

EARTH SCIENCES HISTORY

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HESS logo: Athanasius Kircher's (1602–1680) *Systema ideale prophyliaciorum*—imagined view of subterranean fires and surface volcanoes, from *Mundus subterraneus*, 1678, Vol. 1, between pp. 186 and 187.

Front-cover image: Carlotta Maury (centre in white hat), examining fossils in a quarry in Argenteuil, France, in 1899. Photograph reproduced by courtesy of the Hastings NY Historical Society.

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EDITOR'S INTRODUCTION

DAVID R. OLDROYD

We are pleased to inform readers that *Earth Sciences History* has been accepted for listing by ISI (Institute for Scientific Information)/Web of Science, so that our contributors will have their papers properly counted by their institutions' 'bean counters'. The journal is included in both the Science Citation Index ('SCI') and Social Sciences Citation Index ('SSCI'). It is not clear to the present editor why this listing has not occurred at an earlier stage of the journal's history, but it was good to find that we were accepted without demur, after submitting three consecutive issues for evaluation. The Society's Treasurer, Dr Emma Rainforth, is warmly thanked for making the application or 'doing the paperwork'.

The following news is not gratifying at all, however. As foreshadowed in our previous Editorial, Professor Gerald Friedman, the founding editor of the journal and its long-time supporter, has, due to declining health, had to relinquish the task of compiling the list of 'Interesting Publications'. This contribution has been published ever since the journal's first volume was issued in 1982 (and has become 'more interesting' over the years).

Faced with the potential cessation of 'Interesting Publications', Members of the Board were consulted as to what action should or could be taken. It appeared that no one was likely to have the time and resources to prepare such a compilation on a regular basis and so it was reluctantly decided to bring the Interesting Publications to a close. This decision was made more palatable by the fact that information is now much more easily accessible than was the case back in 1982 (though there is more of it). Also, one should remember that the bibliography for the history of science, published annually by the journal ISIS in its annual *Current Bibliography*, contains most of what scholars may need, though Professor Friedman's collation was generally of wider scope as regards history of the earth sciences—and some Board Members confessed that it was always the first thing they looked at on perusing an issue (perhaps to see whether their own choice offerings had been noticed?). Anyway, we are saddened that the series is coming to an end and express our thanks to Professor Friedman (and his assistants) for their efforts over many years. An appreciation of Friedman by Kennard Bork is contained in the present issue.

In the present number, **Dane Picard** opens with an autobiographical account of his recollections of the early stages of prospecting for oil in Nevada. **Davis Young** provides Part 2 of his important series of articles on the events leading to the publication of the so-called CIPW system for petrological classification. The HESS President, **Martina Kölbl-Ebert**, writes on a remarkable seventeenth-century alchemist/mineralogist and 'mining engineer', Madame Martine de Bertereau, whose work might be said to belong to the pre-scientific era of the earth sciences. **Lois Arnold** offers the first half of a two-part paper on the work of the American palaeontologist Carlotta Maury, describing her trials in a male-dominated science, and also her significant achievements. **Christopher Cleal**, **Helen Frazer**, **Maureen Lazarus**, and **Geoffrey Darnell** provide a detailed account of the work of a rather little-known, but important, early English palaeobotanist, Edmund Tyrell; and **Barbara Mohr** continues the interest in fossil plants by her description of the history of the specimens from Lower Silesia that are now located in the Museum of Natural History in Berlin. Finally **Wolf Mayer** describes the geoscientific work that was conducted in the southern coastal parts of Australia by the Baudin expedition, with the work in 1801–1803 of Nicolas Baudin himself and more particularly his scientific assistants Louis Depuch and Charles Bailly, and the anthropologist François Péron.

GERALD M. FRIEDMAN: AN APPRECIATION

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Change is inevitable in an evolving world. Nonetheless, it can be disquieting when ‘constants’ leave the scene. In Volume 28, Number 1 (2009) the Editor reported that the ‘Interesting Publications’ feature, compiled for many years by Gerald M. Friedman (Figure 1), would no longer form part of the journal. After decades of service to the History of the Earth Sciences Society (HESS) and to *Earth Sciences History* (ESH), Gerry and his family concluded that health issues required him to cut back on his workload. The Editorial Board understood that decision and found that it was not possible to continue the feature without Gerry’s input. It is a shame to lose such a valued element of the journal, especially when it was contributed by one of our Society’s founders, but in this age of readily accessible electronic retrieval methods it was felt that researchers seeking information could resort to a variety of aids, from Google to the *ISIS* bibliography, and that it was not necessary to seek to find a successor for Gerry. But at the same time the Board also felt that cessation of one of the most appreciated facets of the journal demanded a positive statement recognizing the pivotal contributions of Dr Friedman to geoscience and to the discipline of the history of geology.



*Figure 1.
Gerald M. Friedman (from the cover
of Saxa Loquuntur (Rocks Speak): The
Life and Times of the Geologist,
Gerald M. Friedman, courtesy of the
SEPM Foundation, Tulsa, Oklahoma,
USA).*

Needless to note, an organization needs to originate before it can evolve. Those of us long involved with the history of geoscience recall the discussions, beginning as long ago as the late 1960s, about the merit of having an international body of like-minded colleagues and a journal devoted to our discipline. Claude Albritton, Joan and Victor Eyles, Gerald Friedman, Ursula Marvin, Martin Rudwick, Cecil Schneer, Hugh Torrens, George White, and Ellis Yochelson were among the key figures involved in those discussions. In the early 1980s Gerry Friedman and Ellis Yochelson promoted the idea of creating a journal focusing on the history of geology. It was to be the first of its kind, and is still the only one published

in English. Michele Aldrich, Douglas Bassett, William Jordan, Walter Kupsch, and others supported the initiative. Friedman worked long and hard to launch the History of the Earth Sciences Society and—with the substantial involvement of his wife, Sue Tyler Friedman—to produce and distribute the new journal *Earth Sciences History*. It should be noted that the Sue Tyler Friedman Medal, presented by the Geological Society of London for contributions to the study of the history of geology, acknowledges Sue's efforts on behalf of our discipline. I was enlisted to edit the first volume of *ESH*, in 1982, with the understanding that Gerry would shepherd the journal on its long-term journey. With continued re-election by the membership, Gerry served HESS and *ESH* as editor for a dozen years, building the journal into a recognized flagship for analyses relating to the evolution of the earth sciences. It may be difficult for readers to appreciate the variety of skills and efforts that go into building a new journal from scratch and then striving to lead it to maturity. Anyone desiring details of the task need only consult Gerry's 'Editorial' published in Volume 5, Number 2 (1986, p. 104). The fact that you are reading this journal in the twenty-first century speaks to the drive, leadership, and hard work of Gerry, Sue, and the staff in the *ESH* offices in Troy, New York, from 1982 through 1993. Members of HESS recognized and applauded those efforts and at the 2001 meeting of the Geological Society of America (GSA), it was an honor for me, as President of HESS, to award Gerry, along with Ellis Yochelson, the first of the Society's "Honorary Life Membership for Exceptional Contribution". Then, in 2005, the History of Geology Division of GSA presented Professor Friedman, a Past-President of the Division, with the Mary C. Rabbitt History of Geology Award in recognition of his support of and contributions to the discipline.

Above and beyond founding a society and editing a journal, the Friedman productivity in the history of geoscience is evident in Gerry's interest in the key role played by geologists of the Rensselaer School in forming a major part of the original base of American geology. His celebration of the work of Stephen Van Rensselaer (1765–1839), Amos Eaton (1776–1842), James Hall (1811–1898), and Ebenezer Emmons (1799–1863) has added significantly to our understanding of American science in the nineteenth century. To go on a Friedman field trip around Troy—home of Uncle Sam and of the early Industrial Revolution along the Hudson River—was to learn a great deal about local geology, history of geology, and the evocative power of gravesites. Gerry's establishment of the Rensselaer Center of Applied Geology in Troy continued the linkage of the region with geoscience. The Center, under the Friedmans' guiding vision, hosted a number of conferences dedicated to geology and its history. Participants at such gatherings profited from their event planning and many had the opportunity to enjoy their convivial hosting and to be dazzled by Gerry's notable collection of books and papers dealing with geology's evolution over the centuries. The collection has particular strength in the works of Darwin.

Yes, you say, but what else did Professor Friedman do besides playing a critical role in the founding of HESS and *ESH*? That question will produce knowing smiles from anyone familiar with sedimentology in the twentieth century. This is not the place to recount Gerry's exceptional life history and myriad contributions to mineralogy, petroleum geology, carbonate sedimentology, and education. The interested reader should consult his autobiography *Saxa Loquuntur (Rocks Speak): The Life and Times of the Geologist, Gerald M. Friedman* (2006, SEPM Foundation, Tulsa, OK) for a valuable overview. Or check out the Gerald M. Friedman website, with its pdf file of *My Administration of National and International Geological Organizations*. The present appreciation is, however, a good place to recount just a few highlights that help illustrate the range of Gerry's accomplishments. Born in Germany, he was educated at the University of London (BSc) and Columbia University (MA, PhD), also receiving a DSc from the University of London and a rare DrNatSci (Honorary) from the University of Heidelberg. His training included chemistry, hard-rock geology, and a broad view of soft-rock geology, focusing on sedimentology. He

worked in industry, including Bristol Myers-Squibb and Amoco Production Company, and taught at the University of Cincinnati, Rensselaer Polytechnic Institute, and Brooklyn College of the City University of New York (CUNY), where he was honored with a Distinguished Professorship. Gerry served as founder and long-time director of the Northeastern Science Foundation, affiliated with Brooklyn College. The Foundation, with Gerry as editor, still publishes *Northeastern Geology and Environmental Science* and *Carbonates and Evaporites*. Over the years, he has mentored some forty-five PhD and fifty-six Masters candidates and has worked with thirty post-doctoral researchers.

On top of all that, Gerry held a black belt in Judo—perhaps helpful as a teaching aid? He was a Fulbright Professor at the Hebrew University in Jerusalem and held visiting professorships in Israel and Germany. Other countries presenting him with awards have included China, India, Israel, Japan, Russia, Serbia, Venezuela, the United Kingdom, and, of course, many organizations within the United States. In the context of geologic education it is worth noting that Friedman was among the founders of the National Association of Geology (now Geoscience) Teachers and served as an Associate Editor of the *Journal of Geological Education*. The Association of Earth Science Editors (AESE) presented him with its highest award. His textbooks, exemplified by *Principles of Sedimentology* (1978), co-authored with John E. Sanders, have become classroom standards. His numerous publications, with a concentration in sedimentology, are still used worldwide. The International Association of Sedimentologists celebrated Gerry's important work by electing him President and conferring an Honorary Membership.

A concise 'Appreciation' cannot list all of the awards and tributes gathered by Professor Friedman, but a few world-class recognitions should be mentioned. In addition to the HESS and GSA History of Geology Division plaudits noted above, Gerry has received the Hedberg Award in Energy from the Institute for the Study of Earth and Man (ISEM), the Sidney Powers Award of the American Association of Petroleum Geologists (AAPG), the Twenhofel Award of the Society for Sedimentary Geology (SEPM), and the Legendary Geoscientist Award from the American Geological Institute (AGI). The title of the latter award says it all.

It is a pleasure for *Earth Sciences History* to congratulate our Founding Editor and thank him for his many contributions to the geosciences and to HESS.