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Award

2012 Service Award of the Meteoritical Society for Ursula Marvin

I am pleased to offer the citation for Ursula Marvin of the Harvard-Smithsonian Center for Astrophysics, to whom we are presenting the Meteoritical Society's Service Award for her documentation of the history of the society and the personal histories of some of the most influential people in meteoritics and planetary science.

Ursula was educated at Tufts College, Massachusetts, where she received a BA in history, and at Radcliffe College where she earned her master's in geology. After several years in Brazil and Angola searching for ore deposits with her husband Tom, and 2 years studying the meteorites in the Harvard collection, she was appointed to the permanent research staff of the Smithsonian Astrophysical Observatory in 1961. She received her Ph.D. degree in 1969. Ursula has spent her entire career at that institution being involved in some of the most fundamental events in our field; the initial studies of the refractory inclusions in the Allende meteorite, the study of samples returned by all of the Apollo and the Russian Luna missions to the Moon, and the recovery of meteorites from Antarctica. She has participated in three Antarctic expeditions, and between 1980 and 1984, she co-edited five issues of the Smithsonian Contributions to the Earth Sciences cataloging and describing the Antarctic meteorites collected by the U.S. teams.

Ursula's first excursion into research on the history of geology led to her book Continental Drift: The Evolution of a Concept, published in 1973. While researching that topic, she experienced the profound change of belief, shared by many geologists worldwide, that, instead of being fixed in place, Earth's continents move horizontally in a global system of dynamic plate motion. Since the late 1970s, she has focused most of her attention on the history of meteoritics. With care and scholarship, she has published papers on the fall of Ensisheim, the oldest preserved fall in the western hemisphere, and on the role of Ernst Florens Friedrich Chladni, the physicist lawyer who collected reports and deduced in 1794 that meteorites fall from space. In 2007, she published an updated version of her paper on Chladni that was placed in a time capsule during the celebrations in December 2007, at Weston, Connecticut, of the first observed fall in the Americas. She also has



shown that the history of crater studies forced an abandonment of the geological principle that all changes must be ascribed to forces intrinsic to the Earth.

Ursula has recorded the history of the Meteoritical Society through presentations at society meetings, first at Mainz in 1983 on the occasion of the 50th anniversary of its founding, and second at Newcastle upon Tyne in 1987 at its 50th annual meeting (having skipped 4 yr during World War II). Then in 1993, Ursula published her major 53-page article describing the 60-year history of the society. She traced it from its first meeting in Chicago, at which time it had 57 charter members, through its decline during the war and in the 1950s, its revitalization in the 1960s, the insurgency of 1966 (when the establishment slate of officers and council members was rejected), through the creation and history of its current journal, and to the spread of its meetings around the world. There must be few scientific societies with such a careful documentation of its history. It is a fine story. Ursula quotes her colleague at Harvard, Fred

No.	Interviewee	Vol.	Pages	Year
Ι	Edward Anders	36	A255–A267	2001
II	Robert N. Clayton	36	A269–A274	2001
III	Robert M. Walker	36	A275–A283	2001
IV	James R. Arnold	36	A285–A292	2001
V	Brian Mason	37	B35–B45	2002
VI	Stuart Ross Taylor	37	B47–B56	2002
VII	Alastair G. W. Cameron	37	B57–B67	2002
VIII	Friedrich Begemann	37	B69–B77	2002
IX	Heinrich Wänke	37	B79–B88	2002
Х	Ralph B. Baldwin	39	A163–A175	2003
XI	Masatake Honda	39	A177–A187	2003
XII	Gerald J. Wasserburg	39	A187–A197	2004
XIII	Fred L. Whipple	39	A199–A213	2004

Table 1. Oral histories published by Ursula Marvin Meteoritics & Planetary Science.

Whipple, as saying "It was the most rankly amateurish group imaginable, and it turned into the most sophisticated scientific society around."

Most recently, Ursula published in MAPS a series of oral histories based on interviews she had taped with distinguished colleagues who had shared with her the momentous history of meteoritics and planetary science in the latter half of the 20th century (Table 1). Interviews with Edward Anders, Robert N. Clayton, Robert M. Walker, and James R. Arnold appeared in the Supplement volume for 2001; interviews with Brian Mason, Stuart Ross Taylor, Alastair G. W. Cameron, Friedrich Begemann, and Heinrich Wänke appeared in the second Supplement for 2002; interviews with Ralph B. Baldwin and Masatake Honda appeared in 2003; and interviews with Gerald J. Wasserburg and Fred L. Whipple appeared in 2004. Historians, especially NASA historians, are developing a new respect for oral histories and the unique insights they provide.

Ursula has represented the community well in management roles on committees and in societies (she served as President of the Meteoritical Society 1975– 1976), in support for women in science, and in a variety of outreach efforts. Her colleagues at the Geological Society of America honored her with their History of Geology Award in 1986, and the Geological Society of London presented her with their Sue Tyler Friedman Medal in 2005. Asteroid Marvin was named in 1991 and Marvin Nunatak in Antarctica was named in 1992.

In the words of Simon Schama, "[our history] is the secret of who we are" and for reminding us of who we are, Ursula Marvin is a most fitting recipient of the Meteoritical Society's Service Award.

Derek Sears

Space Science and Astrobiology Division, MS 245-3, NASA Ames Research Center, Moffett Field, Mountain View, California 94035, USA

SELECTED BIBLIOGRAPHY (EXCLUDING ORAL HISTORIES)

- Marvin U. B. 1973. Continental drift—The evolution of a concept. Washington, D.C.: Smithsonian Institution Press, 239 p.
- Marvin U. B. 1986. Meteorites, the Moon, and the history of geology. *Journal of Geological Education* 34:140–165.
- Marvin U. B. 1988. The rediscovery of Earth. In *From Sputnik* to space telescope, edited by Cornell J. and Gorenstein P. Cambridge, Massachusetts: M.I.T. Press. pp. 213–242.
- Marvin U. B. 1990. Impact and its revolutionary implications for geology. GSA Special Paper 247. Boulder, Colorado: Geological Society of America. pp. 147–154.
- Marvin U. B. 1992. The meteorite of Ensisheim—1492 to 1992. *Meteoritics* 27:28–72.
- Marvin U. B. 1993. The Meteoritical Society: 1933–1993. *Meteoritics* 28:261–314.
- Marvin U. B. 1994. On writing the history of science (editorial). *Meteoritics* 29:431.
- Marvin U. B. 1996. Ernst Florens Friedrich Chladni (1756– 1827) and the origins of modern meteorite research. *Meteoritics* 31:545–588.
- Marvin U. B. 1998. The shower of stones at Siena, 1794: History's most consequential meteorite fall. In *Proceedings* of the 20th International Commission on the History of Geological Sciences Symposium, edited by Morello N. Brigati, Genova. pp. 303–321.
- Marvin U. B. 1999. Impacts from space: The implications for uniformitarian geology. In *James Hutton—Present and future*, vol. 150, edited by Craig G. V. and Hull J. H. The Geological Society, London, Special Publication. London: Geological Society. pp. 89–117.
- Marvin U. B. 2000. Iron meteorites and controversies over the origin of erratic boulders. *Eclogae geologae Helvetii* 93:25–31.
- Marvin U. B. 2001. Stones which fell from the sky. In Meteorites: Their impact on science and history, edited by Zanda B. and Rotaru M. Translated from Les Meteorites. Paris: Bordas. pp. 16–29.
- Marvin U. B. 2002. Geology: From an earth to a planetary science in the twentieth century. In *The Earth inside and out: Some major contributions to geology in the twentieth century*, edited by Oldroyd D. R. The Geological Society Special Publications 192. London: Geological Society. pp. 17–57.

- Marvin U. B. 2006. Meteorites in history: An overview from the Renaissance to the 20th century. In *The History of meteoritics and key meteorite collections: Fireballs, falls and finds*, edited by McCall G. J. H., Bowden A. J., and Howarth R. J. The Geological Society Special Publication 256. London: Geological Society. pp. 15–71.
- Marvin U. B. 2007. Theodore Monod and the lost Fer de Dieu meteorite of Chinguetti, Mauretania. In Four centuries of geological travel: The search for knowledge on foot, bicycle, sledge, and camel, edited by Wyse Jackson P. N. The Geological Society Special Publication 287. London: Geological Society. pp. 191–205.
- Marvin U. B. 2007. Ernst Florens Friedrich Chladni (1756– 1827) and the origins of modern meteorite research. Updated version in *Meteoritics & Planetary Science* 42:B1– B68.
- Marvin U. B. and Cosmo M. L. 2002. Domenico Troili (1766): "The true cause of the fall of a stone in Albereto is a subterranean explosion that hurled the stone skyward." *Meteoritics & Planetary Science* 37:1857–1864.
- Marvin U. B. and Kring D. A. 1992. Authentication controversies and impactite petrography of the New Quebec crater. *Meteoritics* 27:585–595.