

*is no relationship to the ordinary periodic system, that in all the differentiative processes which occur after the original formation, the chemical and physical properties would play their part, so that if any special material is taken for consideration, relationships to that system would appear more and more as the process of differentiation takes place.*

The fact that in the meteorites the elements of even atomic number are in all cases more abundant than the adjacent elements of odd number seems to indicate that in such bodies the process of differentiation has not proceeded to such an extent as to cause the chemical and physical properties to have an influence sufficient to obscure in any marked degree the most general of the abundance relations due to nuclear stability, but it does not show that there has been an entire absence of differentiation. The composition of the earth's surface, as compared with that of the meteorites, shows a less rigid, but very marked

adherence to the odd and even system, but certain groups of elements related in chemical and physical properties are relatively more abundant. Thus the alkali metals, sodium and potassium, the halogens and aluminum are present in much larger quantities. In the meteorites calcium is much less abundant than magnesium, while on earth both elements are of the same order of plentifulness.

The evidence shows that segregative processes of a physical or chemical nature have proceeded much farther on earth than in the meteorites.

(4) *Third periodic relation: high stability and abundance for atoms whose protonic number is divisible by 4, with a secondary periodicity of 2.* Fig. 7 shows that the abundance of the light atoms is highest for atomic weights (or number of protons in the nucleus) divisible by 4. For the heavier and less abundant species the abundance is high for atomic weights divisible by 2.

(To be continued)

## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### THE REGULAR FALL MEETING OF THE EXECUTIVE COMMITTEE

The regular fall meeting of the executive committee of the American Association occurred at the Cosmos Club, in Washington, on Sunday, October 20, one session being held in the forenoon and one in the afternoon. The members present were Cattell, Compton, Curtiss, Kellogg, Livingston, Ward and Wilson. Absentees were Lillie, Millikan and Moulton. The following paragraphs present items of business transacted:

1. The minutes of the last meeting were reported as approved by mail.

2. The permanent secretary presented the auditor's reports on the treasurer's statement and on the permanent secretary's financial statement for 1927-28, which were accepted.

3. The treasurer's report and the permanent secretary's financial report for 1928-29, of September 30, 1929, were presented, and it was ordered that they be audited and then presented to the council at Des Moines.

4. The committee appropriated \$1,000 from the treasurer's available funds for the use of the committee of one hundred on research for the association year 1929-30.

5. The committee recommended to the council that \$3,000 of the treasurer's available funds be appropriated for allotment for 1930 by the committee on grants for research.

6. The permanent secretary reported the publica-

tion, on October 15, of the volume of Summarized Proceedings for 1925-29 and the report was accepted. The edition is of 4,250 copies, of which 3,877 have been disposed of; 3,637 copies were sold, 125 copies were sent free to section and society secretaries and secretaries of special committees of the association and 115 copies were sent free to foreign organizations and institutions. No free copies are to be sent to organizations and institutions in the United States and Canada unless by special action of the association council. The volume is for sale by the permanent secretary's office, at \$3 each to members of the association, \$4 to others. Cloth-bound copies may be had, as long as the supply lasts, at \$4 each to members and \$5 to others.

7. The permanent secretary reported that membership in the association has increased very satisfactorily during the year that closed September 30. The total enrolment on September 30 was 18,462, and the net increase for the year is 2,134.

8. The permanent secretary reported that the special committee on symbols and abbreviations (Dr. A. E. Kennelly) had approved for the association the following sets of symbols presented by the American Standards Association, of which the American Association is one of the sponsor organizations:

Symbols for photometry and illumination (May 13).

Navigational and topographical symbols (May 15).

Graphical symbols for telephony and telegraphy (July 26).

Symbols for hydraulics (July 26).

9. The permanent secretary reported the organization of the committee on prize award for the Des Moines meeting as follows:

Charles E. Allen (*chairman*), University of Wisconsin.  
P. W. Bridgman, Harvard University.  
Fay-Cooper Cole, University of Chicago.  
S. C. Lind, University of Minnesota.  
H. L. Rietz, University of Iowa.

10. The permanent secretary reported the nomination of Dr. J. McKeen Cattell to the Institute of International Education, as the representative of the association on the board of the institute.

11. A report of progress was accepted from the committee of one hundred on research (Dr. Rodney H. True, *secretary*). A session at Des Moines is to be devoted to the economic status of research workers, in continuation of the series of sessions on this topic held at recent annual meetings.

12. A report on the Press Service was accepted, from Mr. Austin H. Clark, director of that service. Arrangements for reaching the public in connection with the Des Moines meeting are being worked out, not only through the usual newspaper channels but also by means of many non-technical lectures and radio talks.

13. A progress report was accepted from the special committee on source books in the history of the sciences (Dr. Gregory D. Walcott, *chairman*). The "Source Book in Astronomy" has been published and that for mathematics will soon appear. Others are in preparation.

14. A progress report was accepted from the special committee on book lists for libraries (Joseph L. Wheeler, *chairman*). The committee is engaged in compiling attractively printed lists of books in the several branches of science, the titles being selected as suitable for use by those who are not scientific workers but are interested in science.

15. A report from the special committee on calendar reform (Dr. A. E. Kennelly, *chairman*) was accepted and referred to the council at Des Moines.

16. The committee elected to fellowship in the association 145 members, whose nominations had been approved in the regular way by the respective section secretaries. These are distributed among the sections as follows:

Section B, 1  
Section C, 10

Section F, 26  
Section G, 72

Section H, 1  
Section L, 12

Section M, 17  
Section N, 6

17. On its application, the Roentgen Ray Society was officially affiliated with the American Association. The society has 409 members, of whom 27 are members of the association, 10 of these being fellows.

18. Resolutions from the Pacific Division and the Southwestern Division, on importations into the United States for use in educational and research institutions, were considered by the executive committee and referred to the council at Des Moines.

19. A letter from Dr. A. A. Noyes was read, in which he asked to be allowed to decline his recent election to the executive committee. This resignation was accepted with regret.

20. Dr. Joel H. Hildebrand was elected to membership in the executive committee, his term of office to expire at the end of the annual meeting for 1931-32.

21. The proposal that the association might arrange to hold summer meetings was made a special order of business for the executive committee at Des Moines.

22. The permanent secretary presented a summary of replies to a circular letter sent to section chairmen and secretaries, concerning eligibility to fellowship in the association and means for securing nominations for fellowship. The problem of fellowship was made a special order of business for the executive committee at Des Moines.

23. The permanent secretary reported on plans for the Des Moines meeting, which were discussed at length.

24. The executive committee voted to hold its first Des Moines session at 10 on Friday, December 27. It was voted that the first council session at Des Moines is to be held at 2 on Friday and that the second session of the executive committee will follow the first council session. Other Des Moines sessions of the council and executive committee are to occur on Saturday, Monday, Tuesday and Wednesday at 9 and 10, respectively, unless otherwise decided at one of the earlier sessions.

25. It was voted that the election of association president and other officers be made a special order of business for the council at Des Moines, at the Tuesday morning session, December 31.

BURTON E. LIVINGSTON,  
*Permanent Secretary*

## OBITUARY

### EDWIN E. SLOSSON

WHEN Edwin E. Slosson died on October 15, the field of science lost an individual so richly endowed with unique gifts as to make it difficult to carry on

the type of work in which he was preeminent. Dr. Slosson was born in Albany, Kansas, in 1865, of old pioneer colonial stock, and his ancestry could be traced to three of the Mayflower pilgrims. After