Twenty-fifth Annual Meeting
OF THE
WEST VIRGINIA
ACADEMY OF SCIENCE

BETHANY COLLEGE
Bethany, West Virginia
May 5-6, 1950

Officers of the Academy
S. Benton Talbot, President ___________________________ Elkins
M. L. Vest, Vice-President ___________________________ Morgantown
E. E. Myers, Secretary ________________________________ Philippi
A. H. VanLandingham, Treasurer ________________________ Morgantown

Statement of Purpose:
The West Virginia Academy of Science is an organization of West Virginians who are interested in any aspect of science, whether as teachers in college or high school, as manufacturers, as professional men, or merely as lovers of science. Residents of other states are also eligible for membership. Papers on all phases of science, whether pure or applied, are acceptable for the program. The six groups of the Academy appear to afford a place for any pertinent subject, if not, new sections can be organized. All interested persons are invited to attend the meetings and become members.

General Theme of Twenty-Fifth Annual Meeting
SCIENCE AND MEDICINE
GENERAL PROGRAM

FRIDAY, MAY 5

8:00 A. M.  Registration—Bethany House.
9:30 A. M.  Business of Academy. General Session—Commencement Hall.
Call to Order by President Talbot.
Report of Officers:
  a. President
  b. Secretary
  c. Treasurer
Report of Executive Committee
Reports of Standing Committees:
  a. Publications Committee
  b. Legislative Committee
  c. Activities Committee
  d. Membership Committee
Election of Members.
Reports of Special Committees:
  a. Regional Meetings Committee
  b. Industries Committee
  c. Science Talent Search Committee
Appointment of Special Committees.
Announcements.

11:00 A. M.  Welcome, President W. H. Cramble, Bethany College.
Reply, M. L. Vest.
Presidential Address — "Science in Liberal Education".

11:45 A. M.  Address, Dr. S. B. Chandler, Professor of Anatomy, School of Medicine, West Virginia University — "The Three McClanes of Morgantown".

12:30 P. M.  Luncheon — Bethany House.
2:00 P. M.  Meetings by Sections (See following pages for meetings of Sections and Affiliates).
3:00 P. M.  Conference on Premedical Education — Main 34 (See under Biology Section).
4:30 P. M.  Meeting of the State Biological Survey Committee — Main 34. (See under Biology Section.)
6:30 P. M.  Annual Banquet — Bethany House.
Presentation of Junior and Collegiate Academy awards.

8:00 P. M.  "Atomic Energy in Biology and Medicine" — Dr. Shields Warren, Director, Division of Biology and Medicine, United States Atomic Energy Commission, Washington, D. C. — Commencement Hall.

Following the address an informal reception for members and guests of the Academy will be held at Pendleton Heights, the home of President and Mrs. Cramble.

NOTE

The Junior Academy is holding its meeting at Oglebay Park and will join the Senior and Collegiate Academies for the Banquet.
SATURDAY, MAY 6

8:30 A.M. Business of Academy, General Session — Commencement Hall, Unfinished Business.
Reports of Standing Committees (Continued):
   a. Junior Academy Committee
   b. Collegiate Academy Committee
   c. A. A. S. Grant Committee
   d. F. E. Brooks Memorial Arboretum Committee
   e. Biological Survey Committee
   f. Budget Committee
   g. Conservation Committee
   h. Neeology Committee
Reports of Section Chairmen.
Reports of Special Committees:
   a. Auditing Committee
   b. Resolutions Committee
New Business.
Report of Nominating Committee and election of Officers.

9:00 A.M. Meeting of Collegiate Section (continued), Main 37.
10:30 A.M. Address, Dr. Robert H. Carleton, Executive Secretary of the National Science Teachers Association — "Toward Better Science Teaching Today."

11:00 A.M. Motion Picture — "Atomic Medical Cases — Japan, World War II". (Presented through the courtesy of the affiliated Biological Photographic Association)

EXHIBITS
All exhibits of the Senior, Collegiate and Junior Academies and Affiliates and Commercial Exhibits will be in the Irwin Gymnasium.

SECTIONAL MEETINGS

Biology
(Botany, Zoology, Physiology, Medicine and Agriculture)
James T. Handlan, Jr., Chairman, Main 34

"Unusual Animal Food of Man"
Albert M. Reese, West Virginia University 10 Min.

"Experimental Agriculture"
Lowell B. Binkley, Bethany College 10 Min.

"A Preliminary List of the Mammals of Preston County, West Virginia"
Roger W. Barbour, Oglebay Institute 18 Min.

"Origin and Course of the Cortical Bundles of Calycanthus floridus L."
Herald D. Bennett, West Virginia University 10 Min.

FRIDAY, MAY 5 — Main 34

3:00 P.M. Conference on Premedical Education, S. Benton Talbot, Chairman (Following Biology Section meeting).

4:30 P.M. Biological Survey Committee, George Hunt, Chairman (Following Conference on Premedical Education).
Chemistry

(Chemistry, Chemical Engineering, Pharmacy)

C. F. Brown, Chairman, Oglebay 3

“A New Parachor Value for the CH₄ Group in Esters”

“Liquid-Vapor Equilibria, Refractive Indices and Freezing Points in the System: 2—Methylfurane-Methanol”
James B. Hickman and James L. Hall, Dept. of Chemistry, West Virginia University — Presented by James L. Hall —— 15 Min.

“Glycerol in Polyvinyl Alcohol Cures”

“Applied Chemistry”
Stanley White, Davis and Elkins College —— 15 Min.

“A Study of Some Chemical Changes Related to the Browning of Foods during Storage”
J. H. Hare, Dept. Agr. Biochemistry, West Virginia University —— 15 Min.

Mathematics and Physics

(Mathematics, Astronomy, Physics, Mechanical Engineering, Electrical Engineering)

Hunter Hardman, Chairman, Main 44

“The Ether Concept in Modern Physics”
Robert C. Colwell, Physics Dept., West Virginia University —— 15 Min.

“A T, Associated with the Twisted Cubic”
H. A. Davis and M. L. Vest, West Virginia University — Presented by M. L. Vest —— 15 Min.

“Educational Background of the Technical Student Required by the Electronics Industry—A Student’s View”
E. R. McFadden, Bethany College —— 15 Min.

“An Analytic Development of an Involutary Transformation”
James G. Howcroft, West Virginia University —— 15 Min.

“Demonstration of An 1890 Model Radio Receiver”
John Kercsmar and J. S. V. Allen, Bethany College —— 5 Min.

“Rational Approximations”
J. K. Stewart, West Virginia University —— 10 Min.

“The Physical Nature of Creation”
Robert L. Carroll, Fairmont State College —— 15 Min.

Geology and Mining

Leroy O. Myers, Chairman, Oglebay 13

“Ground Water Problem in Mining”
H. Wm. Ahrenholz, Jr., West Virginia University —— 20 Min.

“Sedimentation Features of the Tonoloway Formation in West Virginia”
John C. Ludlum, West Virginia University —— 20 Min.

“Present and Proposed Locations for Underground Storage of Natural Gas in West Virginia”
Charles Edgar Tucker, Columbian Carbon, Charleston —— 20 Min.

Field trip to follow program: Visit to the Georgetown Strip Mine of the Hanna Coal Co., near St. Clairsville, Ohio. Dr. S. L. Galpin, Agricultural Experiment Station, W. Va. U., will be in charge of the West Virginia portion of the trip and Dr. Aureal T. Cross, Dept. of Geology, W. Va. U., will be in charge of the Ohio (Belmont and Harrison Counties) portion of the trip.
Social Sciences — Group I

(Philosophy, Economics, Sociology, History)
Harold A. Gibbard, Chairman
(Section will meet in two simultaneous sessions)

DIVISION A,
Carl Leiden, Chairman, Main 25

“Some Contributions of China and Japan to Western Civilization”
Thomas B. Ennis, West Virginia University 15 Min.

“The Emergence of Canada in American Thinking”
Mrs. Evelyn L. K. Harris, Morris Harvey College 15 Min.

“Thomas Jefferson’s Sectional Motive for Founding the University of Virginia”
Charles H. Moffat, Marshall College 15 Min.

“Henry Whittington’s Letters to Marianna Maori, Sister of the Maid of Athens”
C. G. Brouzas, West Virginia University 15 Min.

“The Story of Jewish Persecution in Hellenistic and Roman Times”
Chandler Shaw, Bethany College 15 Min.

DIVISION B,
Harold A. Gibbard, Chairman, Main 22

“Sociology in Fiction”
E. C. Paustian, Bethany College 15 Min.

“Some Significant Aspects of the West Virginia Labor Movement”
Thomas E. Posey, West Virginia State College 15 Min.

“Medical Care in American State Prisons”
J. T. Richardson, Marshall College 15 Min.

“The Responsibility of Governors Through the Operation of the Impeachment Process”
P. D. Stewart, Marshall College 15 Min.

“The Negro’s Struggle for Integration in the Political and Cultural Pattern of Ohio Before 1860”
John R. Sheeler, West Virginia State College 15 Min.

Social Sciences — Group II

(Education, Psychology)
Alvin A. Fry, Chairman, Ogletay 9

“The Place of Personality Theory in Psychological Research”

“The Subscription School As a Factor in the Development of Education in West Virginia”
Frank S. White, Fairmont State College 12 Min.

“Comparison of Rorschach Analysis With Electroencephalogram Diagnosis in Cases of Brain Damage”

“The Szondi and the Rorschach Compared as Clinical Techniques”
Vincent J. Daly, Huntington State Hospital 10 Min.

“Personality Characteristics of Best-Liked and Least-Liked Teachers”
Richard L. Beard, Marshall College 15 Min.

“The Effects of a Course in Social Psychology on Social Preference, Social Adjustment and Social Studies Achievement Test Scores”
“The Contribution of Modern Languages to the Goals of General Education”
Don Carlos Madrid, Davis and Elkins College 15 Min.

“Group Therapy in a State Mental Hospital”
L. Leon Reid, Huntington State Hospital 10 Min.

“Can a College Curriculum Contribute to Better Inter-Group Understandings?”

“A Comparison of Perceptual Span Training and Reading Practice as Methods of Improving Reading Ability”
Robert L. Decker, West Virginia University 15 Min.

Collegiate Academy Section
Stanley Farr, Chairman, Main 37

FRIDAY, MAY 5

2:00 P. M.

“Aberration”
James Spitznogle, Fairmont

“An Extension to the Law of Conservation of Energy”
Lawrence Toothman, Fairmont

“The Physical Impossibility of the Relativity Length Transformation”
John Nussear, Fairmont

“The Fallacy of the Relativity Time Transformation”
Don Geldbach, Fairmont

“The Origin of the Earth’s Magnetic Field”
Charles Hayhurst, Fairmont

“Nylon”
Julius A. Hirsch, Davis and Elkins

“A Study of Phase Diagrams for a Two Component System of Metals”
Charles D. Mays, Davis and Elkins

SATURDAY, MAY 6

9:00 A. M.

“Hibernation of Snakes”
Myron Smith, Jr., West Virginia Wesleyan

“Xylem Differentiation in Carrot Callus Tissue”
Cyril Anderson, Glenville

“Some New Aspects in the Morphology of Mosses”
William L. Ice, Glenville

“Oak Wilt”
William Leeson, West Virginia University

“Some Ancient Superstitions About the Mandrake”
Summers Cox, West Virginia University

“Some Industrial Applications of Isotopes”
Robert L. Nutter, West Virginia Tech.

“Improvement of Sole Leather by Treatment With Plastics and Rubber”
Joseph Timothy Kilduff, Davis and Elkins

“A Commercial Preparation of Penicillin”
George William Munns, Davis and Elkins
The West Virginia Philosophical Society
AFFILIATE OF THE WEST VIRGINIA ACADEMY OF SCIENCE

FRIDAY, MAY 5  Main 38

9:30 A. M. Meeting with the West Virginia Academy of Science—General Session

2:00 P. M. Professors-Miscellaneous Papers
James Kelly, Jr., West Virginia State College
William S. Minor, West Virginia University
Louis B. Jennings, Marshall College
J. A. Franquiz, West Virginia Wesleyan College
J. B. Shouse, Marshall College

4:00 P. M. Business Meeting

SATURDAY, MAY 6

9:00 A. M. Students-Panel
"Absolutilistic and Relativistic Moral Theories"
Student Speakers from:
Alderson-Broaddus College
West Virginia Wesleyan College
Marshall College
West Virginia University
West Virginia State College

10:15 A. M. Discussions

Biological Photographic Association of West Virginia
AFFILIATE OF THE WEST VIRGINIA ACADEMY OF SCIENCE

FRIDAY, MAY 5 — Main 35

9:00 A. M. Business Meeting (meeting will start promptly).
9:30 A. M. Meeting with the West Virginia Academy of Science—General Session.

2:00 P. M. "Color Photography Made Easy"
A. F. Waldenbarg
Anso, Inc., Binghamton, New York

3:00 P. M. "Stereoscopy and Color"
John Pecar
Kyle and Co., Clarksburg

4:00 P. M. "Color by Flexichrome"
Richard Crawford
The Myers Clinic Hospital, Philippi

SATURDAY, MAY 6 — Main 35

10:00 A. M. Motion Picture
"Cancer: The Problem of Early Diagnosis"

11:00 A. M. Motion Picture
"Atomic Medical Cases — Japan, World War II"
(To be shown at the General Session of the Academy—Commencement Hall)