0th ANNIVERSARY MEETING

PROGRAM

EPITOME

Tuesday, October 23

Morning: Optical Society of America
Acoustical Society of America

Afternoon: Optical Society of America
Acoustical Society of America

Evening: Optical Society of America
Acoustical Society of America

Wednesday, October 24

Morning: Optical Society of America
Acoustical Society of America
Society of Rheology, Joint Session with:
APS Division of Solid State Physics
APS Division of High Polymer Physics
American Crystallographic Association

Afternoon: APS Division of Chemical Physics
Optical Society of America
Acoustical Society of America
Society of Rheology
American Crystallographic Association

Evening: Optical Society of America
Acoustical Society of America
Society of Rheology

Thursday, October 25

All Day: Symposium on Physics Today

Evening: Banquet of AIP and Member Societies

Friday, October 26

Morning: American Physical Society
Society of Rheology
American Association of Physics Teachers
American Crystallographic Association

Afternoon: American Physical Society
Society of Rheology
American Association of Physics Teachers
American Crystallographic Association

Evening: American Association of Physics Teachers

Saturday, October 27

Morning: American Physical Society
Society of Rheology
American Association of Physics Teachers
American Crystallographic Association

Afternoon: American Physical Society
American Association of Physics Teachers

OPTICAL SOCIETY OF AMERICA

OCTOBER 23–25, 1951

Tuesday Morning, October 23, at 10:00

HOTEL SHERMAN, LOUIS XVI ROOM

Contributed Papers

1. Spectroscopy from the Point of View of Communication Theory. Part II. Line Widths. Gilbert W. King and A. G. Emslie, of Arthur D. Little, Inc. (15 min.)

2. Infrared Wavelengths for Calibration of Grating Spectrometers. Earle K. Plyler and Norman M. Gailar, National Bureau of Standards. (15 min.)

3. A Twin Beam Spectrometric System. Marcel J. E. Golay, Signal Corps Engineering Laboratories. (15 min.)

4. Infrared Microspectroscopy with a Carbon Arc. C. S. Rupert and John Strong, The Johns Hopkins University. (15 min.)

5. The Structure of Ta I. C. C. Kiess and Harriet Knudsen Kiess, National Bureau of Standards. (10 min.)

6. Some Spectra of Actinium. William F. Meggers, National Bureau of Standards, and Mark Fred and Frank S. Tomkins, Argonne National Laboratory. (10 min.)

7. Recent Advances in Raman Equipment. J. W. Kemp, Applied Research Laboratories. (20 min.)

Tuesday Morning, October 23, at 10:00

HOTEL SHERMAN, BAL TABARIN ROOM

Contributed Papers

8. The Calibration of a Photoelectric Densitometer for Linearity with a Calibration (or Fixed) Intensity Ratio. Milton Green, Signal Corps Engineering Laboratories. (15 min.)

9. The Use of Plastics as Photographic Filters. William C. Britton, Boston University Optical Research Laboratory. (10 min.)

10. A New Photographic Processing Unit. F. Brech, Jarrell-Ash Company. (10 min.)

11. Application of Psychophysical Procedures to the Study of Dark Adaptation. Forrest L. Dimmick and Ailene Morris, U. S. Naval Medical Research Laboratory. (15 min.)

12. The Parameters of Scotopic Sensitivity. I. The Effect of Size. Jo Ann Smith and Forrest L. Dimmick, U. S. Naval Medical Research Laboratory.

13. The Distribution of the Illumination in the Foveal Image of the Eye. Albert Arnulf, Faculté des Sciences et Institut d'Optique. (15 min.)

14. Distortion of the Image by Prisms. Kenneth N. Ogle, Mayo Clinic and Mayo Foundation. (10 min.)

Tuesday Afternoon, October 23, at 2:00

HOTEL SHERMAN, LOUIS XVI ROOM

Contributed Papers

15. Spectrographic Determination of the Mineral Composition of Beef. A. J. Mitteldorf and D. O. Landon, Armour Research Foundation. (10 min.)

16. Studies of the Effect of Argon and Argon-Helium Mixtures on the d c Arc. Bert L. Vallee and S. James Adelstein, Massachusetts Institute of Technology. (15 min.)

17. Comparison of Volatilization Rates Using the d c Arc in Helium and Air. Bert L. Vallee and Ruth W. Peattie, Massachusetts Institute of Technology. (15 min.)

18. Spectrographic Determination of Tantalum and Columbium in 18–8 Stainless Steels. Wm. J. Poehlman and R. E. Sarnowski, of A. O. Smith Corporation. (10 min.)

19. The Quantitative Spectrochemical Determination of Sodium in Mixtures of Alkaline Earth Carbonates. Werner Hartmann, Bell Telephone Laboratories. (15 min.)

20. Mass Assay of Lithium by Optical Spectroscopy. G. L. Stukenbroeker, D. D. Smith, G. K. Werner, and J. R. McNally, Jr., Oak Ridge National Laboratory. (10 min.)

21. The Porous Cup Technique as a Spectrographic Method for the Quantitative Analysis of Biological Specimens. I. Lee Smith, Ernest Yeager, Nathan Kaufman, and Frank Hovorka, Western Reserve University and City Hospital of Cleveland. (15 min.)

22. A Low Cost Variable Source for Spectrochemical Analysis. Charles W. Rankin, New York State Police Laboratory. (10 min.)

23. An Analysis of the Factors in Spectrochemical Microanalysis. J. K. Hurwitz, Mines Branch, Department of Mines and Technical Surveys, Ottawa. (15 min.)

24. Quantometry in 1951. M. F. Hasler, Applied Research Laboratories. (30 min.)

Tuesday Afternoon, October 23, at 2:00

HOTEL SHERMAN, BAL TABARIN ROOM

Contributed Papers

25. The Three-beam Interferometer. M. Bottema and F. Zernike, Gronigen University. (20 min.)

26. Ruling of Test Gratings with Interferometric Control. George R. Harrison and William H. Culver, Massachusetts Institute of Technology. (15 min.)

27. Testing of Gratings by Phase Contrast. A. Maréchal, Institut d'Optique. (10 min.)

28. Dichroic Polarizers for Photoelectric Optical Systems. II. R. Clark Jones, Research Laboratory, Polaroid Corporation. (15 min.)

29. Photoconductivity in Vacuum-Coated Selenium Films. Paul H. Keck, Signal Corps Engineering Laboratories. (10 min.)

30. Increase of Sensitivity of Phase Contrast Methods by the Use of an Interferential Phase Plate. Marcel Locquin, Société Wild. (20 min.)

31. An Improved Device for Measuring the Thermal Conductivity of Optical Crystals. Stanley S. Ballard, Kathryn A. McCarthy, and David W. MacLeod, Tufts College. (15 min.)

32. Dispersion of Evaporated Films of MgF_2. L. G. Schulz, Institute for the Study of Metals, University of Chicago. (10 min.)

33. Titanium Dioxide Films as Selective Reflectors of the Near Infrared. Frank J. Studer and D. A. Cusano, General Electric Research Laboratory. (10 min.)

34. The Effect of Antireflection Films on Color in Optical Instruments. II. A. E. Murray, Bausch and Lomb Optical Company. (10 min.)

Tuesday Evening, October 23, at 8:00

HOTEL SHERMAN, BAL TABARIN ROOM

MEETING OF THE CHICAGO SECTION

All Optical Society members and guests are invited to attend this meeting of the Local Section, at which the speaker, Dr. James G. Baker, will present a résumé of the Symposium on Optical Image Evaluation held on October 18–20 at the National Bureau of Standards.

Wednesday Morning, October 24, at 8:45

HOTEL SHERMAN, LOUIS XVI ROOM

ANNUAL BUSINESS MEETING

Wednesday Morning, October 24, at 9:00

HOTEL SHERMAN, LOUIS XVI ROOM

Contributed Papers

35. A Monochromatic Radiation Pyrometer for Gas Temperature Measurement. Richard H. Tourin and Morris Grossman, Industrial Scientific Company. (15 min.)

36. A Radiation Pyrometer for Glass Temperature Measurements. William T. Gray, Leeds and Northrup Company. (15 min.)

37. An Emissivity-Independent Radiation Pyrometer. W. G. Fastie, Leeds and Northrup Company. (10 min.)

38. Measurement of Spectral Reflectance Characteristics of Fluorescent Materials and an Accessory for the Beckman Spectrophotometer. Albert J. Derr, Naval Air Material Center. (15 min.)

39. The Measurement of the Reflection Characteristics of Fluorescent Materials with a G. E. Spectrophotometer. John E. Tyler and Francis P. Callahan, Jr., Interchemical Corporation. (10 min.)

40. A Photoelectric Photometer for Evaluating the Color and Maturity of Yellow Sweet Corn. Harold C. Lukens, Robert P. MacKenzie, and C. H. Kunsman, Western Regional Research Laboratory. (10 min.)

41. Apparatus for Colorimetry. I. Multichromatic Colorimeters. Jozef Cohen, University of Illinois. (20 min.)

42. A High Resolution Automatic Recording Abridged Spectrogoniophotometer. Daniel Smith, Interchemical Corporation Research Laboratories. (15 min.)

43. Goniophotometry and Structure of Smoked Magnesium Oxide Surfaces. Daniel Smith, Interchemical Corporation Research Laboratories. (15 min.)

44. Analysis of Goniophotometric Curves. Isadore Nimeroff, National Bureau of Standards. (15 min.)

Wednesday Morning, October 24, at 9:00

HOTEL SHERMAN, BAL TABARIN ROOM

Contributed Papers

45. A New Method of Folding Reflective-Refractive Optical Systems. John K. Davis and Gilbert Clotar, American Optical Company. (15 min.)

46. Study of Excentration Aberrations. A. Maréchal, Institut d'Optique. (10 min.)

47. Graphical Ray-Trace and Surface Generation Methods for Aspheric Surfaces. Robert E. Lewis, Armour Research Foundation. (15 min.)

48. IBM Automatic Equipment in Optical Design. Arthur Cox and Catherine E. Ledda, Farrand Optical Company. (15 min.)

49. A Compact Ultra High Speed Digital Ray-Tracing Machine. Donald H. Jacobs, Michael May, and Seymour Scholnick, The Jacobs Instrument Company. (10 min.)

50. Computing Effects of Lens Variations with the Electronic Calculator. Glenn Wooters, Bausch and Lomb Optical Company. (15 min.)

51. An Analysis of H. D. Taylor's $f:2$ Photolens Using a Card Programmed Electronic Calculator. Robert A. Woodson, Consultant Optical Engineer. (15 min.)

Wednesday Afternoon, October 24, at 2:00

HOTEL SHERMAN, LOUIS XVI ROOM

Contributed Papers

52. International Standardization of Signal Light Colors. Francis C. Breckenridge, National Bureau of Standards. (15 min.)

53. Standardization of Safety Colors. Harry J. Keegan, John C. Schleter, and Kenneth L. Kelley, National Bureau of Standards, and George G. Sward, National Paint, Varnish and Lacquer Association. (15 min.)

54. Stockholm Session of the International Commission on Illumination. Deane B. Judd, National Bureau of Standards. (15 min.)

55. Prediction of the Color of Dye Mixtures on Textiles. H. R. Davidson, General Aniline and Film Corporation. (15 min.)

56. Integrating Light Meter for Fading Tests. O. E. Miller, Color Control Division, Eastman Kodak Company. (10 min.)

57. The Application of a Color Difference Index to Highly Selective Transparent Specimens. A. C. Webber and F. W. Billmeyer, Jr., of E. I. duPont de Nemours and Company. (15 min.)

58. Three-Dimensional Models Constructed on the I.C.I. and Munsell Systems. F. W. Billmeyer, Jr., and A. C. Webber, of E. I. duPont de Nemours and Company. (15 min.)

59. Near-Circular Adams Chromaticity Diagrams. I. H. Godlove, General Aniline and Film Corporation. (15 min.)

60. The Appearance of Colors in Twilight. W. E. Knowles Middleton and Eleanor G. Mayo, National Research Council of Canada. (15 min.)

61. The Influence of Field of View on Measurement of Atmospheric Transmission. Harold S. Stewart and Joseph A. Curcio, Naval Research Laboratory. (15 min.)

62. Brightness of the Twilight Sky. M. J. Koomen, C. Lock, D. M. Packer, R. Scolnik, and E. O. Hulburt, Naval Research Laboratory. (10 min.)

Wednesday Afternoon, October 24, at 2:00

HOTEL SHERMAN, BAL TABARIN ROOM

Contributed Papers

63. Optical Precision Method to Measure the Form of a Reflecting Surface. A. C. S. van Heel, Technical University, Delft, Holland. (15 min.)

64. A Differential Surface Refractometer for Testing for Variation of Refractive Index in Large Plates of Glass. John T. Watson and Georg Joos, Boston University Optical Research Laboratory. (10 min.)

65. A Device for Testing Aspheric Surfaces. David S. Grey, Research Laboratory, Polaroid Corporation. (15 min.)

66. A Method of Testing Objectives of Long Focal Length and High Resolving Power. Arthur G. DeBell and E. P. Martz, U. S. Naval Ordnance Test Station. (15 min.)

67. Thermal Problems in the Daytime Use of Telescopic Optics. A. G. DeBell and C. M. Arney, U. S. Naval Ordnance Test Station. (15 min.)

68. Deterioration of Optical Image Quality by a Heated Air Window Defrosting System. John T. Watson and Bradford Morgan, Boston University, and Donald E. Jarman and Donald E. Wendland, Boeing Airplane Company. (15 min.)

Wednesday Evening, October 24, at 7:30

ADLER PLANETARIUM AND ASTRONOMICAL MUSEUM

The Adler Planetarium and Astronomical Museum has arranged a special program for Optical Society members and guests. Busses will leave the Hotel Sherman at 7:30 P.M. and will return to the Hotel about 9:45 P.M. Tickets may be obtained prior to noon on Wednesday at the registration desk. Members are urged to secure their tickets early inasmuch as the seating capacity of the Planetarium is limited. The nominal price of the tickets includes both transportation and admission to the Planetarium.