugoton – Panhandle Gas Field *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

SKELTON, PETER, GILMOUR, IAIN, KELLEY, SIMON, and SPICER, BOB, 2003, The Cretaceous World. Cambridge University Press, Cambridge, 360 p.

SMIL, VACLAV, 2002, The Earth's Biosphere: Evolution, Dynamic, and Change. MIT Press, Cambridge, MA, 346 p.

SMITH, A.J., 2004, Drought on the Prairies: Exploring the Link Between Lakes and Hydrology Through Time *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 69-72.

SORKHABI, RASOUL, 2005, Pre-Modern History of Bitumen, Oil, and Gas in Persia *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

SPENCER, J.A., 2005, West Virginia's Oil Industry Illustrated on Postcards *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

STANFORD, CRAIG, 2003, Upright: The Evolutionary Key to Becoming Human. Houghton Mifflin.

TAMASAKI, KAZUO, 2001, The Researches by geochemist Ietake Okada and his brief biography: *Kagakushi (Hist. Chem.)*, v. 28, p. 163-170.

TANASESCU, GABRIELA, NECULAE, PANDELE, MOCUTA, T.S., and LEPARDA, ANCA, 2005, Specific Events in Romanian Oil History *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

TAYLOR, M.A., 2004, Who's Hugh? the life of Hugh Miller: *Museum's Journal*, v. 104, p. 39.

TAYLOR, M.A. and TORRENS, H.S., 2004, Further information on the life of Charles Moore (1815-1881), Somerset geologist: *Somerset Archaeology and Natural History*, v. 147, p. 181-182.

TAYLOR, PAUL, ed., 2004, Extinctions in the History of Life. Cambridge University Press, Cambridge, 192 p.

THACKRAY, JOHN, 2003, To See the Fellows Fight. British Society for the History of Science, Monograph 12. BSHS Monographs, 5 Woodcote Green, Fleet, GU51 4EY England, 244 p.

THOMAS, W.A., 2005, Meeting Challenges with Geologic Maps. The AGI Environmental Awareness Series. pubs@agiweb.org

TOCHINAI, FUMIHIKO, 2002, The methodological aspects of the historicity controversies in the Japanese geological community after World War II: The change of attitude to physicochemical methods before and after the War: *Hist. Scientiarum*, v. 12, p. 59-73.

TORRENS, H.S., 2002, Review of the Practice of British Geology 1750-1850. Variorum Collected Studies, Ashgate Publishing Ltd., Aldershot, 356 p.

TORRENS, H.S., 2004a, Scarborough's first geologist? The life and work of the remarkable Rev. Frederick Kendall (1790-1836): *Proceedings of the Yorkshire Geological Society*, v. 55, p. 119-129.

TORRENS, H.S., 2004b, The life and work of the geologist S.S. Buckman: *Proceedings of the Cotteswold Naturalists Field Club*, v. 43, p. 25-47.

TORRENS, H.S., 2004c, The Water-Related Work of William Smith (1769-1839), *in* J.D. Mather, ed., 200 Years of British Hydrogeology. Special Publication no. 225, Geological Society of London, p. 15-20.

TORRENS, H.S. and TAYLOR, M.A., 2004, Further information on the life of Charles Moore (1815-1881), Somerset geologist: *Somerset Archaeology and Natural History [formerly Proceedings of the Somerset Archaeological and Natural History Society]*, v. 147, p. 181-182.

TRABISH, H.K., 2005, Scandal: A Short History of the Teapot Dome Affair *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

TURNER, S. and VICKERS-RICH, P., 2004, Australian involvement in IGCP: Australian Contributions to "Big Geoscience". 32nd International Geological Congress, Florence. Abstracts Vol. pt. 2, abs. 301-16, 1352.

TURNER, S. and WEBBY, B., 2004, Dr. Elizabeth Arnold Ripper 1909-2004: *The Australian Geologist*, no. 133, p. 45.

VACCARI, EZIO, 2002, Earth Science and Geology, *in* B.S. Baigrie, ed., The History of Modern Science and Mathematics. Charles Scribner's Sons, New York, v. 3, p. 1-43.f

VACCARI, EZIO, 2004, An overview on some geological relationships between Australian and Italian scientists in the 18th century: *Jahrbuch der Geologischen Budesanstalt*, p. 74-87.

VACCARI, EZIO and CURI, ETTORE, 2003, Quarrying and Geology in Early 18th Century Italy: The Lithological Column of Gregorio Piccoli (1739), *in* M. Serrano Pinto, ed., Geological Resources and History. Proceeding of INHIGEO Meeting, Portugal, Universidade de Aveiro, Aveiro, p. 417-429.

VAI, G.B., 2003a, A Liberal Diluvianism. *In* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 221-250.

VAI, G.B., 2003b, Aldrovandi's Will: Introducing the Term "Geology" in 1603 *in* G.B. Vai and W. Cavazza, eds., Four Centuries of the Word Geology. Ulisse Aldrovandi 1603 in Bologna. Minerva Edizioni, Bologna, p. 65-112.

VAI, G.B., 2004, The second International Geological Congress, Bologna, 1881: *Episodes*, v. 27, p. 13-20.

VAJDA, VIVI and MCLOUGHLIN, STEPHEN, 2004, Fungal proliferation at the Cretaceous-Tertiary boundary: *Science*, v. 303, p. 1489.

VALERIO, A.L. and LAURITO, CÉSAR, 2004, La Sección de Geologíe del Museo Nacional de Costa Rica,

in G.J. Soto, Percy Denyer, and Mauricio Mora, eds., V Congreso Geológico Nacional. Programa y resúmenes, San José, Costa Rica, p. 155-156.

VANDAS, S.J., WINTER, T.C., and BATTAGLIN, W.A., 2005, Water and the Environment. The AGI Environmental Awareness Series. pubs@agiweb.org

WANG ZHIMING and LIU BINGYI, 2004, Weng Wenbo – The father of modern theory on prognosis: *Newsletter History of Geology for 2004*, p. 40-45.

WAPLES, D.A., 2005, Stepchild: The Natural Gas Industry in Appalachia *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

WATERSTON, C.D. and TORRENS, H.S., 2004, Sir George Steuart Mackenzie, Seventh Baronet (1780-1848) Chemist, Geologist, and Antiquary, *in* H.G.C. Matthew and B. Harrison, eds., Oxford Dictionary of National Biography, 60 volumes, Oxford University Press, Oxford, v. 35, p. 587-589.

WELLS, BRUCE, 2005, Promoting Community Oil and Gas Museums *in* Ashton, K.C., Johns, P.J., and Woodfork, L.D., eds., Proceedings of the Petroleum History Institute 2005 International Symposium on the History of the Oil Industry Abstracts. April 6-9, 2005, Morgantown WV and Parkersburg, WV.

WHITNEY-SMITH, ELIN, 2004, Second Order Predation (2OP) and Pleistocene Extinction Model (PEM) – Implications for Vegetation Changes *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 116-117.

WILLIAMS, J.W., SHUMAN, BRYAN, and BARTLEIN, P.J., 2004, Holocene Variations in Tree Cover and Moisture Availability in Central North America *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 86-91.

WILLS, C. and BADA, J., 2000, The Spark of Life: Darwin and the Primeval Soup. Perseus Publishing, Cambridge, MA, 291 p.

WILSON, L.G., 2000, The Mantell plaque – a further observation: *HOGG (Newsletter of the History of Geology Group of the Geological Society of London),* May, no. 21.

WING, S.L., GINGERICH, P.D., SCHMITZ, BIRGER, and THOMAS, ELLEN, 2003, Causes and Consequences of Globally Warm Climates in the Early Paleogene. Geological Society of America, 588 p.

WOHLFORTH, CHARLES, 2004, The Whale and the Supercomputer: On the Northern Front of Climate Change. North Point Press.

WOLFE, S.A., 2004, Holocene Dunefield Chronology and Environmental Change in the Prairie Parkland – Boreal Forest Transition Ecoregions Central Saskatchewan, Canada *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 92-97.

WOODBURN, T.L., JOHNSON, W.C., and ROSS, JORGINA, 2004, Mapping Surficial Geology of Western Kansas: A Perspective on the Quaternary *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 181-182.

WOODHOUSE, CONNIE, 2004, Tree-Ring Evidence for Late Holocene Drought on the Western Great Plains Periphery *in* AMQUA 2004 University of Kansas, Lawrence. American Quaternary Association Program and Abstracts of the 18th Biennial Meeting, June 26-28, p. 98-99.

WU FENGMING, 2004, A few comments on the modern frontiers in geological science: *Newsletter History of Geology for 2004*, p. 76-79.

WUTZKE, ULRICH, 2000, Deutsche Geologen auf dem Mars – oder: 163 Jahre Glazialtheorie von Agassiz: *Geohist. Blätt*., p. 20-22.

WYSE JACKSON, P.N., 2004, Thomas Hawkins, Lord Cole, William Sollas and all: casts of Lower Jurassic marine reptiles in the Geological Museum, Trinity College, Dublin, Ireland: *The Geological Curator*, v. 8, p. 11-18.

YAMADA, TOSHIHIRO, 2003, Stenonian revolution or Leibnizian revival?: constructing geo-history in the seventeenth century: *Historia Scientiarum* (*International Journal of the History of Science Society of Japan*), v. 13, no. 2, p. 75-100.

YAMADA, TOSHIHIRO, 2004a, Bernhard Varen's Geographia generalis (1650) and Seventeenth- Century theories of the Earth: *Kagakushi Kenkyu* (*Journal of History of Science Society, Japan*), v. 43, no. 229, p. 1-12. (in Japanese)

YAMADA, TOSHIHIRO, 2004b, Descartes versus Gassendi in theories of the Earth with special reference to Nicolaus Steno: *Tetsugaku Kagakushi Ronsou* (*Archive for Philosophy and the History of Science*, University of Tokyo), no. 6, p. 131-167. (in Japanese)

YANG ZUNYI, ZHANG XIANGONG, and YANG GUANGRONG, 2004, The major academic achievements of Professor Yuan Fuli and his important contributions to the reconstruction in China: *Newsletter History of Geology for 2004*, p. 13-18.

YEE, NATHAN and KORETSKY, CARLA, 2004, History of science: who were the ten most notable geochemists of the 20th century?: *Geochemical News*, no. 120, p. 6-14.

YOUNG, D.A., 2003, Mind over magma: the story of igneous petrology. Princeton University Press, Princeton, 704 p.

ZAFFOS, JOSHUA, 2005, Miracle microbes at work: *Geotimes*, February, p. 40-41.

ZALUDIENE, G., 2005, Juozas Lukosevicius View on the Earth Evolution. A Monograph. Institute for Geology and Geography. Vilnius, 129 p.

ZHAI YUSHENG, 2004, The contributions of Professor Xie Jiarong to the geology of mineral deposits and the cause of mineral exploration: *Newsletter History of Geology for 2004*, p. 19-23.

ZUANG, JIUCHEN, 2003, On modern geologists in China. In Chinese: *Stud. Dial. Natur*., v. 25, no. 3, p. 72-79.

ANTARCTIC RESEARCH: NO LONGER AN HISTORIC MATTER IN THE SCIENCE COMMUNITY

ON THE ESTABLISHMENT OF AN NEW ACTION GROUP AND ITS FIRST WORKSHOP

Cornelia Lüdecke

München, Germany
C. Luedecke@lrz.uni-muenchen.de

The 50th anniversary of the International Geophysical Year is in 2007–2008. On this occasion an Action Group on the "History of the institutionalisation of Antarctic Research within SCAR" was established under the Delegate Committee on Standing Committees and Outreach of the Scientific Committee of Antarctic Research (SCAR) during the SCAR XXXIII Delegates Meeting at Bremerhaven in October 2004. It is the first international and interdisciplinary group devoted to the history of polar research.

The aim of this working group is to obtain insight into the evolution of Antarctic research and the emergence and development of institutions to co-ordinate, what was first called the Special Committee, and then Scientific Committee on Antarctic Research. We plan to study to what degree research in the Antarctic has been driven by scientific criteria, and to what extent compromises were made in the light of political barriers, levels of technological development, logistical limitations, and physical hazards.

In historical perspective, a review will be made of essential background factors, both scientific and non-scientific, at work when nations were moved to participate in the International Geophysical Year (IGY, 1957–1958) at the time of the Cold War. Pertinent in this respect are the different roles played by non-governmental scientific organisations as distinct from intergovernmental organisations or modes of international organisation. Additional socio-cultural and political background factors will be considered with regard to major nations that chose not to contribute to the IGY.

Traditionally, field science practised in remote geographical regions was either a byproduct of exploration or an activity exploited by economical interests or territorial claimants. An important aspect of the early international polar year initiatives in the past has been the requirement that expeditions and projects be driven by scientific research instead of exploration. This principle was reiterated in Belgium since 1905 by a number of internationally minded scientists (Henryk Arctowski, William Speirs Bruce, Jean Charcot, Georges Lecointe, Otto Nordenskjöld, and others). This was, when efforts were afoot to establish an international polar commission, a hybrid combination of inter-governmental and non-governmental scientific and other organizations. Although such a commission was actually founded, it had a very marginal influence on events and was soon eclipsed by the First World War.

In the course of the workshops we want to investigate the engagement in Antarctic research. What motivated an individual person or a given country to engage in Antarctic research? Did the motivation differ during different historical time periods? Is it possible

to identify different types of role-figures? The next step refers to the realisation of Antarctic research. How were research agendas set up and implemented? What kind of arguments were used to promote Antarctic research? What sort of funding was available, and did different modes of funding affect the character of an expedition and the way it was conducted? Co-operation was also very important in the context. When did co-operation for research pertaining to Antarctica occur, and what was the general orientation and scope? What were some of the obstacles associated with multi-lateral or international co-operation? Finally there had been leading figures in the context of different national settings and perspectives. We want to know, who were the persons that came to be recognised as leading figures in Antarctic research, and for what reasons? To what extent did some scientists emerge as diplomats within science, or beyond it in the international political arena? How were they regarded by their scientific colleagues, by politicians, media, etc?

To answer these questions the 1st SCAR workshop on history of Antarctic Research took place at the Bavarian Academy of Science and Humanities in Munich on 2–3 June, 2005. The Commission for Glaciology of the Bavarian Academy with its first scientific leader Dr Oskar Reinwarth was involved in the preparatory phase of the construction of the Georg-von-Neumayer-Station and participated in many research projects funded by the Deutsche Forschungsgemeinschaft. On the occasion of the 25th anniversary of the establishment of this West German Antarctic station, a workshop on the history of Antarctic research was held under aegis of the SCAR Action Group and the Commission for Glaciology.

Participants came from Australia, Chile, England, Germany, Holland, Sweden and USA. On Thursday morning, Prof. Horst Hagedorn, chairman of the Commision of Glaciology, welcomed the participants on behalf of the Academy and gave a short introduction to the history of the Academy and the various projects going on. The scientific leader of the same commission, Ludwig Braun, addressed the tradition of Antarctic research at the commission in his welcome speech. Cornelia Lüdecke, chairwoman of the Action Group, gave some technical advises, while Aant Elzinga (University of Göteborg) finally opened the workshop.

Each oral presentation was of 60 minutes duration which allowed enough time for detailed discussions. The posters were on display throughout the whole workshop. Altogether we had nine oral papers and three poster presentations.

Session I started with Jorge Berguño from the Chilean Antarctic Institute (Santiago, Chile) on the dawn of Antarctic scientific consciousness from the Chilean point of view. He described how a sort of elite developed in Chile in co-operation with Antarctic expeditions and with Punta Arenas as focal point for supplies. Due to a very strong earthquake in 1905, the Chilean government was prompted to establish a seismological network instead to realise the planned first Chilean Antarctic expedition. During the discussion, it was pointed out that the International Polar Years (IPY) always took place during fundamental scientific peaks: 1st IPY (1882/83): Observation of the transit of Venus, 2nd IPY (1932/33): Investigation of the upper air, and 3rd IPY (International Geophysical Year, 1957/58): Satellites. Comments on Chile's Antarctic claims in comparison with the Antarctic Treats System were also made.

The poster presentation of five minutes each followed immediatelyafterwards. Jason Davis, a graduate student from the Department of Geography (Ohio State University, Columbus, OH, USA), explained the changes to Antarctic identity rhetoric as demon-

strated by papers published in the National Geographic Magazine. David Michael Dodd from the Royal Society of Victoria / University of Melbourne (Melbourne, Australia) in absence had send a short poster addressing the Australian context of the history of Antarctic research referring to the input of European scientists like Georg von Neumayer. The 'Heroic Age' (until 1916) activities were centred on Australian Antarctic Territory and the Ross Dependency. It was followed by the Second Polar Year (1932/33, Mawson Years), the Third Polar Year (IGY, 1957/58, the Law Years) and Antarctic research in the modern era—the past 40 years. Finally Helmut Honik's (Filchner Archive, Munich, Germany) and Cornelia Lüdecke's poster focussed on the Bavarian officer Wilhelm Filchner (1877–1957) leader of the second German Antarctic expedition to the south eastern part of the Wedded Sea. He wanted to investigate the connection of the western and eastern part of Antarctica being land covered by snow or being frozen water. Filchner's estate is placed in the Filchner-Archive of the Bavarian Academy of Sciences and Humanities. It holds diaries, correspondences, books, movies, pictures, and personal belongings.

After the coffee break, Adrian Howkins a Ph.D. student from the University of Texas at Austin (Abington, USA) discussed Argentine scientific interests in Antarctica from 1946 to 1959. He divided this period in three sections, which were closely connected with changes of government in Argentine: The military or navy period (1946–1951), Peron's period (1951–1956) with the foundation of the Instituto Antarctico Argentino, and finally the time after 1956 with the impact of the International Geophysical Year (1957/58) and research in the so-called Argentine sector of the Antarctic Peninsula with respect of occupation. Howkins investigated the organisational structure of Argentine Antarctic science, the nature of Argentine scientific research and the use made of Antarctic science in Argentine political rhetoric. Due to the discovery of fossils on the Peninsula being the same as in the Argentine Andes, Argentine's claims in Antarctica were based on geographical continuity. In the discussion the peculiarity of the Falkland War down to 65 km north of the boundaries of the Antarctic Treaty System was highlighted. British and Argentine soldiers were fighting against each other, while scientists from both countries were siting at the same table discussing matters of Antarctic research at the same time. Nevertheless a politicalisation of Antarctic history was stated according to Francis Bacon's "Knowledge is power".

Antarctic veteran John C. Behrendt from the Institute of Arctic and Alpine Research (University of Colorado, USA) presented his view of the U.S. Antarctic Oversnow geophysical-glaciological research program of the IGY (1957–58). Being a graduate student of geophysics, he participated in the US program as assistant seismologist on the Filchner Ice Traverse, where many crevasses were encountered. At the end of his talk, Behrendt underlined the fact that the highly demanded U.S. air program had resulted in an averaged death toll of 3.8 deaths/year from 1955–1961. In the discussion the special circumstances of the Cold War were emphasised. Everything was made for later territorial claims of the U.S., which never were presented , because the UK forestalled the Antarctic Treaty. Since 1956 the US flag flies above the South Pole, where all claims except that of the Norwegians meet. But today the U.S. needs the help of the Russian icebreaking cruise ships to resupply McMurdy base, because the US icebreakers and US coast guard ships had been to expensive to be refit in the last years.

It was a pity that the Russian colleagues had withdrawn their participation, because of the business with Antarctic Treaty Consultative Members in Sweden at the same time.

Their comments to the discussions would have been very valuable.

In session II after lunch Reinhard Krause filled in the time slot given to Lisbeth Lewander from the Department of Gender Studies (Göteborg, Sweden), who unfortunately had to cancel her participation on a very short notice or personal reasons. Nevertheless her planned contribution on the political dimensions of the Norwegian-British-Swedish-Expedition (NBSX) to Antarctica 1949–52 will be included in the proceedings. Instead R. Krause gave a paper on Georg von Neumayer (1826–1909) as pioneer of Antarctic research. Neumayer's permanent agitation in favour of a German Antarctic expedition since the late 1850s finally led to the realisation of the first international Polar Year (1882/83), in which two German expeditions took part. One established a station in Cumberland Sound (Baffin Island) and one on the sub-Antarctic Island South Georgia to observe the transit on Venus at the same time.

To fill the time gap C. Lüdecke added a short paper on the Belgian attempt to institutionalize polar research (1905–1915) and the German point of view, which gave insight in the failed initiative of an early polar organisation, to which Berguño and Elzinga referred to several times during their talks. Aant Elzinga from the Department of History of Ideas and Theory of Science (Universtiy of Göteborg, Sweden) continued with his paper on the Swedish non-participation in the Antarctic leg of the IGY. He focussed on the personalities involved. It was interesting to see that prominent participants of the NBSX became rather influential in Antarctic research. But Sweden was not politically motivated and had no champions who who came forward to push for activities in Antarctica during the IGY. In the discussion it was noted that Canada was represented in Antarctic research through members of various expeditions since the Scott's *Terra Nova* expedition (1910–1913). In the middle of June 2005, Canada will finally become a consultative member of the Antarctic Treaty.

When session II was finished, most participants used the beautiful summer evening for a short historic walk through the old parts of Munich passing by the Hofbräuhaus to stop at a typical Bavarian restaurant, where we could sit outside in the beer garden of the backyard. Here, over a glass of beer from Munich, exciting stories from Antarctic expeditions mingled with new ideas of further workshops.

On Friday morning Peter Abbink, a Ph.D. student from the Arctic Centre (University of Groningen, Holland) started session III with a presentation of Antarctica in the 1980s as subject of international politics. Obviously this period had been most dynamic and turbulent in the history of the Antarctic Treaty System (ATS). The debate about the mineral regime intensified and the 'Question of Antarctica' became an annual consideration in the United Nations General Assembly. The support for the ATS increased in the 1980s and the ATS expanded rapidly. Besides the concern for the conservation of the Antarctic natural environment grew considerably. In the discussions on the renewal of the ATS including the decisions about the minerals regime and the environment different types of legal systems had been involved: The German need for exact definitions and the Anglo-Saxon attitude of wait-and-see how things develop.

Johan van Bennekom, retired from Royal Netherlands Institute for Sea Research (Texel, The Netherlands), described the start of Dutch involvement in Antarctic research. In the mid-1960s, Dutch meteorologists were members of overwintering crews in three expeditions to the Belgian-Dutch Station "King Baudouin", situated on the Princess Ragnhild coast. After many years of lacking continuation the Dutch interest in Antarctic research grew again in the 1980s in context with the possible revision of the Antarctic

Treaty. While governmental organisations were very much in favour of exploitation non governmental organisations in Holland played a major role focussing on the conservation of nature. Influential persons could help to reset Dutch Antarctic research through the hospitality of other countries to include Dutch scientists in their expeditions as it also happened with West German scientists after World War II. Instead, Holland will never raise money for a permanent station on the Antarctic continent. Therefore there is a move to try and establish a European station to be used by smaller countries like the Netherlands. This was keenly discussed by some Dutch scientists in Utrecht a few years ago, and it seems the French were also interested in such an endeavour.

The next talk after the coffee break dealt with a special case study. Balthasar Indermuehle from the School of History and Philosophy of Science (University of New South Wales, Glebe, NSW, Australia), gave a fascinating Introduction on the history of astrophysics in Antarctica. He identified three steps of development. The astrogeological era from the first discovery of a meteorite during the Mawson expedition (1911–1914) to the large scale meteorites finds in the 1960s, the high energy era with the dawn of high energy and solar astronomy in the 1970s, and the photon era since 1979 with the first optical research program and recent projects in high energy and sub millimetre astronomy. The Antarctic Plateau turned out to be an ideal place for astronomical observations due to its high altitude and the transparency of several atmospheric windows. This led to the largest single scientific and most international programme at the South Pole. AMANDA (Antarctic Muon and Neutrino Detector Array) is a collaboration of scientists from 20 institutions of six nations. Indermuehle described the special demands of such a project, in which a lot of logistics is involved limiting many other research projects.

The workshop finished with the last paper presented by Cornelia Lüdecke from the Centre for the History of Science, Mathematics and Technology (University of Hamburg, Germany) about the failed initiative of Karl Maria Herrligkoffer's private "German South Pole Expedition" 1957/58. The paper was mainly based on newspaper clippings and pamphlets of the expedition. It is wellknown that West Germany had decided not send an official expedition to Antarctica during the IGY. Instead in 1955, the physician (specialist in anatomy) and mountaineer K.M. Herrligkoffer (1916–1991) had started a campaign to realise a private expedition the Neuschwabenland, which had been discovered by the 3rd German Antarctic Expedition (1938/39). In 1953, Herrligkoffer had been subject of headlines because of his successful expedition to the top of Nanga Parbat as well as his style of leadership. Due to a lack of his (scientific) competence, the German Geographers Day at Hamburg recommended not to support his expedition. Besides, Wilhelm Filchner was engaged by the scientific community to demand an agreement from Herrligkoffer about not including his expedition in the official frame of the IGY. Finally Herrligkoffer's plan was not realised, because he was not the right man at the right place.

At the end of the workshop plans were made for a new meeting either in Argentine or in Chile at the end of May 2006. Besides a session will be also organised at the Open Science Conference of SCAR at Hobart (Tasmania) in July 2006, because we want to address colleagues from Asia as well.

The proceedings of the first SCAR workshop on the history of Antarctic research shall be published in the Reports of Polar and Marine Research of the Alfred Wegener Institute in Bremerhaven (Germany) prior to the SCAR Conference in 2006.

The German journalist, Wolfgang Karg from Berlin, also participated at the

workshop. Afterwards he maid some interviews with the speakers on their personal experience in Antarctic research as well as the significance of the history of Antarctic research for the future.

Summing up the workshop it can be said that the mixture of Ph.D. and graduate students, historians, Antarctic veterans, and historians of science, as well as profound experts of the Antarctic Treaty led to very lively and interesting discussions. Between single sessions nice coffee breaks right next to the conference room facilitated continuation of the discussions. During lunch breaks typical Bavarian dishes like "Leberkäs" with potato salad or "Weißwürstel" with pretsels were served at the same place.

The workshop had been sponsored by the Scientific Committee of Antarctic Research, Deutsches Zentrum für uft und Raumfahrt (Oberpfaffenhofen), Deutsche Gesellschaft für Pülarforschung, und Schwerpunkt Geschichte der Naturwissenschften, Mathematik und Technik (University of Hamburg) and Spaten-Löwenbräu Gruppe.

EARTH SCIENCES HISTORY: JOURNAL GUIDELINES

AUTHOR'S STYLE SHEET AND CHECKLIST

Please check each item as you verify that your manuscript adheres to it:

1. Manuscripts should be written in English; either American or English variants of spelling may be used. The use of variants should be consistent within a paper.
2. 3 copies of papers must be submitted as hard-copies in the first instance. Manuscripts must be typewritten or processed on a letter quality printer and **double-spaced throughout**, including quotations, notes, and references, on paper of standard size and weight. Margins should be wider than usual to allow space for instructions to the typesetter. All text should be flush left, with the right hand margin left ragged (unjustified) to maintain even spacing and readability. Important note: minimize use of fancy formatting codes such as hanging indents. Underlining and italicizing are acceptable for book and journal titles, as are mathematical and foreign Character sets.
3. Revised manuscripts should be submitted in doubled-spaced hard copy, and on CD identifying both the platform (Mac or PC) either as a MS Word document or rtf document. Zip disks and 3.5" disks are also accepted. Electronic submission is essential.
4. Figures are welcome in illustrating articles. Line drawings should be directly reproducible; glossy prints must be furnished for all half-tone illustrations. Digital submission is encouraged, on CDs, or Zip disks. Half-tones should be scanned at 600 dpi and black and white documents at 1,200 dpi and submitted at final publication size: 128 mm wide. Files should be submitted in the TIFF format; files in JPEG or GIF formats are **unacceptable.**
5. Tables should be in files separate from the main text. Note your name on each disk, as well as the platform, software used, and the contents. The typesetter will design the table for your review and revision.
6. ***Earth Sciences History*** **uses a dual citation system of footnotes plus sections on Archives and References.** Although inconvenient for the author, it is easier for readers. Authors should submit articles with endnotes and not footnotes. Notes should be **double-** or even **triple-spaced**, numbered consecutively throughout the article, and keyed to superscript reference numbers in the text. You may use the standard command for endnotes found in your word-processing software. Your article should be followed by sections titled **Archives** and **References**, also **double-** or **triple-spaced**. Follow the models given in **Citation Guidelines -** ***Earth Sciences History,*** available below and on the HESS web site (**www.historyearthscience.org**).
7. Titles and quotations in languages other than English: Titles should be in the original language, but may be followed by an abbreviated English translation if this will help the reader. Titles in non-Roman script may require special treatment. Short, well-known, non-English phrases or technical terms may be kept in the original language, especially if interpretation might change or cloud the meaning. Longer quotations should be translated into English in the text, with the original language in an attached footnote. Non-English words generally are not italicized in the journal. The author will be responsible for both the translation and the accuracy of the non-English text, although the editor reserves the right of verification.

8. Standard metric units or historically appropriate units should be used. If readers in other fields might not be familiar with the units used, please provide some explanation or equivalents.
9. The names of historical figures should be given in complete form on first appearance (not initials), with birth and death dates specified from a reliable source. Dates should be separated by an en-dash and not by a hyphen: (1857–1933) **not** (1957-1933). This may not be possible for obscure figures, but your efforts will make your work more interesting and more useful to other scholars.
10. Standard information to include at the beginning of an article:
    a. Title of article
    b. Name(s) of author(s)
    c. Affiliation(s) of author(s), with street address(es) and e-mail address(es)
    d. Abstract of approximately 150 words
11. Sections that often follow the main body of the text are:
    a. Acknowledgements
    b. Archives
    c. References (mandatory)
    d. Appendices
    e. Notes on Contributors (mandatory; printed at end of each issue): A sentence or two identifying the author(s), relevant career information, recent research areas, and work in progress.
12. Standard files on disk that must be separated:
    a. Text of article (including footnotes) and References
    b. Figures
    c. Tables
13. ***Earth Sciences History*** requests voluntary page contributions from authors in the amount of $15 US per page, but acceptance of manuscripts and publication are not contingent on payment of page charges. A voluntary figure contribution of $15 per figure is similarly requested but not required.

CITATION GUIDELINES

With each article, ***Earth Sciences History*** prints footnotes and—at the end of the article—an **Archives** section and an alphabetical **References** section. This system provides a convenient service to readers. In all cases the range in pages should be shown with an en-dash and **not** with a hyphen: e.g. 534–555, **not** 534-555.

Footnotes use a superscript numeral in the text. The footnote citation format is a simplified version of that found in the *Chicago Manual of Style*, 14th edition. Although complete information should be in the footnotes, it is often useful to the reader if a short hint is given in the text to indicate which work is being cited. For example: "As Lyell wrote in 1833 in his *Principles of Geology . . .".* Succeeding citations in footnotes should use a short-title with the author's last name, year of publication, and page(s): e.g., Oldroyd, Archaean, 1991, 446. The use of author and short-title replaces *Ibid.* and *Op. cit.,* which sometimes inconvenience readers. For more complicated situations, see *The Chicago Manual of Style,* 14th edition (Chicago: University of Chicago Press, 1993), chapter 15, or contact the editor. Authors may include short discussions in footnotes.

The titles of the sections at the end of your manuscript should be **Archives** and

References. The Archives section may either list the collections of manuscripts consulted and cited or, if it would allow greater clarity, an author might write a paragraph discussing these collections. Of course, this section should be omitted if no archives have been cited in the article.

The References section follows the Archives section, or if this is omitted, it follows the main text of the article. The Reference section lists *published* materials cited. The main difference between footnotes and items in References is structural. While authors' names appear as Roberta Smith in footnotes, they appear in References with the family name first: Smith, Roberta. Otherwise, citations follow the models below in both footnotes and References. A second difference is that footnotes cite specific locations in a work, while items in the References section list works-as-a-whole. For multiple authors, see the examples below.

Citations should be as specific as the instance requires. That is, a citation to a work-as-a-whole is acceptable only if the reference is actually to the work as a whole. If the reference concerns a particular chapter or page range, these must be specified. All quotations require specific pages. Short comments and original (foreign) language quotations may also be found in the footnotes.

How Citations appear in Footnotes:

Book:

Eduard Suess, *The Face of the Earth,* 5 vols. (Oxford: Clarendon Press, 1904), 1:17.

Arthur H. Robinson, *Early Thematic Mapping in the History of Cartography* (Chicago: University of Chicago Press, 1982), 37–43.

K. E. Bullen and Bruce A. Bolt, *Introduction to the Theory of Seismology*, 4th edition. (Cambridge: Cambridge University Press, 1985), 103–107.

Article in journal:

David R. Oldroyd, The Archaean Controversy in Britain: Part I – The Rocks of St. David's, *Annals of Science*, 1991, 48: 407–452, on 434.

Eric L. Mills, The Historian of Science and Oceanography after Twenty Years, *Earth Sciences History*, 1993, 12: 5–18.

B.C. Heezen, and M. Ewing, Turbidity currents and submarine slumps in the 1929 Grand Banks earthquake, *American Journal of Science*, 1952, 250: 849–878.

Article or chapter in book:

Stephen J. Pyne, Certain Allied Problems in Mechanics: Grove Karl Gilbert at the Henry Mountains, in *Two Hundred Years of Geology in America,* ed. Cecil J. Schneer (Hanover, NH: University Press of New England, 1979), 225–238.

Karl Hufbauer, Solar Physics' Evolution into a Subdiscipline (1945-1975), in *New Trends in the History of Science,* eds. R. P. W. Visser, *et al.* (Amsterdam: Rodopi, 1989), 73–91.

Unpublished thesis or dissertation:

John A. Wolter, The Emerging Discipline of Cartography, Ph.D. Dissertation, University of Minnesota, 1975, 37–38.

Citing manuscript or archival material and oral history interviews in footnotes:

William Thomson to J. D. Forbes, 30 July 1847, incoming 1847/42, James David Forbes

Papers, St. Andrews University Library. (This will vary according to the system at each archive. Subsequent citations may use abbreviations.)

Walter M. Elsasser, Oral History Interview conducted by J. T. Kiehl, 12 March 1986. 1 session, 1 cassette; preliminary transcript. Part of American Institute of Physics/ American Meteorological Society project. (Subsequent citations may use abbreviations.)

Archives: Two Alternatives

List format:

Forbes, James David. Papers. St. Andrews University Library. (This will vary according to the system at each archive.)

Elsasser, Walter M. Oral History Interview conducted by J. T. Kiehl, 12 March 1986. 1 session, 1 cassette; preliminary transcript. Part of American Institute of Physics/ American Meteorological Society project.

Paragraph format:

This article is based on research in the James David Forbes Papers, at St. Andrews University Library, in St. Andrew's, United Kingdom. It has also drawn on the Oral History Interview of Walter M Elsasser, conducted by J. T. Kiehl on 12 March 1986. This interview and a preliminary transcript are part of the American Institute of Physics/American Meteorological Society project and may be consulted at the American Institute of Physics, College Park, MD, USA.

How Citations appear in the References Section:

Book:

Suess, Eduard, *The Face of the Earth,* 5 vols. (Oxford: Clarendon Press, 1904).

Robinson, Arthur H., *Early Thematic Mapping in the History of Cartography* (Chicago: University of Chicago Press, 1982).

Bullen, K. E., and Bruce A. Bolt, *Introduction to the Theory of Seismology*, 4th edition. (Cambridge: Cambridge University Press, 1985).

Article in journal:

Oldroyd, David R., The Archaean Controversy in Britain: Part I – The Rocks of St. David's, *Annals of Science*, 1991, 48: 407–452.

Mills, Eric L., The Historian of Science and Oceanography after Twenty Years, *Earth Sciences History*, 1993, 12: 5–18.

Heezen, B.C., and M. Ewing, Turbidity currents and submarine slumps in the 1929 Grand Banks earthquake, *American Journal of Science*, 1952, 250: 849–878.

Article or chapter in book:

Pyne, Stephen J., Certain Allied Problems in Mechanics: Grove Karl Gilbert at the Henry Mountains, in *Two Hundred Years of Geology in America,* ed. Cecil J. Schneer (Hanover, NH: University Press of New England, 1979), 225–238.

Hufbauer, Karl, Solar Physics' Evolution into a Subdiscipline (1945-1975), in *New Trends in the History of Science,* eds. R. P. W. Visser, *et al.* (Amsterdam: Rodopi, 1989), 73-91.

Unpublished thesis or dissertation:
Wolter, John A., The Emerging Discipline of Cartography, Ph.D. Dissertation, University of Minnesota, 1975.

GUIDELINES FOR WRITING ÉLOGES

Fields of academic endeavor often memorialize the passing of their practitioners through the publishing of obituaries, memorials, or éloges. The History of the Earth Sciences Society has established a committee (composed of the Past President and three other HESS members) to arrange for the writing of such biographical notices. These éloges will be published in ***Earth Sciences History*** at the first opportunity. The committee and the authors of éloges will follow these guidelines:

1. Individuals who contributed significantly to the history of the earth sciences will be appropriate for an éloge, for their contributions including the writing of articles or books in the field, for their efforts as editors, or generally in the support of history of the earth sciences, and to HESS particularly. Eligibility will extend to non-members as well as to members of the History of the Earth Sciences Society.
2. The committee shall normally solicit authors for particular éloges. Proposals for unsolicited éloges will be considered by the committee, but prospective authors of such unsolicited éloges are strongly advised to contact the Past President before beginning. Do not contact the Editor of **EARTH SCIENCES HISTORY** concerning éloges.
3. The primary focus of the essay should be the contribution of the individual to the history of the earth sciences, not contributions to science or to other areas of scholarship, except insofar as those other efforts affected the individual's historical work. While the text should focus on the person's activity in history of earth science, it should also paint a vivid picture of the person. The person's publications will always be evident and available; the personality will not.
4. Length: Essays will be between 1,000 and 2,000 words, as determined by the committee. One photograph may be included.
5. Bibliography: Only partial bibliographies can be published. Authors should refer mainly to publications relating to history of the earth sciences. Authors are encouraged to refer to more complete bibliographies published in other venues and to published memorials that summarize the person's entire career.

MANUSCRIPT REVIEW GUIDELINES

In reviewing this manuscript for ***Earth Sciences History*** please comment in as much detail as your time permits upon the following matters (and of course anything else that comes to mind.) Please inform the Editor whether you wish your review to be anonymous.

1. Would you have read this through if you had simply come across it already published in ***Earth Sciences History***? If your answer is "No", what might the author(s) do to increase the interest of the piece for you?
2. Is the argument sound, and is its factual basis sufficient and accurate?

3. Are the references to both primary and secondary literatures sufficient, complete, and accurate? Is recent relevant scholarship acknowledged and/or discussed? Can you suggest further materials the author(s) might consult during revision?
4. Is the manuscript clearly written? How might it be reworked for greater clarity?
5. Is the manuscript well organized? What improvements might be made in this area?
6. What is the historical problem the author addresses within the confines of his/her topic? That is to say, if this subject/idea/person is "the answer", what is the "question"?
7. Are the illustrations (if any) pertinent? Sufficient? Of good quality?
8. If this article is revised according to your suggestions, will it be suitable for publication in ***Earth Sciences History***?
9. Other comments and suggestions?
10. Make your comments and suggestions constructive! Because articles for the journal typically pass through at least one cycle of revision before being accepted, it will help greatly if you phrase your comments in a manner which can aid the author(s) in the task of revising the manuscript.
11. If you judge that the manuscript ***cannot*** be brought to a publishable standard in anything like its present form, please say so.

Many thanks for this service to ***Earth Sciences History*** and The History of the Earth Sciences Society. Our referees' reviews and commentary are the primary foundation and guarantee of scholarly standards. Please return your comments to me in a timely manner. **In no circumstances take longer than 30 days.**

TREASURER'S REPORT FOR 2005

(AS OF NOVEMBER 1, 2005)

BALANCE FORWARDED FROM 2004	$39,818.37
Less payments to Allen Press for ESH 23/1 and 2 and 24/1	- $29,548.82
Less other operating Expenses including Website and postage	- $ 2,172.86
INCOME TO HESS INCLUDING INTEREST	+$21,658.50
BALANCE AS OF November 1, 2005	$29,755.19

EXPLANATION

Three issues of *Earth Sciences History* have been published in the year 2005 up to November 1. The issues were volume 23 numbers 1 and 2 for 2004 and volume 24 number 1 for 2005. The costs for volume 23 were higher than anticipated. 23-1 was $9,344.70 and 23-2 was $16,493.21. With the large increase in printing costs and with Patrick Wyse Jackson taking over as editor for volume 24, the decision was made to have the printing and mail distribution handled in Ireland. The savings realized was a factor in this decision. The cost for 24-1 dropped to $3,710.91. we anticipate the costs for 24-2 to be in the same range. The savings resulting from the change in printing firms has helped HESS maintain a healthy budget surplus through 2005. The increase in mailing costs and other services has resulted in an increase in dues by $2 for 2006.

Other expenses for 2005 include: Website fees of $109.85. $355.59 for Ed Rogers' participation at the Geological Society of America's Affiliated Society meeting in Boulder. $300 for coverage in the Allen Press Directory. $313 to cover Patrick Wyse Jackson's participation in an Allen Press Symposium. $348 to cover the cost of printing and mailing ballots notices. $473 for shipping back issues of ESH to one central location. $201 for mailing of dues notices, reminders and miscellaneous printings and reimbursements to our associate editors.

Overall HESS remains fiscally strong but we do need to increase both our individual and institutional memberships.

Respectfully submitted
Ed Rogers
HESS Treasurer

NOTES ON CONTRIBUTORS

K. R. Aalto is Professor Emeritus of Geology at Humboldt State University. He received his PhD in Geology at the University of Wisconsin-Madison in 1970. His research interests are in sedimentary tectonics, stratigraphy, igneous petrology and structural geology of the Franciscan Complex and Neogene rocks of northern California, volcanic geology of the Modoc Plateau, Pleistocene geology of the Bahamas Platform, and the history of science [which he effectively "minored" in while a graduate student, strongly influence by Robert H. Dott, Jr.]. He is a Fellow of the Geological Society of America.

Paul Brinkman is a Ph.D. candidate in the Program in History of Science and Technology at the University of Minnesota and the Lester Armour Graduate Fellow at The Field Museum - Library. His principle areas of interest are in history of vertebrate paleontology, Field Museum history, the life and career of Elmer S. Riggs, and Darwiniana. He is currently writing his dissertation on the history of Jurassic dinosaur collecting in the American West.

Graham McKenna was Chief Librarian and Archivist for the British Geological Survey (1984–2003). He was responsible for the transfer of its library and archives from the Geological Museum in South Kensington to the Survey's present headquarters in Nottinghamshire in 1985 and 1986. He was also Curator of the British Association Collection of Geological Photographs at Keyworth.

David Oldroyd retired in 1996 and is presently an honorary visiting professor at The University of New South Wales. He was Secretary-General of the International Commission on the History of Geological Sciences for eight years and is currently a Vice-President.

Jens Smed, ICES Hydrographer 1946-1984. Recent work: contributions to the history of oceanography, especially the history of ICES. Further work on these subjects is in progress.

JOIN THE HISTORY OF THE EARTH SCIENCES SOCIETY AND SUBSCRIBE TO

EARTH SCIENCES HISTORY

Memberships for 2006 are:

	Inside the USA	Outside the USA
Individual	US $46	US $51
Institutional	US $76	US $81

NAME_____

INSTITUTION_____

ADDRESS_____

_____

_____

CITY_____

STATE_____

COUNTRY_____

ZIP CODE OR POSTAL CODE_____

PHONE _____

FAX_____

e-mail_____

RESEARCH AND INTEREST AREA:

_____

_____

_____

Payment may be made by: ____Check drawn on a US Bank

Send form and payment to: Ed Rogers, HESS TREASURER, P.O. Box 455, Poncha Springs, CO 81242, USA

BACK ISSUES OF *EARTH SCIENCES HISTORY*

It's easy to buy a single back issue, or a complete run of the journal. Place your order using the form below

---

Payment may be made by: ____Check drawn on a US Bank

Send form and payment to: Ed Rogers, HESS TREASURER, P.O. Box 455
Poncha Springs, CO 81242 USA

To calculate your cost, add the cost of the journal and the appropriate postage cost. All costs are in U.S. dollars.

Journal cost (per issue, 2 issues per vol.)	*Institutional*	*Individual*
Volumes 1-22 (Volume 1 was a single issue)	US $30/issue	US $20/issue
Volume 23 forward	$36/issue	$21/issue

Postage is expensive. Please choose the cheaper surface rates or First Class. First Class prices are in parentheses.

Surface Rates	U.S. Addresses	Canadian Addresses	Elsewhere
1-10 issues	$8 (10)	$12 (15)	$25 (45)
11-20 issues	$10 (15)	$15 (25)	$40 (80)
Full run of journal	$15	$25	$80

SPECIAL OFFER FOR FULL RUN OF JOURNAL: Get the complete run of volumes 1–23 for $330 plus postage for individuals or $480 plus postage for institutions. This is approximately 2/3 the normal cost. Volumes 1, 2, 3, and a few other issues are only available as photocopies.

NAME_____
INSTITUTION_____
ADDRESS_____
_____
_____
CITY_____
STATE_____
COUNTRY_____
ZIP CODE OR POSTAL CODE_____
PHONE _____
FAX_____
e-mail_____