change its capitalistic system to a socialistic one.

Reference

1. H. Karatsu, Sci. Bull. Office Naval Res. Far East **11**(3), 4 (1986).

TAKASHI ICHIYE
3/87 *College Station, Texas*

WHAT BECAME OF J. L. DUNHAM?

Whatever happened to J. L. Dunham?

The quantitative analytic theory of the molecular spectroscopy of diatomic molecules owes its origin to J. L. Dunham, who apparently did this important work for his PhD thesis in physics at Harvard University during 1928–32. However, my search of both *Physics Abstracts* and *Chemical Abstracts* failed to discover any further publications after the brilliant papers on the BKW method and its application to diatomic molecules (*Physical Review* **41**, 713 and 721, 1932). One can certainly understand that the difficult years of the great depression made many competent physicists disappear from the research frontier to find employment teaching in high schools or even leave science altogether; however, it would be nice to know more about this particular physicist, whose contribution is so enduring.

If any readers of PHYSICS TODAY can supply any information, I would be grateful, as I wish to mention something of Dunham's biography in a forthcoming review of his work and modern developments arising therefrom. Please direct any replies to me at the Department of Chemistry, National Tsing Hua University, Hsinchu, Taiwan 30043.

JOHN F. OGILVIE
National Tsing Hua University
8/87 *Hsinchu, Taiwan*

MEETING REFORM

The February 1987 APS *Bulletin* (page 127) reports the loss of some $150 000 per year due to non-registration of some APS meeting participants. Taking the average registration fee as $100, this gives about 1500 cheaters per year. Since only several thousand APS abstracts are submitted annually (and far from all authors show up for the meetings) the above figure amounts, I am afraid, to a much greater percentage of dishonesty among our colleagues than in the general population!

This somewhat sad and shameful conclusion can, however, be relatively easily dealt with. An announced registration fee (or perhaps a flat rate) should accompany every submitted abstract as a cover charge. This measure would not limit the unrestricted privilege of any APS member to submit abstracts—those of us who are financially disadvantaged (for example, unemployed, on pensions or from poor countries) could be excused from the payment on the submission of a simple declaration stating their reasons. To simplify handling, this declaration could even be included at the bottom of the abstract page. The percentage of such exceptional cases would not be unacceptably high.

Contrary to what the APS *Bulletin* article suggested, admission to APS sessions should be open to anyone interested (that is, the idea of "badge guards" is a bad one).

ALEXANDER A. BEREZIN
McMaster University
2/87 *Hamilton, Ontario, Canada*

SEARCH LONGA, VITA BREVIS

It seems that most of the news stories in the Search and Discovery section are getting too long these days. While these articles are definitely valuable to both experts and nonexperts, it takes too much time to finish reading them and may become boring for the majority of readers, the nonexperts. Personally, I think that two pages would be the ideal maximum length for each story. More short ones (of half to one page each, say) could then be added. I am sure that each month, around the world, there are enough searches and discoveries in the various disciplines of physics that are newsworthy and fit to print—in PHYSICS TODAY, of course.

LUI LAM
San Jose State University
1/87 *San Jose, California*

FALSIFYING CREATIONISM

While I found the news story on "creation science" that appeared in your February 1987 issue (page 64) interesting, I must take exception to the statement by the National Academy of Sciences that creationism "requires the direct involvement of a supernatural intelligence and thus cannot be tested by the scientific method."

Creationism proposes that life arose by a series of interferences by a deity with the laws of space–time, while evolutionism proposes that life arose by the normal operation of

those laws. Thus creationism and evolution are mutally exclusive hypotheses. (Note that creationism, in this sense, need not be synonymous with the concept of Creation, since a God who created space–time might have created life simply by instating the laws that cause evolution to occur.)

If it can be shown that the origins of life can be adequately explained by the normal functioning of space–time, then creationism will have been falsified. Of course, creationists might propose that God interfered with the laws of space–time in such a way as to cover His tracks and make it appear as though life arose by evolution, but I have yet to encounter any creationists who actually claim this, and I doubt that most evolutionists would object seriously if they did.

ROBERT W. MCADAMS
3/87 *Lincoln Park, New Jersey*

MORE ON REFEREEING

I would like to express my strong support of the letter by Alwyn Eades (October 1986, page 156) concerning the refereeing process. I have seen it happen more than once that I or friends pointed out a basic flaw in a paper and suggested how to treat the problem, only to see the paper published with the referee's ideas forming the substance of the work.

Another problem concerns the scope of *Physical Review Letters*. I would expect that the editors of a journal aimed at publishing letters of "general interest" should take that aim into account by also employing referees outside the immediate field of a letter. However, my impression is that US editors are significantly more reluctant than European editors to assume an active role in shaping the scope or publishing policy of a journal. For example, I know of a couple of papers that were judged good by referees, with only minor suggestions made, but which have never been resubmitted by the authors (for whatever reasons). I would expect that an editor would be interested in publishing good papers and therefore would contact these authors again after a while. Again, this would be fair to the referees, taking their work into account.

ANTON ZEILINGER
Atominstitut der Österreichischen Universitäten
11/86 *Vienna, Austria*

MARTIAN MISTAKE

We are writing to call attention to an error in our book *On Mars*. On pages 235 and 236, we state incorrectly that Norman Horowitz, Roy E. Cameron and Jerry S. Hubbard (*Science*, 21 April 1972, page 242) failed to detect microorganisms in the soil of the dry valleys of Antarctica, despite five years of effort. Actually, they detected bacteria in 86% of the soil samples tested; just 14% were found to be sterile. No one, to our knowledge, ever claimed that the dry valleys were sterile, contrary to what our book says. We apologize to Horowitz, Cameron and Hubbard for misstating their findings.

EDWARD C. EZELL
LINDA N. EZELL
6/86 *Woodbridge, Virginia* ■

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION
(Act of 12 August 1970: Section 3685, Title 39, USC)

1. *Title of publication:* PHYSICS TODAY
1A. *Publication no.:* 0031-9228
2. *Date of Filing:* 1 October 1987
3. *Frequency of issue:* Monthly (12)
3A. *Annual subscription price:* $70.00
4. *Location of known office of publication:* 500 Sunnyside Blvd., Woodbury, NY 11797.
5. *Location of the headquarters or general business office of the publisher:* 335 East 45th St., New York, NY 10017.
6. *Names and address of publisher, editor and managing editor:*
Publisher: American Institute of Physics, 335 East 45th St., New York, NY 10017.
Editor: Gloria B. Lubkin, American Institute of Physics, 335 East 45th St., New York, NY 10017.
Managing editor: Thomas von Foerster, American Institute of Physics, 335 East 45th St., New York, NY 10017.
7. *Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given.):* American Institute of Physics, 335 East 45th St., New York, NY 10017.
8. *Known bondholders, mortgagees and other security holders owning or holding one percent or more of total amount of bonds, mortgages or other securities:* Guardian Life Insurance Company of America (mortgagee), 201 Park Ave. South, New York, NY 10003.
9. *Extent and nature of circulation:*

	Average*	August**
A. *Total number of copies printed (net press run)*	105 303	110 801
B. *Paid circulation*		
1. *Sales through dealers and carriers, street vendors and counter sales*	none	none
2. *Mail subscriptions*	99 899	104 513
C. *Total paid circulation*	99 899	104 513
D. *Free distribution by mail, carrier or other means, samples, complimentary and other free copies*	2 403	1 783
E. *Total distribution (sum of C and D)*	102 302	106 296
F. *Copies not distributed*		
1. *Office use, left over, unaccounted, spoiled after printing*	3 001	4 505
2. *Returns from news agents*	none	none
G. *Total (Sum of E, F1 and 2—should equal press run shown in A)*	105 303	110 801

* *Average number of copies of each issue during preceding 12 months.*
** *Actual number of copies of single issue published nearest to filing date.*

I certify that the statements made by me above are correct and complete.

G. F. Gilbert, Treasurer