Twenty-fourth Annual Meeting

WEST VIRGINIA

Academy of Science

1924 - 1949

Officers of the Academy

NELLE AMMONS, President ........................................... Morgantown
S. BENTON TALBOT, Vice President ............................... Elkins
N. BAYARD GREEN, Secretary .................................. Huntington
A. H. VANLANDINGHAM, Treasurer .............................. Morgantown

DAVIS AND ELKINS COLLEGE
April 29-30, 1949
List of Presidents and Places of Meeting

1924 Morgantown G. R. Bancroft
1925 Huntington G. R. Bancroft
1926 Bethany J. Ellisland
1927 Morgantown B. R. Weirner
1928 Elkins John L. Tilton
1929 Charleston John L. Tilton
1930 Keyser H. F. Rogers
1931 Buckhannon A. B. Brooks
1932 Athens P. D. Strousbaugh
1933 Fairmont Carl G. Campbell
1934 Montgomery David B. Reyer
1935 Elkins C. E. Albert
1936 Bethany G. S. Dodds
1937 Huntington Frank Cutright
1938 Morgantown T. L. Harris
1939 Charleston Wallace Smith
1940 Keyser A. M. Reese
1941 Philippi Frank S. White
1942 Buckhannon Friend E. Clark
1943 No Meeting
1944 Feirmont Andrew Leitch
1945 No Meeting
1946 Athens E. Meade McNeill
1947 Morgantown H. A. Davis
1948 Montgomery J. E. Judson
1949 Elkins Naile Ammons

BIOLOGY
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 in high school, as manufacturers, as professional men, or merely as lovers of sciences. 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.

Notes to Chairman of Sections: A person desiring to submit a paper or abstract thereof, for publication in the proceedings should leave a copy with the section chairman or send it promptly to the Secretary. Such papers should be in the hands of the proper people not later than May 16, and must conform to the rules for such manuscripts available to all members through the Secretary. The Academy does not print papers by non-members or papers which have been, or are to be, published elsewhere. Long or profusely illustrated papers, or papers requiring special typographical symbols, cannot be accepted for publication at the present time.

As each paper is read will the Chairman of the Section see that a copy of the paper is placed on his table?

Each one who presents a paper is expected to leave a copy for the Committee on Publication. If he wishes to publish elsewhere he should have an abstract of his paper. If delay is needed for the completion of the paper, please make note when the writer agrees to have his copy in the hands of the Secretary of the Academy. The number of reprints desired should be indicated on the paper. Before the meeting of the Section adjourns secure a list of those present and have the Section designate a Chairman for the next annual meeting.

At the close of the meeting of the Section will the Chairman of the Section please leave with the Secretary of the Academy a copy of the program of the Section with the papers marked as presented or not presented, with the date named when delayed papers will be in the hands of the Secretary of the Academy, the name of the one selected by the Section to serve as Chairman at the next meeting. Please also leave with the Secretary the manuscripts handed in, together with such notes as it may seem desirable to have the Secretary include in the minutes of the meeting and the list of names of those present.

Local Arrangements: Full details concerning local arrangements will be found in the letter which accompanies this program.
GENERAL PROGRAM
FRIDAY, APRIL 29—RECREATION HALL

9:00 A. M.—Greetings, President R. B. Purdum, Davis and Elkins College.
Response, Dean S. Benton Talbot.
Business of the Academy.
Report of Officers
Report of Executive Committee
Report of A. A. A. S. Representative
Report of Editor of The News Letter
Report of Standing Committees:
   a—Legislative Committee
   b—Activities Committee
   c—Membership Committee
   d—Junior Academy Committee
   e—A. A. A. S. Grant Committee
Appointments of Special Committees
Other Business.

10:00 A. M.—Sketch of Organization Meeting
Roll Call of Charter Members
History of the Academy in West Virginia—Dr. J. E. Winter
Necrology of 25 Years—Dr. E. P. Dostick
The Junior Academy in West Virginia—J. Nab Bryan
Activities of a Junior Academy Chapter—The Mound Chapter
Science Talent Search in West Virginia—Dr. J. E. Judson
The Collegiate Academy—Dr. H. A. Davis
Our Regional Setup—Jennie Harrigan

11:00 A. M.—Presidential Address—"The Responsibility of an Academy of Science"
Address—Carbide and Carbon Chemical Corporation's Place in the Chemical Industry—Dr. J. Nelson Wickert, Carbide and Carbon Chemicals Corporation, South Charleston.

12:15—Luncheon, College Commons
1:30 P. M.—Meeting by Sections (See pages 5, 6 and 7)
1:30 P. M.—Junior Academy of Science Meetings. (See separate program for details)
1:30 P. M.—Meeting of W. Va. Biological Survey Committee, Science 203
3:30 P. M.—Meeting of Biological Photographic Association, Science 304
6:30 P. M.—Annual Banquet, College Commons
8:00 P. M.—"Preadeas and Modern Life"—Dr. Lawrence H. Snyder, Dean of the Graduate College of the University of Oklahoma, Norman, Okla.

Following the address an informal reception for members and guests of the Academy will be given in Halliburton Hall.

SATURDAY, APRIL 30

8:45 A. M.—The Philosophical Society Meeting. (See page 8)
9:00 A. M.—The Collegiate Academy Section—Dr. H. A. Davis, Liberal Arts 104
Election of Officers
Program (See page 7)

9:00 A. M.—The Senior Academy Section, Recreation Hall
Business Session
Unfinished Business
Reports of Committees
   a—State Biological Survey Committee
   b—Committee for the Preservation of Wild Life
   c—Committee to Rewrite the Constitution
   d—E. B. Morse Memorial Arboretum Committee
   e—Executive Committee
   f—Auditing Committee
   g—Resolutions Committee
   h—Reports of Sectional Chairman
   i—Reports of Nominations Committee and Election of Officers
   j—Other Business

10:00 A. M.—Program—Prof. Melvin P. Loy, Chairman
   "Characteristics of Coal in West Virginia"—Dr. A. J. W. Hood, West Virginia Geological Survey
   "The Recovery of European Agriculture"—Moving Picture Film, Russell H. Gist, Agricultural Agent
   "Vegetable Wealth"—Mr. C. C. Hoag, Head of Edwin R. Brown Department of Petroleum, Marietta College
10:00 A. M.—The Biological Photographic Association, Science 203
Adjournment.
SECTONAL MEETINGS

Biology

[Botany, Zoology, Physiology, Anatomy and Agriculture]
E. L. Plymle, Chairman, Science 203

"Heteroploidy in Blood Cells"  
Fritz Levy, U. S. Veterans Hospital, Huntington  
20 Min.

"The Caprifoliaceae of West Virginia"  
Virginia Armstrong Pifer, West Virginia University  
8 Min.

"The Hydrangeaceae of West Virginia"  
Elizabeth Ann Bartholomew, West Virginia University  
8 Min.

"Biological Research at the Undergraduate Level"  
Joseph Y. Peary, Alderson-Broaddus College  
12 Min.

"The Genus Holanthus in West Virginia"  
Charles Dryer, Waynesburg College (Pa.)  
8 Min.

"The Genus Hieracium in West Virginia"  
James C. Myers, Hopemont, West Virginia  
8 Min.

"Interpretation of Fish Scale Reading in Fishery Management"  
Lowell E. Blatley, Bethany College  
10 Min.

"Effect of Light in Sporophore Formation in a Xylophagous Species"  
David C. Richards, West Virginia University  
10 Min.

"The Viability of Lily Pollen with a Humidity Variable"  
W. Harold Kaseling, Bethany College  
5 Min.

"Additions to the Catalogue of the Vascular Plants of West Virginia VII"  
E. L. Core and M. A. Davis, West Virginia University  
8 Min.

"The Hughes-Kelley-Younge American and African Mammal Collection of Heads at West Ley College"  
J. J. Judson, Wesleyan College  
5 Min.

"Iron Bacteria in Mine Waters"  
Juniour M. Joseph, West Virginia University  
10 Min.

Chemistry

Stanley White, Chairman, Science 106

"Analytical Separation of Cobalt and Zinc"  
By Samuel Morris (dec'd), H. T. Growerling and James B. Hickman  
10 Min.

"Liquid-Vapor Equilibria in the Systems: I, 2—Dichloroethane—Acetone"  
By I. J. Price and James B. Hickman [West Virginia University]. Time on both  
10 Min.

"The Hydroxethyl Alcohols as Plasticizers in the Officials Collidio"  
By Gordon A. Bary, West Virginia University  
10 Min.

"Spontaneous Combustion of Linseed Oily Rags"  
By E. B. Hortich, West Virginia University  
10 Min.

"The College Chemistry Testing Program Sponsored by The Division of Chemical Education of the American Chemical Society"  
By William J. Walloco, West Virginia State College, Institute, W. Va.  
15 Min.

"The Present Status of Cathodic Protection Against Corrosion"  
By W. A. Keohele West Virginia University  
20 Min.

"The Electron Microscope"  
By Morton L. Seedmore, West Virginia University  
10 Min.

"Excerpts from an Air Pollution Study of Morgantown"  
By Henry E. Wood, West Virginia University  
10 Min.

"The Effect of Preparatn Milking of Dairy Cows on the Protein Content and Composition of Colostrum"  
By J. H. Van Ladingham and Charles E. Westley, Jr., West Va. U.  
10 Min.

"The Effect of Preparatn Milking of Dairy Cows on the Vitamin Content of Colostrum"  
By C. A. Piandors and H. A. Van Ladingham, West Virginia Univ.  
10 Min.

"Water Analysis—Leaching of Mine Waters"  
By E. R. Fehrer and C. F. Brown, Bethany College  
10 Min.

10 Min.


E. Winter

Second Chapter West Virginia Academy of Science"
Mathematics and Physics
Robert L. Carroll, Chairman, Science 302

"An Involutorial Transformation Associated With A Conic"
James A. LaRue, West Virginia University ................................................ 10 Min.

"A Non-involutorial Transformation Associated With A Conic"
Arthur W. Pennington, Potomac State .................................................... 10 Min.

"Minimum Surface of Revolution"
Alphonse J. DiPietro, West Virginia University ........................................... 10 Min.

"The Convergence of A Certain Sequence"
Miss Laurie Worr, West Virginia University ................................................ 10 Min.

"A Thermal Conductivity Experiment"
Coleman M. Loyd, West Virginia Institute of Technology .............................. 10 Min.

"Space Theories and Ether Concepts"
Dr. Robert C. Colwell, West Virginia University .......................................... 15 Min.

"The Nature of Matter and The Production of Magnetic Fields"
Robert L. Carroll, Fairmont State College ................................................ 15 Min.

"Lines of Curvature and Associated Quadrics"
Hunter Hardman, Marshall College ............................................................ 10 Min.

"A Carrier Current Campus Broadcasting Station"
James Williams, Leslie Cole and J. S. V. Allen, Bethany College .................... 20 Min.

Geology and Mining
H. M. Fridley, Chairman, Science 304

"Bituminous Coal Striping in West Virginia" Leroy O. Myers, West Virginia University.
"Authigenesis in West Virginia Sandstones" Milton T. Heald, West Virginia University.
"Glacial Erosion Diversions in West Virginia." H. M. Fridley, West Virginia University.

Social Science—Group I
(History, Economics, Political Science, Sociology)
E. C. Paustian, Chairman, Liberal Arts 103

"The Indians of Canada." A. J. Dadasian, West Virginia University .................. 15 Min.

"Sociological Frames of Reference for Community Analysis"
Herbert A. Gibbard, West Virginia University ........................................... 20 Min.

"Some Influences Affecting Marital Adjustment"
Carlton H. Currie, West Virginia Wesleyan College ..................................... 15 Min.

"The Value and Limitations of Positivism in Sociology"

"West Virginia's Public and College Libraries—Ten Years Later"
C. G. Burosas, West Virginia University .................................................. 20 Min.

"The Horn Papers, Concluded." Frank S. White, Fairmont.
"The North Atlantic Pact: Regionalism and Collective Self-Defense"
Albert G. D. Levy, Hiram College, Hiram, Ohio.

Social Science—Group II
(Education and Psychology)
E. V. Bowers, Chairman, Liberal Arts 102

"The Objectives of Courses of Human Growth and Development Offered by West Virginia Colleges." B. L. Gumm, Concord State College ................. 12 Min.


"Science Teaching in the Elementary School" 
A. A. Fry, West Virginia Wesleyan College .......................................... 7 Min.

"Certain Factors Related to Scholastic Success at the College Level" 
Madeleine H. Fel, Marshall College ..................................................... 12 Min.

"Similarities and Differences Among the Peoples of the World" 
Herman G. Canady, West Virginia State College ....................................... 15 Min.

"An Organization of Student Personnel Courses and Services" 
Kenneth F. McCormick, West Virginia University ....................................... 15 Min.

"An Intellectual Personality and Environmental Evolution of the Imates of West Virginia's Female State Prison" 
Vincent J. Daly, Huntington State Hospital ........................................... 10 Min.

"Certain Effects of Varying the Components of an Electroshock on Convulsive Behavior in the Albino Rat" (Illustrated by slides) 
John C. Townsend, West Virginia University ............................................... 15 Min.

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Collegiate Academy Section
H. A. Davis, Chairman, Liberal Arts 104


"Picnic Acid." Donald Simons, West Virginia Wesleyan.

"Colloidal Chemistry." James Dennis, West Virginia Wesleyan.

"Television and FM." Bill Goodwin, West Virginia Wesleyan.

"Photomicrography." Wilton Tannen, West Virginia Wesleyan.

"The Recent Development in the Measurements of Time." 
Cabell Pearson, West Virginia University.

"The Spring Meeting of the Appalachian Geological Society." 
John Maxwell, West Virginia University.

"Sign Wave Controlled Multi-Vibrator." Elton R. Curray, Fairmont State.

"The Extent that Fairmont Dentists Use Sodium Fluoride in Control of Caries." 
Anthony J. Spadaro, Fairmont State.

"New Ways of Preserving Collection Specimens." Edith Steward, Alderson Broaddus College.


"Secondary Oil and Gas Recovery." Harold Sanders, West Virginia University.


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"William Hume" 
Office of the Dean, Morris Harvey College.
Program of the
Philosophical Society of the State of West Virginia

Affiliate of the W. Va. Academy of Science

April 29, 1949

9:00 A. M.—Meeting of all groups with the West Virginia Academy of Science.
1:15-2:00 P. M.—"The Problem of the Moral Argument in Favor of the Existence of God."
   A paper by Dr. Ralph C. Brown, professor of Biblical Literature and Philosophy, West Virginia Wesleyan College.
2:00-2:30 P. M.—Discussion of the above paper.
2:30-2:45 P. M.—Intermission.
2:45-5:00 P. M.—Professors' Symposia.
   1st Topic: "Education Toward a Democratic World Order."
   Speakers: Dr. James L. Hopp, Prof. of Education at W. Va. Wesleyan College; Dr. C. G. Adams, Professor of Philosophy at Morris Harvey College.
   2nd Topic: "Democracy and the Relativity of Truth."
   Speakers: Dr. R. Lloyd Beck, Professor of Philosophy, Marshall College; Dr. Charles Wood, Professor of Philosophy at Alderson-Broadus College.
5:00-5:15 P. M.—Intermission.
5:15-5:30 P. M.—Business Meeting.
6:30 P. M.—Banquet with the West Virginia Academy of Science followed by General Meeting of the Academy and Reception.

April 30, 1949

8:45-9:30 A. M.—"The Function of the Principle of Persuasion in the Development of Social Ethics."
   Paper by Dr. William S. Minor, Professor of Philosophy, University of West Va.
9:30-10:00 A. M.—Discussion of the above paper.
10:00-11:00 A. M.—Students' Panel.
   Topic: "Religious Roots of Democratic Ideas."
   Speakers: Mr. Martin Abraham, Univ. of W. Va.; Richard C. Christopher, Marshall College; David Dubois, W. Va. Wesleyan College; Mr. Douglas Baumgartner, Alderson-Broadus College; a student from Morris Harvey College.
11:00-12:00 M.—General Discussion of the Above panel. Taking part from the floor: Matthew A. Reese and Francis E. Bays, Marshall College; Margaret Ann Cyphers and Edward Crow, West Virginia Wesleyan College; George Ward and Robert N. Gifford, University of W. Va.; Robert Withers, Richard Withers, Alderson-Broadus College.

Announcements to the Philosophical Society

1. Registration will be at the Information Desk.
2. Room assignments and tickets for the banquet will be arranged at the Information Desk.
3. Only the banquet will be served to the Society in groups. Other meals will be secured by the participants at any other convenient adjacent restaurants.
4. The meetings will be held in Liberal Arts 207. Should there be any change, participants will be informed at the desk on arrival.