

***Meteoritics and Planetary Science* goes electronic**

Beginning in January 2000, each issue of *Meteoritics and Planetary Science* will be placed on the internet as PDF files for electronic access. Access will be user and password controlled, and readers should receive a username and a password from the Treasurer upon receipt of their dues (or from the Editorial Office in the case of libraries).

Of course, this is not *Meteoritics and Planetary Science's* first utilization of electronic publication. All issues are currently available in a fully searchable format at the Astrophysical Data System's website (http://adswww.harvard.edu/ads_abstracts.html) one year after publication in hard-copy form, and abstracts are currently posted on the journal's website within 48 hour of formal acceptance. But for the first time full electronic and hard-copy versions of the entire issue of *Meteoritics and Planetary Science* will be available simultaneously to both members and subscribers.

The decision to go to simultaneous electronic and hard-copy publication was made after considerable research and discussion by the Editorial Board. As a means of cheap communication, the internet is excellent. According to Andrew Odlyzko, a mathematician at the AT&T telecoms corporation, the cost of producing an electronic version of an article averages ~\$400, compared to ~\$4000 for print publication. However, the debate continues over the long-term future of print vs. electronic publication. The promise of convenience and wide ranging accessibility almost certainly assure that the publishing industry will see permanent changes in the ways information is produced and distributed. However, as a means of documenting our data and ideas, electronic publication has the major shortcoming of being ephemeral. We are all familiar with internet sites that are no longer available, or have "evolved" so they cannot be revisited to check old information. For commercial and marketing purposes this transience is not a problem, but for scientific purposes it is analogous to members of an orchestra playing from different scores, and the fact that the violins have a better version of the score than the timpani will hardly improve the final product. We have known several instances of website owners asking that their site not be cited in the references accompanying papers and, like NASA and its proposals, the editors of *Meteoritics and Planetary Science* will not allow websites to be cited in articles.

The need for permanence of archiving is by no means trivial. Traditionally, journals have distributed printed information so that multiple copies are independently archived in widely dispersed libraries, some percentage of which will always survive any turmoil yet to come. Electronic publication places all the information on one or two sites where it will be lost if the publisher collapses, or deems the site economically unproductive, if local circumstances change, or if technology advances too fast for archivists to update their archives. However, libraries welcome electronic publication because it absolves them of the expensive obligation to archive; but it means that one of their major contributions to our culture has been lost. They have become simply information disseminators, no more valuable than the number of extant internet sites they have access to. *Meteoritics and Planetary Science* will encourage libraries to download and archive electronic copies of the journal, but there is little incentive to do this. The cost of downloading and archiving electronic versions of journals can be little different than the cost of archiving hard-copies received in the mail, and the cost updating electronic versions as technology evolves is extremely high.

There is discussion of national electronic archive facilities resembling the national hard-copy libraries, and in fact the national library of Denmark is now entirely electronic. By its scale and the importance of its holdings, a national archive would be guaranteed stability, high-level maintenance, and continual updating as technology evolves. But in an area where the pace of change is high and the nature of change is hard to predict, it is not clear whether this will happen widely and whether it will be effective.

In the meantime, *Meteoritics and Planetary Science* will publish both forms, an electronic version for its speed, convenience, and flexibility, and a print version for its unrivalled success with respect to its archival qualities. Even electronic publication requires the imprimatur of a respected journal for the articles to obtain the effectiveness their authors require. So above all, the commitment to rigorous peer review and editorial processes will remain unchanged. This will ensure the continued high quality of content the scientific community has come to expect from *Meteoritics and Planetary Science*.

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