News and Notes

London Conference on Optical Instruments

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This conference, with a membership of 250, was held at Imperial College, London, July 19–26. Although the great majority of the attendants were from the United Kingdom, 14 other countries were represented. The conference was limited to practical rather than theoretical questions, and it was further constrained to symposia on reflecting microscopes, reflecting telescopes, phase-contrast microscopes, spectrophotometers, gratings and grating instruments, photographic and projection lenses, and new optical materials. The manuscripts presented will be published in a volume by Chapman and Hall, Ltd. (John Wiley and Sons, Inc.), late this winter.

A significant feature of the conference was the opportunity provided to discuss the papers, and many important contributions were made in the course of the discussions. For instance, in the session on reflecting microscopes it was made clear that there is much activity, especially in England, the U. S., and Holland, on the designing of catadioptric systems, where the reflecting surfaces may be either spherical or aspherical. The applications of reflecting microscopes in biophysics and biochemistry are numerous and appear to be increasing at a rapid rate, probably largely because of the greater effectiveness of these systems in ultraviolet work over the conventional refracting systems.

Phase-contrast is another technique that is achieving wide use in microscopy. A new accessory was presented by M. Françon, of the Institut d'Optique of Paris, which permits the ready conversion of an ordinary microscope for phase-contrast use.

In a session on spectrophotometers it was emphasized that this instrument must how be regarded as a standard analytical tool for the monitoring and the control of appropriate industrial color processes rather than just an academic research item. It was indicated that the future trend in the design of spectrophotometers will be in the adaptation of the simpler single-beam instruments for double-beam use, rather than in the construction of more complicated double-beam or memory-device, single-beam instruments. Two methods for effecting this simplification have already been developed, at least partially: one by Halford and Savitzky, of Columbia University, employing phase discrimination, and the other by a group at the University College, Southampton, England, using different chopping frequencies for the sample and the comparison beams and an electronic method of balancing out the comparison signal.

The new echelle gratings, which have been developed at the Massachusetts Institute of Technology and the Bausch and Lomb Optical Company, were described to an interested audience. These high-resolution gratings are best used in conjunction with an ordinary spectrograph, where they increase the useful dispersion by a factor of 10–50 with very little decrease in photographic speed. A method of achieving higher disperson and resolution, using a conventional diffraction grating two or three times over by reflecting the light back in the "blaze" direction, was described by Hulthén of Sweden. A new method for making high-quality plane diffraction gratings is being developed at the National Physical Laboratory in England, following the suggestions of Sir Thomas Merton. It employs an ingenious method of correcting the periodic errors of the ruling-engine screw. The series of elaborate tests developed for testing the quality of the gratings is particularly noteworthy, but can only be fully appreciated when one has the opportunity of examining the setup. Plans for the large astronomical telescope for Great Britain were described and were the subject of much discussion. This, apparently, is a field in which it is considered dangerous to follow any but the conventional instrumental pattern because of the large amount of money involved in the building of large telescopes. Nevertheless, the British are starting out in a somewhat new direction with their dual-purpose telescope.

The use of combined refracting-reflecting optical systems in a high-precision theodolite was demonstrated by Lotmar of Switzerland. The resulting compactness and high optical quality of this system commend it for further study, not only for transits but also for high-powered military telescopes.

It seemed to the writer that the outstanding features of this excellent conference were the restriction of the subject matter to a few important items, the skillful scheduling of papers and allowance for adequate (and sometimes previously planned) discussion, the inspiring leadership provided by the several chairmen during discussion periods, and the sustained interest of the conference members throughout the five days of meetings. The contrast with some of our crowded, multipapered, simultaneous-sessioned scientific meetings is too apparent to require comment—it must be true that useful, although quite different, purposes are served by both types of meetings.

The Thirteenth Meeting of the Meteoritical Society

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Meteoriticists from Michigan to California convened at Flagstaff, Arizona, on September 5 for the 13th meeting of the Meteoritical Society. Host of the society for the sessions on September 5 and 6 was the Museum of Northern Arizona, whose director, Harold S. Colton, extended the visitors every courtesy.

In the course of the two-day program, 27 papers were presented on such varied topics as direct and spectrographic observations of meteors, laboratory investigations of high-speed impact, air drag on cubes at high Mach numbers, mineralogical analyses of a number of meteorites—including several old Japanese falls—anthropological aspects of meteorites, recently discovered terrestrial craters of possible or probable meteoritic origin, subsurface studies at the Barringer Meteorite Crater, a proposed college curriculum in meteorities, age determination of metallic meteorites through their helium content, meteoritical great circle problems, phenomena erroneously attributed to meteorites, a lost meteorite, and an estimate of the energy of the great Siberian meteorite based on the theory of atomic clouds.

The guest speaker at the society dinner, which followed the sessions of the second day, was Assistant Director E. D. McKee, of the Museum of Northern Arizona. His illustrated lecture on shooting the rapids through the Grand Canyon of the Colorado was an enjoyable diversion. It was followed by a showing of motion pictures of solar prominences filmed at the Harvard Observatory Station at Climax, Colorado.

The third day of the meeting was spent at the Barringer Meteorite Crater at the invitation of its owners, The Standard Iron Company of Philadelphia, and its curator, Theodore Johnson. A general exploration of the crater from its floor to areas well outside its rim was made during the morning. After lunch, a closing session was held on a promontory overlooking the crater. The high light of the afternoon was the report of the retiring president of the society, Arthur S. King. Dr. King outlined the notable advances in meteorities during the past four years and expressed to President-elect L. F. Brady, curator of geology at the Museum of Northern Arizona, his best wishes and his confidence that the progress of the last four years would continue through Dr. Brady's administration.

About People

G. Lyman Duff, dean of the Faculty of Medicine, McGill University, will deliver the 13th annual Louis Gross Memorial Lecture, sponsored by the Montreal Clinical Society, on October 25 at the Jewish General Hospital in Montreal. Dr. Duff's subject will be "The Pathogenesis of Atherosclerosis."

William F. Ehret, professor of chemistry at New York University, is on leave for the academic year 1950–51 and is serving as visiting professor at the University of Hawaii.

Recent appointments to the staff of the Department of Physics, University of Connecticut, are **Edgar Everhart,** assistant professor, and **Otis R. Gilliam,** instructor. Dr. Everhart was previously instructor in physics at Dartmouth College and a staff member of the Radiation Laboratory at MIT. Dr. Gilliam comes from the Graduate School at Duke University.

J. J. Galloway, professor of stratigraphy and paleontology at Indiana University, is on sabbatical leave for the fall semester, in order to complete his study of the stratigraphy and paleontology of the Harrodsburg (Mississippian) limestone of Indiana. **Tom G. Perry,** of the University of Toronto, has been appointed instructor in geology to teach courses in stratigraphy and invertebrate paleontology.

Elmer Hutchisson, of Case Institute of Technology, Cleveland, will serve as acting president during the leave of absence of **T. Keith Glennan,** who has accepted an appointment as a member of the Atomic Energy Commission. Dr. Hutchisson will continue in his position as dean of the faculty and director of research and of the Graduate Division.

William B. Nutting, of Cornell University, **Harold Rauch,** of Brown University, **Bronislaw M. Honigberg,** of the University of California, and **Lyle C. Dearden,** of the University of Kansas, have been appointed instructors in the Department of Zoology at the University of Massachusetts.

Paul Marsh Pitman will be inaugurated president of the College of Idaho, Caldwell, on October 14. **L. A. Williams** has been acting president.

I. I. Rabi, professor of physics at Columbia University, has been appointed to membership on the U. S. National Commission for Unesco. As a member of the U. S. delegation to the Unesco General Conerence in Florence last spring, Dr. Rabi was largely responsible for the adoption of a resolution to assist and encourage the formation and organization of regional research centers and laboratories in order to increase the international collaboration of scientists.

Ada Chree Reid was elected president of the Medical Women's International Association at its sixth congress in Philadelphia. Dr. Reid

is editor of the *Journal of the American Medical Women's Association* and attending cardiologist at New York Infirmary.

Warner F. Sheldon, assistant professor of pathology in the University of Pennsylvania School of Medicine, has been elected director of the Mount Desert Island Biological Laboratory, Salisbury Cove, Maine. Dr. Sheldon succeeds **J. Wendell Burger,** associate professor of biology at Trinity College.

Thomas C. Watkins, professor of economic entomology at Cornell University, has gone to the University of Miami, Coral Gables, Fla., to complete a sabbatical leave study. Dr. Watkins will devote his major attention to studies and collections of insect pests of subtropical plants, including citrus fruits. He is making his headquarters at the Subtropical Horticultural Farm recently established at the university.

Visitors

Recent visitors at the U. S. Geological Survey, Washington, D. C., were: **Leslie Kent,** Geological Survey, Union of South Africa; **B. G. Escher,** Leyden University, Netherlands; **J. H. F. Umgrove,** Waassenaar, Netherlands; **Felix Andres Vening-Meinesz,** Meteorological Institute, Netherlands; **J. F. Cox,** Free University, Brussels; **Jean Goguel,** Institute of Geophysics, Geology and Mining, Paris; and **C. E Tilley,** University of Cambridge, England.

Recent visitors at the National Bureau of Standards were: **E. C. Bullard,** head of the National Physical Laboratory, Teddington, England; **Pierre Fleury** and **Maurice Françon,** of the Institut d'Optique, Paris; **M. Caneppa** and **Bruno de Finetti,** of the Istituto Nazionale per le Applicazioni del Calcolo, Rome; **Jacques F. Cox,** University of Brussels; **Ryosuke Hama,** Institute of Science and Technology, University of Tokyo; **Marc Kampe de Feriet,** École Centrale de Paris; **Hugh O'Neill,** University College, Swansea, Glamorganshire, Wales; **Giulio Racah,** The Hebrew University, Jerusalem; **Ivan A. Rubinsky** and **Elie Rubinsky,** American University, Beirut; **Elie Roubine,** L'Ecole Supérieure d'Electricité, Paris; and **Dennis Brown,** associate professor, Auckland University College, New Zealand.

Grants and Awards

The Hematology Research Foundation, of Chicago, recently awarded the following fellowships: **The Ruth Berger Reader Fellowship** to Fern L. Stevenson, at Hektoen Institute for Research, Cook County Hospital; the **Robert L. Goldblatt Fellowship** to Abe Oyamada, at Mount Sinai Hospital; and the **Dr. Raphael Isaacs Fellowship** to Aaron M. Josephson, at Michael Reese Hospital.

William F. Little, engineer in charge of the Photometric Department, Electrical Testing Laboratories, New York City, has received the 1950 **Illuminating Engineering Society Medal,** awarded annually in recognition of achievement which has furthered the profession, art, or knowledge of illuminating engineering in the field of engineering, design, applied illumination, optics, ophthalmology, lighting research, education, or administration and management.

Colleges and Universities

A center for advanced training and research in zoology is being developed at the **University of Illinois** in its museum of natural history. Latest additions to the educational collection are 450 specimens of animal life from the Huachuca Mountains of Arizona, collected by Donald F. Hoffmeister, museum curator, and Richard Van Gelder, of Ft. Collins, Colo., graduate student at Illinois, in a month-long summer trip. Added to 350 specimens from the Huachuca region already at the University, they provide the greatest collection of mammals from the area assembled in any museum.

The University of North Carolina is offering postgraduate medical courses for practicing physicians in the state, sponsored by the School of Medicine and the Extension Division of the university. The courses will be given at various towns throughout the state. Speakers for two courses arranged for this fall include Louis A. M. Krause, University of Maryland, Milton L. McCall, Jefferson Medical College, Eugene B. Ferris and A. A. Weech, University of Cincinnati, H. Houston Merritt, Columbia University College of Physicians and Surgeons, Bentley P. Colcock, The Lahey Clinic, E. T. Bell, University of Minnesota, Eugene Stead, Duke University, and Harold D. Green, Bowman Gray School of Medicine.

The Stritch Medical School, Loyola University, Chicago, presented its second televised postgraduate conference in obstetrics and gynecology, September 25–29, at the Lewis Memorial Maternity Hospital. The program was made possible through the cooperation of E. R. Squibb & Sons and the Radio Corporation of America. Among those taking part were William J. Dieckmann, University of Chicago, Ralph A. Reis and Ronald R. Greene, Northwestern University, and Harry A. Oberhelman and John J. Madden, of Stritch Medical School.

The Institute for Fluid Dynamics and Applied Mathematics, University of Maryland, is sponsoring a series of public lectures and seminars during the fall academic term. Six lectures will be given by Joseph-Marie Kampe de Feriet, professor of mathematics, University of Lille, who is visiting research professor at the institute. Dr. de Feriet's first group of lectures, to be held October 17–19, will be on aspects of "Spectrum of Turbulence and Diffusion." The second group of lectures will be on "Atmospheric Turbulence," to be given December 12–14. Weekly seminars on "Statistical Theory of Turbulence" will be conducted by Dr. de Feriet, and Alexander Weinstein, research professor at the institute, will conduct seminars on "Hilbert Space and Theory of Vibrations." Sydney Goldstein, professor of mathematics,

Institute of Technology, Haifa, gave a series of lectures during September and early October. Further information about the seminars, lectures, and colloquia of the institute may be obtained from Raymond J. Seeger, acting director of the institute, College Park, Md.

A special committee on skin metabolism and regeneration has been established at the **University of Texas Medical Branch,** Galveston, to correlate studies in these fields with particular reference to the management of burns and radiation injury. Chairman of the committee is Clarence S. Livingood, professor of dermatology and syphilology.

Industrial Laboratories

The Ercona Corporation, of New York City, has been appointed exclusive American agent for Carl Zeiss optical instruments, binoculars, and photographic lenses. A scientific instrument division has been set up by the corporation under the direction of Alfred Boch. A broad range of Zeiss instruments is now available for science and industry in America.

The Fairchild Recording Equipment Corporation of Whitestone, New York, has manufactured a control track generator which superimposes a high-frequency signal on the magnetic tape simultaneously with the sound track. Available for immediate delivery.

Instrument News, published quarterly by **The Perkin-Elmer Corporation,** Glenbrook, Conn., in the interests of furthering research, material analysis, and production through modern optical instrumentation, is available on request.

Fred S. Carver, Inc., 345 Hudson Street, New York 14, manufacturer of hydraulic equipment, has issued a catalogue introducing the latest edition of the well-known Carver laboratory press for research and development.

Bell Telephone Laboratories has developed a new technique for photographing the pattern of sound waves. The method will be used for studying waves from communications equipment and for observing microwave radio wave patterns.

Bausch & Lomb Optical Co. will exhibit a new metallograph at the National Metal Show in Chicago, October 23–27.

Scientific Glass Apparatus Co. has released *What's New for the Laboratory, No. 10,* containing descriptions of many new or improved laboratory aids.

A new technical booklet describing the use for **Hercules Powder Company's** Vinsol resin in the production of Buna N cements and adhesives is now available.

Lanco Apparatus News, published by Arthur S. La Pine & Company, 121 West Hubbard Street, Chicago 10, has been expanded to 8 pages covering laboratory supplies and reagents and industrial chemicals.

Radio Corporation of America will exhibit 50 years of electronic engineering advances at the Mid-Century Exposition in Dallas, Texas. October 7–22.

The Eastman Kodak Company's *Kodak Color Handbook* provides a handy reference and guide for advanced amateur and professional photographers in 248 pages at $4.00.

Meetings and Elections

St. Francis Sanitorium for Cardiac Children is presenting seminars on **the nature and treatment of rheumatic fever,** on the first Tuesday of each month, October 10 to May 8, 1951. The subjects for discussion each month are:

Oct. 10—Nature of Rheumatic Fever.
Nov. 14—Experimental Rheumatic-like Disease.
Dec. 12—Present Concepts Regarding the Mechanism of Heart Failure.
Jan. 9—Treatment of Rheumatic Fever with Cortisone and ACTH.
Feb. 13—Oxygen Therapy in Heart Disease.
Mar. 13—Salt Metabolism and Cardiovascular Disease.
Apr. 10—Treatment of Congestive Failure in Rheumatic Heart Disease.
May 8—Methods for Measuring Cardiodynamics.

Further information may be obtained from Reverend Mother Superior, F.M.M., St. Francis Sanitorium for Cardiac Children, Roslyn, Long Island, N. Y.

An institute on coastal engineering, sponsored by the Departments of Engineering and the Division of Engineering Extension, University of California, Berkeley and Los Angeles, will be held October 11–14, at the Municipal Auditorium, Long Beach. The conference is planned to summarize current information and techniques for engineers engaged in design, construction, operation, and maintenance of coastal works. Topics for discussion include fundamentals of wave action, development of basic design data, natural and artificial movement of sediment, site criteria for harbors and other coastal works, and design and construction of structures exposed to wave action. Programs may be obtained from Department of Institutes and Lectures, University Extension, University of California, Los Angeles 24.

The American Dietetic Association will hold its 33rd annual meeting in Washington, D. C., October 16–20. Winthrop M. Phelps, medical director, Children's Rehabilitation Institute, Baltimore; O. Spurgeon English, head of the Department of Psychiatry, Temple University School of Medicine and Hospital, Philadelphia; John R. McGibony, chief, Division of Medical and Hospital Resources, USPHS; William S. Schram, Veterans Administration, Newark; and C. Glen King, scientific director, Nutrition Foundation, New York City, will be among the speakers. A number of sessions will be concerned with food technology, institution management, and professional education.

The fourth general assembly of the World Medical Association will meet in New York City, October 16–21. The association is composed of national professional groups in 39 countries, and nearly all of these will be represented at the meeting. Objectives of the association are to promote closer ties among the national medical organizations, to

maintain the honor and protect the interests of the medical profession, to study and report on professional problems in different countries, to exchange matters of interest to the profession, to establish relations with other health groups, to assist all peoples of the world to attain the highest possible level of health, and to promote world peace. A number of technical papers will be presented at the scientific session to be held on October 18. Alfred Blalock, surgeon-in-chief, Johns Hopkins Hospital, will discuss advances in heart surgery. The therapeutic uses of blood and blood derivatives will be described by Louis K. Diamond, medical director of blood banks, American National Red Cross. Effects of stresses on human organs will be discussed by Hans Selye, director of the Institut de Medicine et de Chirurgie Experimentales, Université de Montreal, Quebec. Alfred F. R. Andresen, consultant in gastroenterology, Flushing Hospital, Brooklyn, will review diseases of the stomach and intestine. A conference of medical editors of the world will be held on October 21, presided over by Morris Fishbein, editor of the *World Medical Association Bulletin.*

A two-day program, devoted to an analysis of **recent developments in the applications of radioisotopes to biomedical problems** will be conducted at the University of Colorado Medical Center, Denver, on October 19 and 20. Talks will be presented on the interaction of radiation with biological systems, problems of protection and dosimetry in biological applications of isotopes, recent biochemical developments utilizing isotopes, the use of I^{131} as a clinical test for thyroid function, therapeutic applications of radiophosphorus and radioiodine in various clinical conditions, and progress in clinical applications of various isotopes. Guest speakers will include Rulon Rawson, Sloan-Kettering Institute, New York City, Paul Aebersold, George Manov, and Allen Lough, Isotopes Division, Atomic Energy Commission, Oak Ridge, and John Z. Bowers, Division of Biology and Medicine, Atomic Energy Commission. The course will include demonstrations of isotope procedures currently employed in biomedical research and clinical practice. The course is open to physicians and physical and biological scientists. The registration fee is $5.00, and the tuition is $20.00. Applications should be sent to Director of Graduate Medical Education, University of Colorado Medical Center, 4200 E. Ninth Ave., Denver 7.

The eighth "Frontiers in Chemistry" lecture series, co-sponsored by the International Society of the Friends of the Kresge-Hooker Library and Wayne University Department of Chemistry, will take place on Monday evenings at 7:00 P.M. in Science Hall on the Wayne campus, Detroit, Mich. Lecturers and the dates of their appearance are:

October 16–M. G. Mellon, Purdue University
October 23–L. L. Quill, Michigan State College
October 30–C. G. Swain, Massachusetts Institute of Technology
November 6–R. C. Fuson, University of Illinois
November 13–T. F. Young, University of Chicago
November 20–I. M. Kolthoff, University of Minnesota
November 27–Henry A. Lardy, University of Wisconsin
December 4–R. T. Arnold, University of Minnesota

The noncredit registration fee for the series is $5. Qualified persons may arrange for graduate credit of one or two hours. Additional information may be obtained from George H. Coleman, professor of chemistry at Wayne.

Abstracts of all lectures will be provided registrants in advance. A dinner at which the speaker will be guest of honor will take place at the University's Student Center at 5:30 P.M. on each of the program nights. All registrants are invited, but should make advance reservations.

An international colloquium on Calculating Machines and Human Thought will be held in Paris January 8–12, 1951, under the sponsorship of Le Centre National de la Recherche Scientifique. American scientists invited to attend are H. H. Aiken, Harvard University; E. W. Cannon, National Bureau of Standards; Norbert Wiener, Massachusetts Institute of Technology; and E. C. Berkeley, Edmund C. Berkeley and Associates, New York City.

The second high frequency measurements conference, sponsored jointly by the American Institute of Electrical Engineers, the Institute of Radio Engineers, and the National Bureau of Standards, will be held in Washington, D. C., January 10–12, 1951. Conference headquarters will be at the Hotel Statler, and the technical sessions will be held in the auditorium of the Department of Interior.

The Illuminating Engineering Society elected the following officers at its recent national technical conference: president, Walter Sturrock, General Electric Co.; vice president, E. M. Strong, Cornell University; treasurer, R. F. Hartenstein, Ohio Edison Co.; and general secretary, A. H. Manwaring, Philadelphia Electrical & Mfg. Co.

The Plant Science Seminar elected the following officers for 1950–51, at its annual meeting in Boston, August 24–30: chairman, Heber W. Youngken, Jr., University of Washington; vice chairmen, Paul D. Carpenter, University of Illinois, and Carl H. Johnson, University of Florida; secretary, Edward P. Claus, University of Pittsburgh; and members of the executive committee, Elmer L. Hammond, University of Mississippi, and J. Allen Reese, University of Kansas.

Tables of Nuclear Data, recently compiled by the National Bureau of Standards, are now available. The initial volume, together with supplements that will follow at six-month intervals, will present a comprehensive collection of experimental values of half-lives, radiation energies, relative isotopic abundances, nuclear moments, and cross sections. Decay schemes and level diagrams,

more than 125 of which are included in the tables now ready, will be provided wherever possible. References to over 2,000 original papers make it possible for the research worker to evaluate the details of previous investigations and to design experiments to resolve existing discrepancies. The publication is available from the Superintendent of Documents, U. S. GPO, Washington 25, D. C., at $4.25 a copy, which includes the price of three supplements. Remittances from foreign countries must be made in U. S. exchange and must include an additional sum of one-third the publication price to cover mailing costs.

The U. S. Naval Ordnance Test Station at Inyokern, Calif., is establishing a group of mathematicians and statisticians for weapons evaluation work, and is recruiting technical personnel for the work. There are also openings for recent graduates and theoretical physicists with specialized interests in solid state physics, atomic physics, fluid mechanics, hydrodynamics, aerodynamics, and other fields of classical physics. Full information can be obtained from J. B. Hamilton, Head, Professional Placement Branch, U. S. N. O. T. S., Inyokern, China Lake, **Calif.**

Presidential approval of the omnibus appropriations bill for 1951 makes available to the **Public Health Service** $3,600,000 for research with cortisone and ACTH. The entire sum is allocated for research grants to nonfederal institutions and scientists. The work will be directed toward evaluating preliminary results already achieved with these compounds and toward further investigation of their possible dangers and benefits. Grants will be made largely for study of the compounds in relation to arthritis and cancer, mental and neurological, metabolic, and cardiovascular diseases, as well as for basic laboratory studies on the general biological effects of the compounds.

In carrying out the program, the PHS will continue to cooperate with the Department of Agriculture in seeking plant sources from which cortisone and other steroids can be obtained. Although chemical synthesis and screening of new compounds are being conducted largely under the auspices of private industry, some of the allocated funds will be available for these lines.

The grants will be administered through the service's Research Grants and Fellowships Division of the National Institutes of Health. Applications will be evaluated and reviewed by one or more of 22 specialized study sections. The National Advisory Council, a nonfederal scientific group, will make the final recommendation. The deadline for receipt of applications is *November 1.*

A new international "yardstick," calculated from the wavelength of light waves emitted from bombarding a rare form of atomically produced mercury, is being developed by Kenneth B. Adams, of the Westinghouse Research Laboratories, and Kevin Burns, astronomer at the Allegheny Observatory in Pittsburgh, in collaboration with the National Bureau of Standards and scientists in France and England. This standard, on which all international measurements of length can be based, will be officially adopted only after its measurement is confirmed by at least three laboratories working independently in three different parts of the world.

The second annual Conference of Midwestern Parasitologists has established a coordination committee for compilation of a list of **parasitological research laboratories** of all types in the midwestern area and a cross-indexed check-list of the cultures of parasitic protozoa, helminths, mollusks, and arthropods maintained in these laboratories. This listing will coordinate and facilitate the exchange of material for both teaching and research purposes. A digest of the existing laws and regulations enforced by the U. S. Public Health Service and Department of Agriculture governing the shipment of cultures, and a manual on maintenance, shipment, handling, and transfer of parasitic cultures will also be sent out with the check-list. If all laboratories between the Rocky Mountains and the Alleghenies that have not received notice of the listing will write Dr. H. Elishewitz, Department of Microbiology and Public Health, Chicago Medical School, 710 S. Wolcott Ave., Chicago 12, Ill., their names will be included on the final list.

A new spectroscope, the Todd Spectranal, is now available, permitting rapid, accurate macro- or micro-analysis of 33 elements. Only a few milligrams of the sample are required, and these are completely recovered after analysis. The spectroscope is designed so that the element is excited by controlled voltage and amperage through two platinum electrodes in a glass condenser chamber. This obviates the need for cool gas flames, hot arc, or spark excitation. The instrument permits visual analysis, eliminating the need for photographic equipment, and rapid identification can be made by laboratory personnel. Further information about the instrument is available from Meyer Scientific Supply Company, 221 Atlantic Ave., Brooklyn 2, N. Y.

Recently Received

Absolute Measurement of Resistance by the Wenner Method. James L. Thomas *et al.* National Bureau of Standards Research Paper RP 2029. U. S. GPO, Washington 25, D. C. 30 cents.

The Geiger-Müller Counter. National Bureau of Standards Circular 490. U. S. GPO, Washington 25, D. C. 20 cents.

Sterling-Winthrop Research Institute. John B. Watkins Company, New York City.

Thermal Expansion of Solids. Cir. C486, National Bureau of Standards. U. S. GPO, Washington 25, D. C. 20¢.

Table of Powers of Complex Numbers. Herbert E. Salzer. AMS 8, National Bureau of Standards. U. S. GPO, Washington 25, D. C. 25¢.

Density of Solids and Liquids. Cir. C487, National Bureau of Standards. U. S. GPO, Washington 25, D. C. 20¢.