

Meetings

Sedimentology

The fifth International Congress of Sedimentology met in Geneva and Lausanne, Switzerland, 2-7 June, under the presidency of Carl Correns of Göttingen, Germany. Approximately 150 delegates from 19 countries attended, the largest groups coming from France, Switzerland, Holland, Germany, the United States, the Soviet Union, and Italy. Two and a half days were devoted to sessions, the rest to well-planned field trips. Added to

the latter were four days of postsession excursions in the Alps between Lake Geneva and Bern. The friendly, informal leadership of Augustin Lombard and Arnold Bersier, hosts respectively at Geneva and Lausanne, added much to the spirit of cordial relations which existed, and there was no sign of past or present international strife. The languages of the session were principally French and English, plus a considerable amount of German.

The principal topic of discussion in lectures and field trips was the origin of the Flysch and Molasse types of sedimentation, which represent respectively the

deep trough facies formed in front of the youngest Alps and the overlying alluvial fans formed after the deep basins had been filled. Similar facies have been recognized in many other mountain ranges. One of the most interesting and still unanswered questions is the extent to which turbidity currents supplied sediments to the Flysch; in the discussion on this subject Kuenen of Holland played a leading part. To many of us at the congress, the alternation between the deep-watershales and the breccias or conglomerates seemed to be the most conspicuous feature of the Flysch shown to us. This would appear to indicate the importance of submarine slumping along the sides of the deep trough. Graded bedding, found less commonly, was evidence of occasional turbidity currents.

Sessions devoted to recent sediment studies also aroused interest. Bezrukof of the U.S.S.R. gave some of the results of the recent Russian expeditions in the Pacific. The results included obtaining the longest cores on record (34 meters), the deepest cores (about 10,000 meters in the Kuril trench), and the greatest sounding depths (10,990 meters in the Mariana trench). As in many other deep-water samples, an alternation between fine clays and coarse sediments was found.

Other papers attempted to compare recent sediments with ancient. The convening of specialists in the study of recent and old sediments to discuss the geological interpretations of ancient rocks proved to be a very important function of this congress.

The next meeting will be held in Copenhagen, 15-25 Aug., 1960, in connection with the International Geological Congress.

FRANCIS P. SHEPARD

*Scripps Institution of Oceanography,
La Jolla, California*

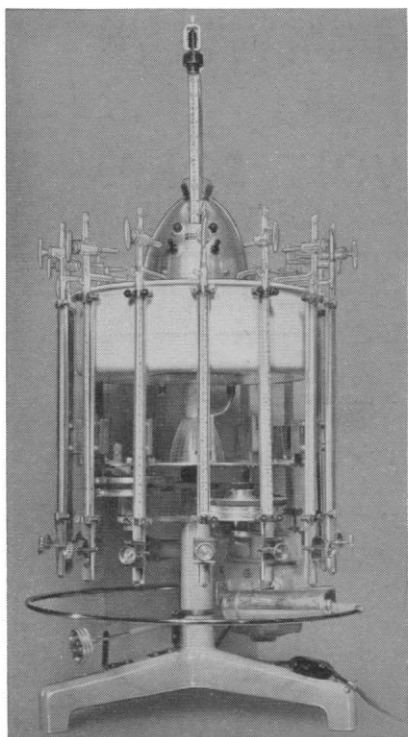
Vertebrate Speciation

A grant has been made by the National Science Foundation to the University of Texas to assist travel by graduate students to a Conference on Vertebrate Speciation to be held in Austin, Tex., 27-31 October. Persons wishing further information should contact W. Frank Blair, Department of Zoology, University of Texas, Austin 12, Texas.

Insulin in Psychiatry

An International Conference on the Insulin Treatment in Psychiatry has been arranged 24-25 October for the purpose of presenting recent advances in the basic aspects and the clinical uses of Sakel's discovery. The meeting will take place

THE "BRONWILL"* Warburg most compact-most versatile Warburg Available



Model UV shown above, is a compact, circular unit, only 20½" diameter, 31" high, rotatable thru 320° permitting any of the manometers to be quickly read. Model UVL equipped for photo-chemical work.

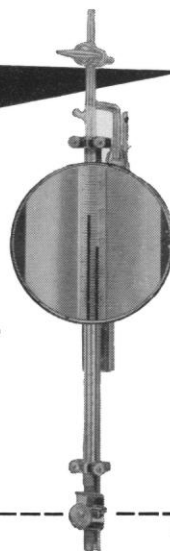
Requires only 20½" of Desk Space

- Magnetic Temperature Setting.
- Highest Temperature Constancy $\pm 0.01^\circ \text{C}$.
- Cooling Coil Built In.
- Fastest to Set Up. Small bath (only 8 liters) heats from ambient to 37°C in 22 minutes.
- Rotatable thru 320° .
- Calibrated—Interchangeable Manometers & Vessels Available.
- Available for Photosynthesis.

EASY TO READ

DOUBLE CAPILLARY MANOMETERS

Single background scale—a sturdy single rod containing two capillaries. Available pre-calibrated—interchangeable—no more calibrating each time a piece is broken.



*The trademark identifying products of Bronwill Scientific Division, Will Corporation.

BRONWILL
SCIENTIFIC DIVISION
WILL CORPORATION
131 GOULD STREET
ROCHESTER, N. Y.

BRONWILL SCIENTIFIC DIVISION
WILL CORPORATION
Box 127, Brighton Station, Rochester 10, N. Y., Dept. 685
Please send full information on Bronwill Warburgs.

Name.....
Position.....
Company.....
Address.....
City..... Zone..... State.....

at the New York Academy of Medicine, 5th Ave. and 103 St., New York. It is cosponsored by S. Bernard Wortis, professor of psychiatry and neurology, New York University; D. Ewen Cameron, professor of psychiatry, McGill University; and Jacques S. Gottlieb, professor of psychiatry, Wayne State University. All those interested are invited to attend. For further details write to Dr. M. Rinkel, 479 Commonwealth Ave., Boston 15, Mass., or Dr. A. K. Bernath, 985 5th Ave., New York 21, N.Y., or Dr. H. E. Hemwich, Galesburg State Research Hospital, Galesburg, Ill.

Forthcoming Events

October

24-25. Taxonomic Consequences of Man's Activities, symp., St. Louis, Mo. (H. C. Cutler, Missouri Botanical Garden, St. Louis.)

30-1. American Assoc. of Textile Chemists and Colorists, 37th natl. conv., Chicago, Ill. (J. G. Kelley, E. I. duPont de Nemours & Co., Inc., 7 South Dearborn St., Chicago 3.)

31-1. Central Soc. for Clinical Research, 31st annual, Chicago, Ill. (A. S. Weisberger, CSCR, Suite 1215, 25 East Washington St., Chicago.)

November

2-7. Radiology, 6th Pan American cong., Lima, Peru. (M. Lesende, Inter-American College of Radiology, Tucuman 1516, Buenos Aires, Argentina.)

3-4. Italian Soc. of Nuclear Biology and Medicine, 3rd cong., Florence, Italy. (Segreteria della Società Italiana di Biologia e Medicina Nucleare, Clinica Medica, Pisa, Italy.)

4. Use of 650 and 704 Computers for Structure Analysis, conf., Pittsburgh, Pa. (G. A. Jeffrey, Dept. of Chemistry and Physics, Univ. of Pittsburgh, Pittsburgh 13.)

4-7. American Soc. of Tropical Medicine, Miami Beach, Fla. (R. B. Hill, 3575 St. Gaudens Rd., Miami 33.)

4-11. International North Pacific Fisheries Commission, 5th annual (by invitation), Tokyo, Japan. (R. I. Jackson, 209, Westbrook Building, Univ. of British Columbia, Vancouver 8, Canada.)

5-7. Society for Applied Spectroscopy, annual, New York, N.Y. (P. Lublin, Sylvania Electric Products Inc., Bayside, N.Y.)

5-7. Society of Rheology, annual, Philadelphia, Pa. (W. R. Willets, Titanium Pigment Corp., 99 Hudson St., New York 13.)

6-7. Lead Hygiene Conf., Chicago, Ill. (M. Bowditch, Lead Industries Assoc., 60 E. 42 St., New York, 17.)

6-7. Nuclear Science, 5th annual, San Mateo, Calif. (H. Pratt, IRE, 1 E. 79 St., New York 21.)

6-8. Geochemical Soc., St. Louis, Mo. (K. B. Krauskopf, Geology Dept., Stanford, Calif.)

6-8. Geological Soc. of America, St. Louis, Mo. (H. R. Aldrich, 419 W. 117 St., New York 27.)

6-8. Gerontological Soc., 11th annual scientific meeting, Philadelphia, Pa. (N. W. Shock, Baltimore City Hospitals, Baltimore 24, Md.)

6-8. Paleontological Soc., St. Louis, Mo. (Miss K. V. W. Palmer, 109 Dearborn Pl., Ithaca, New York.)

6-8. Society of Economic Geologists, St. Louis, Mo. (H. M. Bannerman, U.S. Geological Survey, Washington 25, D.C.)

8. Society for the Scientific Study of Sex, 1st annual, New York, N.Y. (R. V. Sherwin, 1 E. 42 St., New York 17.)

8-13. International Rubber Conf., Washington, D.C. (B. S. Garbey, Jr., Pennsalt Chemical Corp., 813 Lancaster Pike, Wayne, Pa.)

10-12. American Petroleum Inst., 38th annual, Chicago, Ill. (API, 50 W. 50 St., New York 20.)

10-12. Physics and Medicine of the Atmosphere and Space, intern. conf. (by invitation), San Antonio, Tex. (Southwest Research Center, 331 Gunter Bldg., San Antonio.)

10-13. American Dental Assoc., Dallas, Tex. (H. Hillenbrand, 222 E. Superior St., Chicago, Ill.)

12-14. Society for Experimental Stress Analysis, annual, Albany, N.Y. (W. W. Murray, P.O. Box 168, Central Square Sta., Cambridge 39, Mass.)

12-15. Society of Naval Architects and Marine Engineers, 66th annual, New York, N.Y. (W. N. Landers, SNAME, 74 Trinity Pl., New York 6.)

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

and

THE NATIONAL SCIENCE FOUNDATION

announce the publication of revised editions of two popular booklists prepared by The Traveling High School Science Library Program:

THE TRAVELING HIGH SCHOOL SCIENCE LIBRARY, 1958, an annotated catalog of the 200 books included in a special loan collection that is being sent to over 1300 schools this year, 25¢ a copy.

AN INEXPENSIVE SCIENCE LIBRARY, 1958, a selected list of over 300 paperbound science and mathematics books suitable for high school students and the nonspecialist adult reader, 25¢.

A discount of one-third is offered on orders for 25 or more copies of either list. We pay postage if remittance accompanies order. *Do not send postage stamps in payment.*

Address orders to:

SCIENCE LIBRARY PROGRAM, AAAS

1515 Massachusetts Avenue, N.W.

Washington 5, D.C.

16-21. Radiological Soc. of North America, Chicago, Ill. (D. S. Childs, 713 E. Genesee St., Syracuse, N.Y.)

16-23. Scientific Information, intern. conf., Washington, D.C. (Mrs. M. Shepard, Intern. Conf. on Scientific Information, Natl. Acad. of Sciences-Natl. Research Council, 2101 Constitution Ave., Washington 25.)

17-20. Conference on Magnetism and Magnetic Materials, Philadelphia, Pa. (H. B. Callen, Dept. of Physics, Univ. of Pennsylvania, Philadelphia.)

18-20. Air Pollution, 1st natl. conf., Washington, D.C. (Dept. of Health, Education, and Welfare, U.S. Public Health Service, Washington 25.)

(See issue of 19 September for comprehensive list)

Letters

Radioactive Wrist Watches

J. L. Haybittle, of the Radiotherapeutic Center at Addenbrooke's Hospital in Cambridge, England, has reported in *Nature* (17 May 1958) that some luminous-dial wrist watches contain sufficient radium to subject their owners to nearly two-thirds the maximum permissible level for exposure of hands and forearms. According to Haybittle, one watch, having an estimated radium content of 2.2 μ c, recorded on a film placed

in contact with the back of the watch a dose rate of 8 mr/hr.

During the past year we have been investigating the degree of radioactivity of luminous-dial wrist watches as these were made available to us by their owners. Watches were found to vary more than tenfold in their activity. Of 20 watches examined, 12 showed activity not exceeding 1 mr/hr at a distance of approximately 1 in. from the face of the watch, four registered between 1 and 5 mr/hr, two between 5 and 8 mr/hr, and two between 8 and 10 mr/hr.

With an activity of 8 mr/hr at a distance of 1 in., it may be calculated that at a distance of 8 in. a wrist watch worn 24 hours a day can deliver 1.1 r a year; this is the dosage that might be delivered to the gonads by the most active watches when the watch is worn on the wrist in a position facing the gonads. The least active watches could deliver approximately one-tenth this activity, or 110 mr/yr (at 8 in.); at 12 in. this would be reduced to about 49 mr/yr, in good agreement with the dosage of 40 mr/yr estimated by Libby in *Science* [122, 57 (1955)] for a wrist-watch radiation source at an average distance of 12 in. from the central body, including sex organs. The potentially harmful magnitude of the radiation from the most active watches, corresponding to 5 rem in about 5 years, may be judged in the light of the recommendation by the International Commission on Radiation Protection that no one should receive a dose in excess of 5 rem by age 30.

When one further considers that this radiation is several times greater than natural background radiation and exceeds by more than 100 times that presently received from radioactive fallout, the potential hazard to the wearer of a luminous-dial wrist watch raises the question as to whether the small benefit that may be received from such a watch is worth the hazard.

GRAFTON D. CHASE

ARTHUR OSOL

School of Chemistry, Philadelphia
College of Pharmacy and Science,
Philadelphia, Pennsylvania

Drug Synergism

In the report entitled "Drug synergism (potentiation) in pain relief in man: papaverine and morphine," by Macris, Gravenstein, Reichle, and Beecher [*Science* 128, 84 (1958)], the authors found "that less pain relief is obtained from morphine not preceded by papaverine." In their interpretation of this finding the authors conclude that "synergism in the relief of pathological pain has been clearly demonstrated with analgesic drugs." The authors also point out that papaverine alone has no analgesic power.

Prevent Accidents with Acid-Proof STANDARD "SIPH-O-PUMP"

Quick Procedure . . . No loss

NO NEED TO LIFT OR TILT . . .

Just squeeze bulb gently (Fig. 1) and liquid will flow quickly into receptacle. Whether bottle, drum, can or barrel, the container remains stationary throughout entire operation. To stop flow from the pump, press stop valve gently (Fig. 2).

NO DRIPPING . . .

Turning the delivery tube upward (Fig. 3) will force remnant to flow back into container.

RETURNS EXCESS TO CONTAINER . . .

By dipping delivery tube (Fig. 4) into discharged liquid—pressing bulb—and pushing valve button until only desired amount is left in the receptacle.

UNAFFECTED BY MOST SOLUTIONS, including:

ALCOHOL	LIQUID AMMONIA	INKS
DETERGENTS	FORMIC ACID	TURPENTINE
ESSENCES	LACTIC ACID	PETROLEUM
GASOLINE	MURATIC ACID	TINCTURES
FORMALDEHYDE	SULFURIC ACID	OILS
	NITRIC ACID	

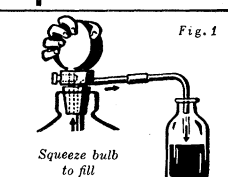
Apparatus consists of: Siph-O-Pump, flow tube, extension tube, discharge tube and acid-proof stopper. For use with solvents, plastic tubes may be replaced by glass tubes. Please specify size of stopper when ordering.

Cat. No. S-84542 "SIPH-O-PUMP" A—delivers approximately 1½ gallons per minute Each \$15.50

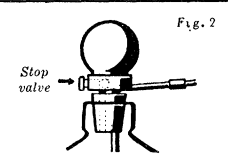
Cat. No. S-84543 "SIPH-O-PUMP" B—delivers approximately 3 gallons per minute Each \$16.50

EXTRA STOPPERS, ACID-PROOF

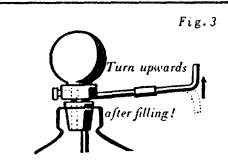
30 x 45 MM FOR 'A' PUMP	Ea. 1.35
37 x 52 MM FOR 'A' OR 'B' PUMPS	Ea. 1.50
45 x 60 MM FOR 'A' OR 'B' PUMPS	Ea. 1.70
55 x 70 MM FOR 'A' OR 'B' PUMPS	Ea. 1.95
65 x 80 MM FOR 'B' PUMP	Ea. 2.25



Squeeze bulb to fill



Stop valve



Turn upwards after filling!

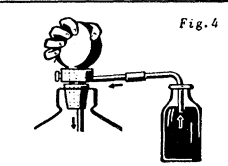


Fig. 4



STANDARD SCIENTIFIC
Supply Corp. 808 BROADWAY
NEW YORK 3, N.Y.

LABORATORY
APPARATUS
REAGENTS
AND
CHEMICALS