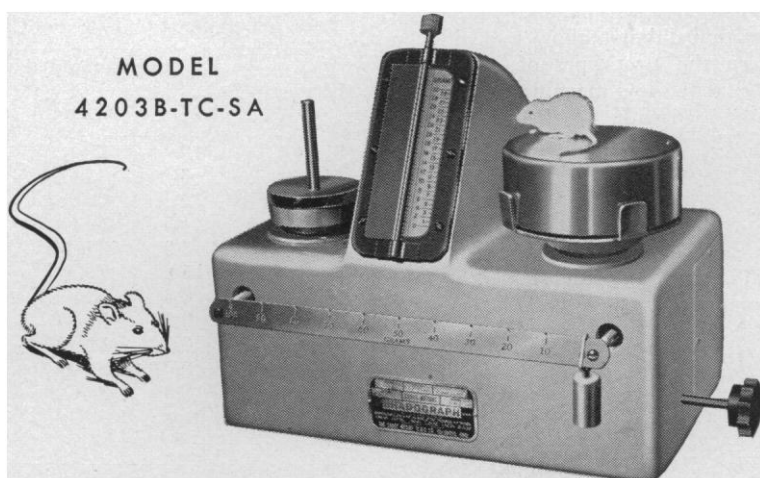


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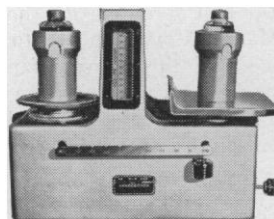
small animal balance provides  
visible accuracy to 350 milligrams

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## Meetings

### Science and Mathematics

#### Teacher Education

The Mideast Regional State College Conference on Science and Mathematics Teacher Education was held in Washington, D.C., on 7 and 8 March 1958, under the sponsorship of the Science Teaching Improvement Program of the American Association for the Advancement of Science. (The conference was made possible through grants from the Carnegie Corporation of New York and the General Electric Educational and Charitable Fund.) The original stimulus for this conference was provided by the successful completion of a similar conference, also sponsored by the Science Teaching Improvement Program, held in the Midwest last year. The purpose of these conferences is to bring together representatives of the mathematics and science faculties of the state colleges in order that they may have the opportunity to exchange views with others concerning current developments in science and in better teaching of science. Since a large percentage of the future teachers in our public schools will be produced in these state colleges, and since experimental programs in education are being conducted in many of them, it is also desirable that representatives from these institutions meet with representatives of the organizations interested in improving the teaching of science in the high schools.

Participants in the Mideast Conference included representatives of the science and mathematics departments of state colleges of the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Virginia, and West Virginia; high-school supervisors of science and mathematics from the Washington metropolitan area; and other leaders in science and mathematics education. In all, approximately one hundred persons participated in the conference.

The conference was opened with a challenge to face new times and new tasks with an open mind and a determination to develop the best possible educational system for American democracy. Topics developed in subsequent addresses included: science and mathematics in the Soviet ten-year school; a review of current experimental programs in the United States in science and mathematics teaching, particularly at the secondary level; a plea for coordination of the science programs at the elementary, secondary, and collegiate levels; suggestions for improvements in curricula for the training of teachers of science and mathematics; and recommendations for revision of secondary school curricula in science and mathe-

matics to meet the rapid advances currently observed in these fields.

No resolutions were adopted by the conference, but recommendations of the discussion groups in both mathematics and science included the following:

1) Programs of preparation for teachers of mathematics and science should be designed to provide strong concentration (one-half of the total number of college hours) in the general academic area to be taught, with sufficient concentration in a specific subject to prepare the teacher for graduate work in that field.

2) All teachers for elementary schools should have training in biological sciences, physical sciences, and mathematics equal to at least a one-year college course in each.

3) It is strongly recommended that further experimental studies of the curriculum content of both high-school and college courses in mathematics and science be made in an effort to improve training in these fields.

4) An organized program providing adequate counseling service in mathematics and science for secondary teachers should be established in all school systems. This program might be modeled after the STIP program.

5) Teaching loads should be reduced to a reasonable level, with adequate allowance provided for time spent on extracurricular activities. In figuring work loads, total clock hours should be used as the criterion, with laboratory hours carrying equal credit with class hours.

6) Colleges should establish special-content courses in science and mathematics for in-service training of teachers. These courses should provide the breadth of knowledge required in teacher training, and should carry graduate credit.

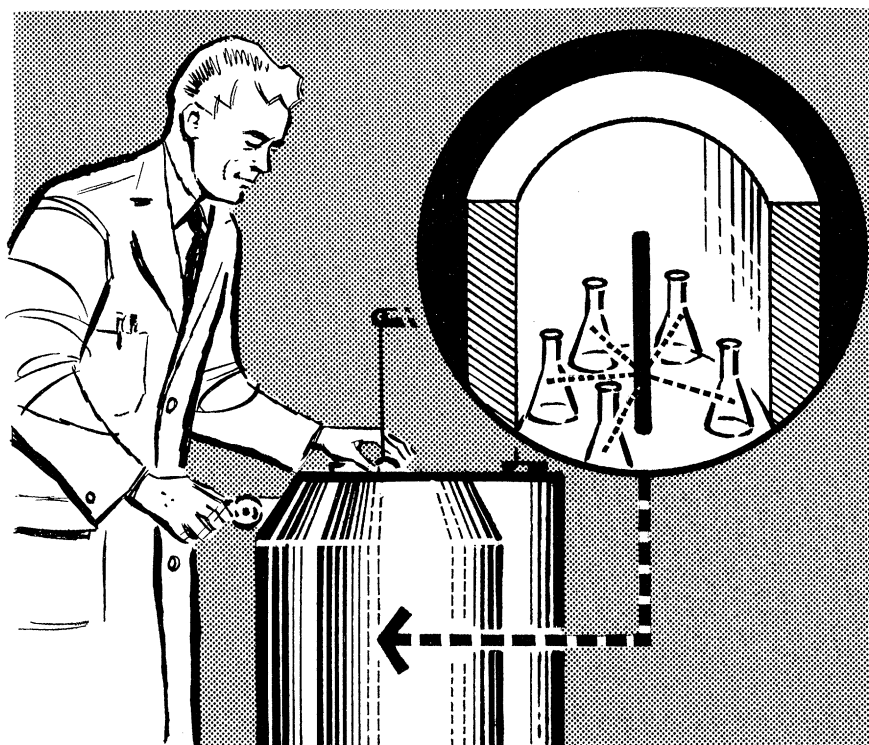
JOSHUA R. C. BROWN

*American Association for the  
Advancement of Science,  
Washington, D.C.*

### Engineering Education

The American Society for Engineering Education will hold its annual national meeting from 16 to 20 June on the Berkeley campus of the University of California. During that week more than 1000 engineers and educators will gather to present and discuss recent progress toward increasing the effectiveness of engineering and applied science instruction in the nation's schools and colleges.

Four general sessions of the society will cover such topics as engineering accrediting procedures; research and the engineering college; improved use of facilities and staff; a survey of nuclear manpower; and the development of engineering faculties. Conferences of the Engineering College Administrative



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Council and the Engineering College Research Council will also be held during the 5-day gathering. For further information, address Prof. E. P. DeGarmo, division of Industrial Engineering, University of California, Berkeley 4, Calif. Registered attendance by nonmembers is cordially invited.

#### Australasian Conference on Radiation Biology

The second Australasian Conference on Radiation Biology will be held at the Cancer Institute, Melbourne, Australia,

15-18 December. Guest speakers at the conference will be L. H. Gray, director of the British Empire Cancer Campaign, Radiobiological Research Unit, Mount Vernon Hospital, London, and J. F. Loutit, director of the Medical Research Council Radiation Biology Unit, Harwell, Didcot, Berkshire, England.

Papers on relevant subjects are invited. Titles and a 250-word abstract should be submitted by 31 July. Registration forms and other information may be obtained from J. H. Martin, Physics Department, Cancer Institute Board, 483 Lt. Lonsdale St., Melbourne, Victoria, Australia.

#### Waksman Birthday Meeting

A Symposium on Microbiology—Yesterday and Today was held on 5 June at the Institute of Microbiology, Rutgers University, in honor of Selman A. Waksman on the occasion of his 70th birthday. Attendance will be limited to 200. For information write to Edward R. Isaacs, Rutgers Institute of Microbiology, New Brunswick, N.J.

#### Forthcoming Events

##### July

2-5. Ferro and Antiferromagnetism, IUPAP Colloquium (by invitation), Grenoble, France. (L. Neel, Dept. of Experimental Physics, Univ. of Grenoble.)

2-5. Rarefied Gas Dynamics Symp., Nice, France. (F. M. Devienne, Laboratoire Mediterranee de Recherches Thermodynamiques, 2 avenue Villebois Mareuil, Nice.)

4-6. Astronomical League, Ithaca, N.Y. (Miss W. A. Cherup, 4 Klopfer St., Millvale, Pittsburgh 9, Pa.)

4-6. Speleology, intern. colloquium, Brussels, Belgium. (S. Paumen, 183, avenue Nouvelle, Brussels.)

6-12. Cancer Cong., 7th intern., London, England. (H. F. Dorn, National Inst. of Health, Bethesda 14, Md.)

6-12. Research and Development Engineering Seminar, 2nd annual, University Park, Pa. (Extension Conference Center, Pennsylvania State Univ., University Park.)

7-9. Exchange of Knowledge in a Divided World, Chicago, Ill. (H. W. Winger, Graduate Library School, Univ. of Chicago, Chicago 37.)

7-11. Technical and Industrial Communications Inst., Fort Collins, Col. (Chairman, Dept. of English and Modern Languages, Colorado State Univ., Fort Collins.)

7-12. Nuclear Physics, intern. cong., IUPAP, Paris, France. (C.I.P.N., Institut du Radium, II, rue Pierre Curie, Paris 5<sup>e</sup>.)

7-12. Parodontopathy Research, 15th Intern. cong., Paris, France. (Institut Universitaire de Medecine Dentaire, 24, Micheli-du-Crest, Geneva, Switzerland.)

11-13. Cardiovascular Surgery Cong., European Soc., Düsseldorf, Germany. (Congress Secretariat, Medizinische Akademie, Moorenstrasse 5, Düsseldorf.)

8-11. Institute of the Aeronautical Sciences, summer, Los Angeles, Calif. (S. P. Johnston, IAS, 2 E. 64 St., New York 21.)

9-15. Zoological Nomenclature Colloquium, London, England. (F. Hemming, 28 Park Village East, Regent's Park, London, N.W.1.)

10-14. Research Methods in Soil Zoology, colloquium, Harpenden, Hertfordshire, England. (P. W. Murphy, Rothamsted Experimental Station, Harpenden.)

12-14. Biological Sciences, intern. union, 13th general assembly, London, England. (Chairman, Div. of Biology and Agriculture, National Research Council, 2101 Constitution Ave., NW, Washington 25.)

(See issue of 16 May for comprehensive list)

## Fourth Soviet Conference on ELECTROCHEMISTRY

*in English translation*

Extended abstracts, in English, of 121 papers presented at the Fourth Conference on Electrochemistry held in the USSR, October, 1956. This Conference brought together most of the Soviet Union's most eminent electrochemists, to review progress since the 3rd (1950) Conference. Abstracts will not be sold singly, but a Table of Contents will be sent free on request. The scope of the meeting may be inferred from the following list of topics covered, and the number of papers for each:

General questions of electrochemical kinetics and the reaction mechanism of electrochemical reactions, 22 papers; the mechanism of electrode processes in melts, 11 papers; diffusion kinetics, 8 papers; the mechanism of oxidation, 8 papers; metal passivity and chemisorbed layers, 10 papers; electrodeposition of metals, 30 papers; chemical current sources (batteries), 14 papers; electrolysis in chemical industry, 9 papers; electrochemical processes in non-ferrous metallurgy, 9 papers.

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