have with us, viz., Dean Acheson, Eleanor Roosevelt, and Adlai Stevenson, to name but very few; all, it should be noted, people of the very deepest humanity.

In 1950 Bertrand Russell said: "The human race could, here and now, begin a rapid approach to a vastly better world, given one simple condition: the removal of mutual distrust between East and West. I do not know what can be done to fulfill this condition. Most of the suggestions I have seen have struck me as silly. Meanwhile the only thing to do is to prevent an explosion somehow and to hope that time may bring better wisdom." (l.c., p. 64) Up to now no word has come that, since the appearance of the committee's pamphlet or Dr. Phillips' article, the British sage has modified these 1950 views.

JOSEPH K. MARCUS

27 W. 96th St., New York City

References

1. PHILLIPS, M. *Science*, **116**, 439 (1952).
2. CREW, H., and DE SALVIO, A. *Dialogues Concerning Two New Sciences, by Galileo.* New York: Macmillan (1914).
3. *Matchette Foundation Lecture* No. 3, p. 21.
4. BELOFF, M. *The Foreign Policy of Soviet Russia,* Vol. 2. Oxford: Oxford Univ. Press, 390, 392 (1949).

Stress Research

AN ever increasing number of articles deals with problems pertaining to research on "stress" and the so-called "adaptive hormones" (ACTH, STH, corticoids, adrenergic substances, etc.).

In 1950, the Institute of Experimental Medicine and Surgery of the University of Montreal initiated the publication of a series of reference volumes entitled *Annual Reports on Stress* (Acta Medical Publishers, Montreal), in which the entire current world literature is surveyed every year (usually between 2000 and 4000 publications). Up to now, we have had to compile the pertinent literature partly from medical periodicals, monographs, abstract journals, and partly from reprints sent to us by the authors themselves. Of all these, reprints proved to be the best source of data which we felt deserved prompt attention in our annual reports. Hence, in the past, we have sent our several thousand individual reprint requests to authors whom we knew to be currently engaged in research on stress and allied topics.

We would like to encourage investigators interested in stress research to send us their reprints for this purpose as soon as they become available.

HANS SELYE
ALEXANDER HORAVA

Institute of Experimental Medicine and Surgery
University of Montreal

"The Earth Is Born"

I RECENTLY sent a letter to *Life* protesting certain points in regard to its quite striking pictures and the text of "The Earth Is Born." *Life* edited my letter by removing my remarks relative to granite floating in its liquid, and I wish to present the full letter for publication in SCIENCE. In 1950, there was a conference at Rancho Santa Fe on the origin of the earth, attended by chemists, geologists, and astronomers. The geologists concluded rather definitely, I thought, that a non-liquid origin of the earth was probable, and convinced me of the reasonableness of their arguments (*1*). I suppose that all these men dashed off letters to *Life* relative to certain details of its story and fared even more badly than I did, since their letters evidently were not published at all. My letter follows:

"I wish to compliment *Life* on the magnificent pictures of "The Earth Is Born," but also wish to criticize these pictures in certain details on the basis of scientific fact and deduction.

"(1) Water is the only common substance whose solid, ice, floats on its liquid. The rocky materials of the earth sink in their molten liquids and therefore it is difficult to see how the continents were formed as great blocks of solid granitic masses floating in liquid or coming to rest on sunken platforms of basalt. I know of no statements of scientific workers recorded in the serious scientific literature that agree with this view. Moreover, when a mixture of silicates freezes the more dense constituents crystallize first and sink. If the earth was formed in a molten condition—and there is disagreement among scientific students on this point—then the continents were formed from the last liquid to become solid. On the basis of your story, God must have stuck close to this insignificant planet and given a helping hand at crucial moments. I prefer to believe that His laws of nature, including the differences in densities of solid and liquid rocky materials, were sufficient to accomplish the end result without further intervention. Unless this assumption is made, the whole course of the origin of the earth cannot be solved by scientists and belongs in the realm of folklore and mythology. Incidentally, the laws of floating bodies were discovered by Archimedes in the third century B.C.

"(2) If the moon was completed some 10,000 miles from the earth's surface, i.e., just outside the distance at which the tides would break it up, or 11,600 miles from the center of the earth, it certainly would have had an egg shape and as it subsequently moved away from the earth its shape must have changed to its present nearly spherical one. This would have caused a great break up of its surface, and the cracks in its surface should have some sort of concentric pattern about the center of the moon's face. I can see no such pattern. Moreover, the primordial egg-shaped moon would have a larger surface than the present spherical one and hence as the former changed to the latter, buckling of the surface should occur and folded mountains be formed. Fissures in the moon's surface are remarkably open and no folded mountains have ever been identified. Again, the earth contains large amounts of metallic iron and the moon does not. Would it not be well to give the cosmic chemical engineer some help in getting iron on the earth and little on the moon by keeping them some reasonable distance

apart? But what reasons are there for this short distance? Until I know the reasons, I simply do not believe it. Science does not consist of such dogmatic statements, but seeks to understand how and why things happen.

"(3) Lincoln Barnett says, 'Some theorists think that its substance was cold and wet, like snow.' This seems to refer to me, but if so, it is a complete misrepresentation of my ideas. I discussed a cold stage in the formation of the earth, but placed the temperature at which the earth accumulated at perhaps 1650° F.

"There are other points which I might criticize, but most of all it seems to me that *Life* should use in stories of this kind the results of scientific workers who have been willing to put their ideas and conclusions into serious scientific publications under their own names, so that they can be criticized by other scientists. Such ideas are more reliable in general than those which have not been so presented and criticized."

HAROLD C. UREY

Institute for Nuclear Studies
University of Chicago

Reference

1. SLICHTER, L. B. *Proc. Natl. Acad. Sci. U. S.*, **36**, 511 (1950).

Association Affairs

Gordon Research Conferences June 15–September 4, 1953

W. George Parks

University of Rhode Island, Kingston

THE Gordon Research Conferences, sponsored by the AAAS, for 1953, will be held from June 15 to September 4 at the Colby Junior College, New London, N. H., and the New Hampton School, New Hampton, N. H.

The conferences were established to stimulate research in universities, research foundations, and industrial laboratories. This purpose is achieved by an informal type of meeting consisting of scheduled lectures and discussion groups. Sufficient time is available to stimulate informal discussions among the members of the conferences. Meetings are held in the morning and in the evening, Monday through Friday, with the exception of Friday evening. The afternoons are available for recreation, reading, resting, or participation in discussion groups as the individual desires. This type of meeting is a valuable means of disseminating information and ideas that otherwise would not be developed through the normal channels of publication and scientific meetings. In addition, scientists in related fields become acquainted, and valuable associations, which have resulted in collaboration and cooperative efforts between different laboratories, have thus been created.

It is hoped that each conference will extend the frontiers of science by fostering a free and informal exchange of ideas among persons actively interested in the subjects under discussion. The purpose of the program is not to review the known fields of chemistry, but primarily to bring experts up to date as to the latest developments, analyze the significance of these developments, and to provoke suggestions as to the underlying theories and profitable methods of approach for making new progress. In order to protect individual rights and to promote discussion, it is an established requirement of each conference that all information presented is not to be used without specific authorization of the individual making the contribution, whether in formal presentation or in discussion. Scientific publications are not prepared as emanating from the conferences.

REGISTRATION AND RESERVATIONS

Each applicant must state the institution or company with which he is associated and the type of work in which he is most interested. Attendance at each conference is limited to 100.

The director will submit the names of those requesting attendance to the Conference Committee for each conference. This committee will review the names and select the members in an effort to distribute the requests as widely as possible among the various institutions and laboratories represented. The names selected will be returned by the Conference Committee to the director, who will notify those accepted as soon as possible. A registration card will be mailed with the notice of selection. Advance registration by mail for each conference is required. On receipt of the completed registration card and a deposit of $25.00 made payable to the Gordon Research Conferences, AAAS, registration will be completed. The deposit of $25.00 will cover the registration fee of $15.00 (except for academic individuals and students on personal expense who may apply for a reduction of $5.00), and the balance will be credited against subsistence expenses at the conference. The room rates are as follows: $2.50 per night per person in a double room with single beds; $3.00 per night per person in a single room; $3.50 per night per person in a single or double room with private bath (the number of rooms available with bath is limited; assignments are made in the order that applications are received). Meals served in the dining room are at the rate of $6.50 per day per person. Gratuities are provided for by an