### SUPPLEMENT TO METEORITICS, VOL 31#6

# The Meteoritical Society Newsletter

# **DECEMBER 1996**

A report of the business carried out by the Society over the past year, compiled by Monica M. Grady, Secretary.

#### EDITORIAL

President's Editorial

Hap McSween

Honest criticism is hard to take, particularly from a relative, a friend, an acquaintance, or a stranger. - Franklin P. Jones

One of the unofficial duties of the Society's President is to listen to gripes of all kinds. Often these criticisms have merit, and I would like to share a few of them with you, in the hope that the Meteoritical Society might improve by addressing them. Don't get me wrong - I consider our Society the most vibrant scientific organisation that I know of, but any organisation can benefit from some fine tuning of its policies and adjustments to the way it operates.

All societies, I suppose, tend to be run by the most experienced or best known members, those who have paid their dues, so to speak. It has been suggested, however, that the makeup of the Council should reflect the Society's membership in the broadest sense. In the past, the Nominating Committee has paid attention to diversity in geography and discipline in selecting its nominees, but not so much to diversity in age and experience. Many younger members of the Society, in particular, feel that their concerns may not be adequately represented on the Council. Future slates of nominees might benefit from having a student member or a recent graduate who likely shares their concerns. The Council has already indicated that the names of members of the Nominating Committee should be made available to the business meeting prior to the selection deadline so that they can be contacted with suggestions of nominees for various offices.

As I write this, I have recently returned from the Olympics in Atlanta. After watching many events on television, I was struck by how much more exciting they were when viewed live at the Olympic stadium. In the same way, the Meteoritical Society's annual meetings are "science live," and our oral and poster presentations of research in-progress convey a heightened sense of excitement compared to the final, polished publications. "Science live" also allows one to appreciate that scientific research is carried out by humans, not robots, and that we sometimes make mistakes and even change our minds. These are valuable lessons for students, and we must insure that our younger members have opportunities to attend the annual meetings. Organisers, aided by generous gifts from the Barringer Crater Company, have always found funds to support student travel, but additional funding sources (such as might be provided by the Meteoritical Society Endowment Fund) are needed. Young researchers just out of graduate school are especially vulnerable to loss of travel funds, because it often takes years to secure their own support. Also, it has been suggested that future Councils should weigh the merits of particularly exciting but very distant or expensive venues versus more mundane meeting sites that involve lesser costs. Meeting organisers might also consider less expensive (and correspondingly less grandiose) social events and banquets, in order to hold registration costs down.

One of the things I cherish about Meteoritical Society meetings is the discussion periods after talks and, I have to confess, I like a good fight as much as anyone. Criticism and response serve a vital role in insuring that observations and measurements are properly made and interpreted. However, some members (I share this concern) are troubled by comments and questions that are unnecessarily aggressive and disrespectful, particularly when they are addressed to students. To be sure, this happens only rarely, but it takes only one instance to mar a student's perception of the scientific enterprise (this applies not only to the student on the hot seat, but also all the other students in the audience). In general, the Society does a marvellous job of nurturing its future generations, and it has been suggested that we should hold all our colleagues to a high standard of civility while carrying on scientific debate.

We are lucky that our research happens to focus on topics that are inherently interesting to the public. However, we have pushed and quantified the disciplines of meteoritics, cosmochemistry, impact cratering, and planetology to the point where new discoveries and ideas may be difficult to comprehend, sometimes even by other practitioners. All of us would benefit if greater attention were paid to clear communication, and it has been suggested that the Society develop new mechanisms for promoting its research discoveries and delivering this information understandably to the broader scientific community and to the lay public.

In closing, I should note that I have enjoyed my stint in leading this wonderful organisation, and I thank you for the honour and privilege of serving. In listening to your concerns, I have learned that the Meteoritical Society, like all organisations, must change with the times, and it is important that such change be steered by honest criticism. You should realise that it is welcome, and the new Officers and Council invite your concerns.

#### **NEW COUNCIL**

A new Council takes office in January 1997. No candidates were proposed other than the slate of Officers put forward by the Nominating Committee. The following will therefore comprise the new Council of Officers:

(US)

Secretary	Monica M. Grady	(UK)	2nd term
Treasurer	Joseph I. Goldstein	(US)	2nd term
Councillor:	Andrew M. Davis	(US)	
	William K. Hartmann	(US)	
	Gregory Herzog	(US)	2nd term
	Petr Jakeš	(Czech Republic)	
	Hiroko Nagahara	(Japan)	2nd term
	Ludolf Schultz	(Germany)	
	Paul Warren	(US)	
	Brigitte Zanda	(France)	

Vice-President: Michael J. Drake

#### **FINANCES**

Treasurer's Report

Joseph I. Goldstein

The balance sheet for 1995, given below, shows the Society to be in a healthy financial position. The royalties from Pergamon (Elsevier) Press for the publication of *Geochimica et Cosmochimica Acta* continue to accrue. We have collected a total of \$75,735.40 through the end of 1995, an increase of \$20,735.73 from the first of the year.

### BALANCE SHEET December 31, 1995

Bank balance 12/31/95	\$37,147.35
Money Market Account	\$26,462.63
Total 12/31/95	\$63,609.98
Bank balance 1/1/95 (excl. Pergamon, Elsevier)	\$55,213.56
Net gain, Jan Dec. 1995	\$8,396.42
Net Capital as of 12/31/95	\$139,345.38
Includes royalty from Pergamon,	
Elsevier of	\$75,735.40

As of June 30, 1996 our Net Capital is \$168,009.24 which includes additional royalty payments from Pergamon (Elsevier) and interest from our investments of \$18,039.93. Council authorised \$75,000 of this to be transferred to the Meteoritical Society Endowment Fund. As of June 30, 1996, the endowment for the Nier Prize stands at \$53,969.19.

Although our net capital and reserves for the society look quite good, there will be a small budget deficit of about \$3,000 for 1996. Unfortunately this deficit will grow in 1997 and beyond because of increased costs for producing our society's journal, *Meteoritics and Planetary Science*. Because of this budget deficit, the Council voted for a \$10 dues increase for each full member from \$60 to \$70. Although the dues increase seems large, this is the first increase in 3 years.

We have arranged to accept payment for the 1997 society dues by Visa or Master Charge. This change was prompted by the numerous requests from non-US members for this convenience. Members in countries without associate treasurers have had major problems with arranging for currency exchange. The dues increase discussed above will also cover the charges we must pay for the use of Visa and Master Charge.

The current number of members paid for 1995 is 925, essentially the same number of members we have had for the last few years. This number includes 85 student members, and 27 retired members. Of this total 501 members are from the US. The next five highest member countries are Germany, Japan, United Kingdom, France and Switzerland.

We are very thankful to the following members who have made a substantial impact on society finances in the form of gifts. The following members gave major gifts of \$100 or more this past year: Evans Burns, Bevan French, William Greenberg, Gerald Herfurth, John Wasson and William Walbon.

The following members also gave donations: Milton Blander, Alfredo Brogioni, H. W. Bottcher, Peter G. Brown, William H. Cleverly, Ghislaine Crozaz, Vincenzo DeMichele, Duane W. Dietz, Noel Eberz, Jan Frank, Karl Franger, Billy Glass, David Gold, Dorrit Hoffleit, Eugene Jarosewich, John Jeffries, Lindsay Keller, Gunter Lugmair, Roderick Leonard, Ursula Marvin, Barbara Narendra, Henry Hung, E. T. Nichols, John Obradovich, Robert Pepin, Frederick Pipping, N. M. Podgovnyhkl, Oliver Rosham, Jochen Schlutter, William

Shinner, Lawrence Taylor, Robert Walker, Ann Welbon, Walter Werner, Michael Zolensky and Kenzo Yagi.

Next year's (1997) dues statement will be sent before the end of the year. The Treasurer would appreciate your prompt response; late dues payment often result in temporary suspension of your subscription to *Meteoritics and Planetary Science*. If you have any questions about your dues or membership status, the easiest and fastest way to reach the Treasurer is by email, (JIGO@ecs.umass.edu).

#### METEORITICS AND PLANETARY SCIENCE

Editor's Report

Derek Sears

Forced to confront a Chairman of the Publication Committee urging me to take the journal to ever greater heights, and a Treasurer working to keep down costs, I remarked this year that editing a journal is more like riding a wild steer than captaining a large vessel! However, the image of controlling a mighty vessel filled with the precious cargo of our research does appeal. So, my report reads that Starship MAPS has completed another series of successful voyages, each fully laden with bigger and better cargo than before, without any wreckages or even being blown off-course by the storms it encountered. In fact, the editorial board are very proud of the cargo we transported last year. This is an exciting subject, and hardly a day goes by without an interesting new idea being tossed into the holds.

Meteoritics & Planetary Science is succeeding in attracting most of the major meteorite, crater, tektite and interplanetary dust papers being produced, and probably most of the meteor papers. It is also doing very well in attracting asteroid papers, and we will work to maintain this trend. But we now need a major effort towards encouraging cometary papers to the journal. With this in mind we were very pleased that Anny-Chantal Levasseur- Regourd joined the board this year. We also welcomed Rick Binzel, Scott Sandford, and Bill Hartmann as part of our efforts to broaden the appeal of the journal, and Urs Krähenbühl, Alex Deustch, Ed Scott and Ernst Zinner joined the group to maintain and enhance existing strengths. This is a fine bunch a colleagues that it is a privilege to know and work with. Already they are having an impact on the journal.

From both a managerial and editorial point of view perhaps the biggest step we took this year was to transfer the abstracts of the annual meeting and other non-competitive items to a supplement. Our reasons for doing this were explained at length in the supplement's editorial and will not be repeated here. Another was the name change that occurred on January 1, 1996. Almost immediately we received an avalanche of requests for information about the journal from planetary scientists not previously associated with the journal. It is still early days, but all the indications are that the name change was an excellent idea.

So the steam is up for another series of voyages. We are always looking for good cargo, and there's much in the pipeline. I receive a steady stream of comments applauding the invited reviews, but the list needs constant replenishment, especially with ideas that might help us break into the cometary fields. My postal and e-mail addresses are public, and for the price of a beer you can gain my complete attention at any of our meetings.

#### GEOCHIMICA COSMOCHIMICA ACTA

Karl Turekian takes over as Executive Editor of *GCA* on 1st January 1997. The Meteoritical Society looks forward to his stewardship.

The Presidents of the Meteoritical Society and Geochemical Society presented the retiring Executive Editor,

Gunter Faure, with a commemorative plaque at the Geological Society of America meeting in Denver, to acknowledge his many contributions as Executive Editor.

#### HONOURS

The Leonard Medal

Otto Eugster (Chair)

The 1996 Leonard Medal was awarded to Professor Don Brownlee, from the University of Seattle, Washington. Excerpts from the Committee's citation:

"Don Brownlee has made numerous contributions to the study of small interplanetary particles, but his name will always be associated particularly with the discovery and characterisation of what were once "Brownlee particles" but are now called IDPs (interplanetary dust particles) ......it was Brownlee (with co-workers) who created the aircraft-mounted impactor system which produced the first (and for years only) believable collections. He then went on .......to study and characterise these particles in increasing detail, learning to handle and manipulate them, and demonstrating the broad range of structures and compositions that is present."

"....Don has also been active in the collection and analysis of particles in space.....providing the first real look at the population and fluence of particulates as they exist in low-Earth orbit, and the results of these analyses are being used to advance designs for the next generation of particle capture cells."

The 1997 medal will be awarded to Dr E. Zinner.

Members of the Leonard Medal Committee were: Otto Eugster (Chair), Jim Papike, Paul Pellas, John Wasson and John Wood. Nominations for Leonard medallists are encouraged and may be submitted to Otto Eugster (Leonard Medal Committee Chair in 1997), prior to January 15th 1997. His address is: Physikalisches Institut, Sidlerstrasse 5, 3012 Bern, Switzerland. Fax: 41 31 631 4405. Nominations may also be submitted to Monica Grady (Meteoritical Society Secretary; Fax: 44 171 938 9268).

The Barringer Medal

Mike Dence (Chair)

The 1996 Barringer Medal was awarded to Dr Fred Hörz, NASA-JSC, Houston. Excerpts from the Committee's citation:

"Fred has made significant contributions to our understanding of cratering and impact processes...."

"Fred has built the shock laboratory at JSC into a worldclass facility in which he, his colleagues and visiting scientists have made many discoveries about impact processes and their effects. Much of the documentation of pressures required to produce particular shock metamorphic effects stems from his work. His fieldwork and drilling campaign at the Ries demonstrated the degree to which local components can dominate ejecta and is the cornerstone for the interpretation of lunar samples derived from basin-seized impacts. His range of work has been very broad and, in later years, included lead investigations of cosmic dust and micrometeorite cratering on the LDEF experiment."

The 1997 medal will be awarded to Dr T. J. Ahrens.

Members of the Barringer Medal Committee were: Mike Dence (Chair), Bevan French, Billy Glass and Richard Grieve. Nominations for Barringer medallists are encouraged and may be submitted to Billy Glass (Barringer Medal Committee Chair in 1997), prior to January 15th 1997. His address is: 387, Hobart Drive, Newark, DE19713, USA. Fax: (302) 831 4158.

Nominations may also be submitted to Monica Grady (Meteoritical Society Secretary; Fax: 44 171 938 9268).

Fellows

Ten members of the Society were elected Fellows in 1996: John Annexstad, Sherwood Chang, Andrew Davis, Odette James, Rhian Jones, Gary Lofgren, David Mittlefehldt, Minoru Ozima, Mark Thiemens and Rainer Wieler.

The Nier Prize

The initiation of the Nier Prize for young scientists was announced in the May 1995 issue of *Meteoritics*. The award honours the memory of Alfred O. C. Nier, and is supported by an endowment given by Mrs Ardis H. Nier. The prize-winner is proposed by the Leonard Medal Committee, and the first award winner is Dr Laurie Leshin from UCLA. Excerpts from the Committee's citation:

"...the research for which Laurie is well-known, namely elucidating the hydrogen isotope geochemistry of the SNC meteorites......not only provides further important evidence for a martian origin for these rocks, but the use of D/H ratios in hydrous phases as a high precision probe of the interactions of water in the martian crust and atmosphere highlights an important new approach to planetary science through meteorite studies.....there is an increased appreciation for the importance of isotopic (specifically D/H) measurements for understanding the history of volatiles on Mars"

The 1997 prize-winner is Dr T. J. McCoy.

Nominations for Nier prize-winners are encouraged and may be submitted to Otto Eugster (Leonard Medal Committee Chair in 1997), prior to January 15th 1997. His address is: Physikalisches Institut, Sidlerstrasse 5, 3012 Bern, Switzerland. Fax: 41 31 631 4405. Nominations may also be submitted to Monica Grady (Meteoritical Society Secretary; Fax: 44 171 938 9268).

Instructions for nominating individuals can also be found in *Meteoritics* (1995) **30** p. 803.

### ANNUAL MEETINGS

1996; Berlin

Dieter Stöffler

The 59th Annual Meeting of the Meteoritical Society was held July 22-26, 1996, at Berlin in Germany, at the Humboldt-University. The meeting was a big success, with 318 participants pre-registered from 17 countries. There were 200 oral presentations scheduled (including the medallist lectures), with 100 poster presentations. Grants were awarded to 17 students. Medals and certificates were presented to award winners Don Brownlee and Fred Hörz at a formal ceremony in the lecture theatre of the House of World Cultures, prior to the Annual Banquet. At the same ceremony, the President, Hap McSween, presented the first Nier Prize to Laurie Leshin.

1997; Hawaii Klaus Keil

The 1997 Annual Meeting of the Meteoritical Society will be held in the Maui Prince Hotel on the beautiful Island of Maui, Hawaii, USA, from July 21-25, 1997. The hotel is literally at the end of the road near Makena, located directly at the beach, and has fine convention facilities. The hotel has 300 rooms, so the Society will pretty much occupy the entire hotel. All rooms have at least partial ocean view and lanais (balconies), and are equipped with air conditioning (hardly ever needed), refrigerator, safe, etc., all at the remarkably low price of \$115.00 plus tax per night for two people in one room

(up to 2 children under 18 in the same room are free). The hotel has many other amenities, such as tennis, golf, pools, etc. and has agreed to honour the same room rate 4 days prior and 4 days after the meetings, for those of you that may wish to come early or stay longer. There will be scientific sessions from Monday morning through Friday noon, with Wednesday afternoon open. On Sunday, July 20, there will be a field trip up to the spectacular, 3,056m tall, dormant volcano Haleakala, whose summit can easily be reached by car. A walking tour through the caldera is planned. On Wednesday afternoon, July 23, there will be a field trip to the most recent and very fresh lava flow on Maui, which is thought to have erupted in 1790 and is located only a few miles from our hotel. These trips will have expert guides, but you need to provide your own transportation. Self-guided, other excursions and tours are also available on Wednesday afternoon and throughout the week. It is recommended that you rent a car, since you need one anyway to get from the airport to the hotel; the hotel has ample free parking. On Saturday July 26 and Sunday July 27, we plan a field trip to the Volcano National Park on the Big Island of Hawaii. With a bit of luck, you may be able to see an active eruption along the East Rift, which has been erupting pretty much continuously since 1983. This trip requires flying to Hawaii from Maui and renting a car on Hawaii. Expert guides will again be provided. Details will be announced later. If you require any further information at this time:

Contact: Professor Klaus Keil

Hawaii Institute of Geophysics & Planetology

University of Hawaii at Manoa Honolulu, Hawaii 96822, USA.

Tel: (808) 956-3898 Fax: (808) 956-3188;

E-mail: keil@kahana.pgd.hawaii.edu.

The Meteoritical Society Meeting will be preceded by a Workshop on "Parent Body and Nebular Modification of Chondritic Materials", which will take place July 17-19, 1997, also in the Maui Prince Hotel.

Much Aloha, and we are all looking forward to seeing you in Hawaii!

1998; Dublin Ian Sanders

The meeting is planned for July 26th to 31st, 1998, at Trinity College, an old university campus occupying a walled "island" site of gracious historic buildings in the heart of the city of Dublin.

Accommodation has been reserved in the college (250 beds), where it is hoped most delegates will stay. Rooms in the older part of college have a certain elemental charm (they are genuine Georgian rooms) and in some cases toilets and showers are shared by several rooms. Recently-built rooms are available. They have en suite facilities, but lack the character of the older rooms. Accommodation has also been reserved in two hotels near the college. Tourist accommodation is in extremely short supply in Dublin in July. It will therefore be essential to book accommodation early. Current prices are from IR£30 per person per night (IR£1 = \$1.6). A student hostel is available nearby; it costs around IR£10 per night. Car parking is not available in Trinity College, and is expensive in inner city car parks. During the meeting, a car should be unnecessary.

The Welcome and Farewell parties will be held in the Museum Building, an Italian-style 19th century building, and home to the Geology Department. Wednesday afternoon will be free, and one plan is to have a bus trip to the monastic settlement of Glendalough, about 30 miles south of Dublin in a

picturesque glacial valley. The Banquet is to be held on the Thursday evening in the Royal Hospital Kilmainham, a 17th century banqueting hall located about 3 miles from Trinity College.

A guest programme is being planned. It will include some full-day and half-day outings in the Dublin region, such as golf, hill walks, old country houses, Newgrange burial site (5000 BP), Cistercian abbeys, literary pub crawls, Guinness's brewery, *etc.* Also theatre, concerts, art galleries and museums are within walking distance of the lecture theatres, as are Dublin's premier shopping streets and restaurants.

A post-conference field trip to the west of Ireland is being considered.

Contact: Dr Ian Sanders

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1999; Johannesburg

Uwe Reimold

The Annual Meeting of the Society in 1999 will be held in Johannesburg (South Africa). Dates proposed to Council for acceptance are from 11 to 16 July 1999. The conference will be held on the Campus of the University of the Witwatersrand and will be jointly organised by staff of Wits University and Rand Afrikaans University. The Organizing Committee is jointly chaired by Wolf Uwe Reimold (Wits) and Lew Ashwal (RAU). So far, this Annual Meeting will be sponsored by the Geological Society of South Africa, the Mineralogical Association of South Africa, both universities involved, and the Cosmic Mineralogy Working Group of the International Mineralogical Association. The Working Group plans a special symposium on Mineralogy of Impact-Related Phenomena as part of this conference. The organizers plan to circulate a questionnaire among participants of the 1997 Annual Meeting in Hawaii, in order to obtain information regarding their preferences of geological excursions to be arranged for the 1999 meeting.

Contact: Dr. Wolf Uwe Reimold

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2000; Chicago Andrew Davis; Mini Wadwha

At its meeting in July 1996, Council accepted an invitation for the year 2000 from the Field Museum and the University of Chicago. Further details will follow in due course.

# **ELECTRONIC COMMUNICATION**

The Meteoritical Society now has a World Wide Web page, maintained by Paul Benoit at the University of Arkansas. The address is:

http://cavern.uark.edu/studorg/metsoc/

The page contains information on Society meetings, awards and membership, and has a list of Society officers. The current versions of both the Meteoritical Bulletin and the Newsletter are posted there, as are highlights from the Society

Archives. The Society homepage is linked to the Web page of *MAPS*, the homepage of the Lunar and Planetary Institute, and the homepages of several Society members.

For further information about the Web page, contact Paul Benoit (cosmo@uafsysb.uark.edu) or Monica Grady

(mmg@nhm.ac.uk). Suggestions for additions or improvements are (almost) always welcome.

#### CHANGES TO THE BYLAWS

At the March Council meeting, the Bylaws were amended: *Meteoritics* was changed to *Meteoritics and Planetary Science* throughout.

# Announcement

The following back issues of publications are available, at no cost, from the Smithsonian Institution:

Smithsonian Contributions from the Earth Sciences which contain the original descriptions (including photos) of the Antarctic Meteorites. #23 (76,77), #24 (78,79), #26 (80,81), #28 (82,83) and #30 (84-86, including ALH 84001).

The Microscopic Properties of Meteorites, by Tschermak (1885). Translated by Wood (1964) (includes numerous wonderful photographs)

For further information contact: Dr T. J. McCoy, Dept. of Mineral Sciences, Smithsonian Institution, Washington, DC 20560, USA; Fax: 202 357 2476; E-mail: MNHMS055@SIVM.SI.EDU