1955

38th Annual Meeting, 1954. Program

Academy Editors

Follow this and additional works at: http://scholarworks.uark.edu/jaas

Part of the Education Commons, Engineering Commons, Life Sciences Commons, Medicine and Health Sciences Commons, Physical Sciences and Mathematics Commons, and the Social and Behavioral Sciences Commons

Recommended Citation
Available at: http://scholarworks.uark.edu/jaas/vol8/iss1/3

This article is available for use under the Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0). Users are able to read, download, copy, print, distribute, search, link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.

This Arkansas Academy Annual Meeting report is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Journal of the Arkansas Academy of Science by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.
ARKANSAS ACADEMY OF SCIENCE
Thirty-Eight Annual Meeting
University of Arkansas, Fayetteville
April 23-24, 1954

Friday, April 23

9:00 a.m. Registration

1:00 a.m. Meeting Called to Order, Dr. Z. V. Harvalik presiding. Welcoming address by Mayor Roy Scott of the City of Fayetteville, and Dr. Joe E. Covington, Acting President, University of Arkansas

12:30 p.m. Luncheon: Student Union Address: Philosophy and Science, Dr. Harold D. Hantz, Chairman, Department of Philosophy, University of Arkansas

2:00 p.m. *Sectional Meetings: Agriculture, Biology, Chemistry, Geography, Geology, History and Government, Physics, Psychology, Mathematics, Medicine and Pharmacy, Sociology and Anthropology

7:00 p.m. Annual Public Lecture: Film, The Story of Mount Palomar, with comments by Dr. Bernard H. Gundlach, Mathematics Department, University of Arkansas.

8:30 p.m. -10:00 p.m. Science Fair

8:30 p.m. Film Short Subjects: Glass for Science The Development of Entomology

Saturday, April 24

8:30 a.m. Coffee and Doughnuts

9:00 a.m. Joint Meeting, Senior and Junior Academies of Science

10:30 a.m. Second Business Meeting: Treasurer's Report

Report of Committees

Election of Officers

Adjournment

10:30 a.m. Modern Dance Preview (for wives)

12:00 a.m. Informal Luncheon: Student Union

1:30 p.m. Field Trip to Martin’s Bluff on White River, arranged by Dr. Dwight Moore

1:30 p.m. Participation in Agri Day

* SECTIONAL PROGRAM

Agriculture Section

Chairman: J. L. Lancaster, University of Arkansas


A-3-3 Modification of the Environment as a Factor in the Control of Cotton Diseases. V. H. Young, University of Arkansas.


A-5-5 Cowpea and Bean Weevils. W. D. Nylie, University of Arkansas.


Published by Arkansas Academy of Science, 1955
A-7-7 Cationic Activities and the Exchange Phenomena of Plant Roots; Relationship to Practical Problems of Nutrient Uptake. E. O. McLean, D. Adams, and F. E. Baker, University of Arkansas.

A-8-8 The Quality of Water from the Arkansas River for Irrigation Purposes. Cecil Blackwell, University of Arkansas.


A-10-10 The House Fly Problem. J. L. Lancaster, University of Arkansas.

**Biology Section**

Chairman: Robert S. Fairchild, University of Arkansas

B-1-11 Notes on Arkansas Amphibians and Reptiles. Herndon G. Dowling, University of Arkansas.

B-2-12 Laboratory or Busywork? Albert Robinson, Jr., Arkansas State College.

B-3-13 A Description of the Larvae of the Salamander Ambystoma Annulatum. Robert S. Chase, Jr., University of Arkansas.


B-5-15 Observations on Anemone in Arkansas. Dwight M. Moore, University of Arkansas.

B-6-16 Cytological Observations on Protoplast. Nelia Leurs, University of Arkansas.

B-7-17 Physiological Studies on Slime Mold Plasmodia. George T. Johnson, University of Arkansas.


B-10-20 The Vegetation of the White River Basin to be Affected by the Table Rock Dam and Reservoir. Dwight M. Moore, University of Arkansas.


B-12-22 An Annual Temperature Study of Five Northwest Arkansas Lakes. Carl E. Hoffman, Andrew Hulsey, Charles Nelson, Bobby Owen, and Buford Tatum, University of Arkansas.


B-14-24 A Study of the Cotton Rat in Northwestern Arkansas. John A. Sealand, Jr., University of Arkansas, and Barry Q. Walter, University of Arkansas and Western Reserve University.

**Chemistry Section**

Chairman: Joseph E. Pryor, Harding College

C-1-25 Partial Vapor Pressures and Classical Acid Constant of Hydrogen Chloride. C. W. McCarty, Ouachita College.


C-3-27 Large Carbon-Ring Compounds. L. I. Duiguid, Du-Good Chemical Laboratory, St. Louis.

C-4-28 A Possible Role of Radioactivity in Petroleum Genesis. R. R. Edwards and P. K. Kuroda, University of Arkansas.

C-5-29 Algebraic Relations for Property-Composition Curves of Binary Mixtures. Louis Frank, Philander Smith College.

C-6-30 A Product Study of the Distribution of C14 Produced During Neutron Irradiation of Sodium Cyanide. Arthur Fry, University of Arkansas.


Elementary Chemical Calculations. E. S. Amis, University of Arkansas.

Chairman: C. M. Strack, Henderson State Teachers College


Geography of Arkansas: A Resource Unit. Clarence S. Williams, Arkansas State Teachers College.

Urban Land Classification. Eric S. Lane, University of Arkansas.

Delimitation and Analysis of the Little Rock Central Business District. James E. Vance, University of Arkansas.

Spatial Associations of the 1948, 1952 Presidential Vote. C. M. Strack, Henderson State Teachers College.

Chairman: Kern C. Jackson, University of Arkansas

The Stratigraphy of the Monticello Ridge. Frank E. Omellion, University of Arkansas.


Carbonate Fillings in Solution Cavities of Pre-Atoka Age. Kern C. Jackson and James E. Case, University of Arkansas.


The Establishment of the Presence of the Miocene on Crowley's Ridge, St. Francis County, Arkansas. Ellis Doyle Herron, University of Arkansas.

The Petrogenetic Significance of Quartz Twins. Kern C. Jackson, University of Arkansas.

Chairman: F. M. Bridge, University of Arkansas


An Exceptional Decision: The Trial of Professor Richard T. Ely by the Board of Regents of the University of Wisconsin, 1894, Stanley R. Rolnick, Southern State College.

The Idea of Progress in Recent Philosophy of History, Georg G. Iggers, Philander Smith College.

Relationship of Planning and Zoning in the Arkansas Zoning Cases. Nathalie Georgi, University of Arkansas.

The Know Nothings. Charles G. Hamilton, College of the Ozarks.

Chairman: N. A. Goldsmith, Henderson State Teachers College

Derivation and Integration of Functions of Intervals, William S. Orton, University of Arkansas.

On Estimates of Error in Numerical Integration, Dorothy M. Hoover, University of Arkansas.
M-3-53  A Newcomer's Views on the Teaching of Elementary College Mathematics, Lowell R. Tappan, University of Arkansas.


MEDICINE AND PHARMACY SECTION
Chairman: Dr. Jacob Sacks, University of Arkansas

MD-1-56  The Problem of Common Fungus Infections. Dr. Calvin J. Dillaha, Little Rock.

MD-2-57  Studies on the Metabolism of Chick Bone Marrow, Dr. James S. Dinning, University of Arkansas School of Medicine.

MD-3-58  A Study of Eclampsia With an Appraisal of the Current Therapy. Dr. Donald E. Barlow, University of Arkansas School of Medicine.

MD-4-59  The Preparation of Cell-free Enzymes from the Photosynthetic Bacterium Rhodopseudomonas Gelatinosa. Arthur A. Smith and Dr. Jack M. Siegel, University of Arkansas School of Medicine.

MD-5-60  Energy Requirement in Bacterial Photosynthesis. Dr. Jack M. Siegel, University of Arkansas School of Medicine.

PHYSICS SECTION
Chairman: J. Robbins, Hendrix College

P-1-61  The Electret, an Electrical Analogy to the Permanent Magnet. C. E. Jones, University of Arkansas.


P-3-63  The Design and Use of a Cosmic Ray Telescope. C. C. Allen, University of Arkansas.

P-4-64  A New Condenser Method for Determining Amplitudes of Light Diaphragmatic Materials. Lloyd B. Ham, University of Arkansas.

P-5-65  Reflectivity of Metal Films Deposed at Various Low Pressures. Zaboj V. Harvalik, University of Arkansas.

PSYCHOLOGY SECTION
Chairman: Merrell E. Thompson, University of Arkansas

PS-1-66  Reminiscence as a Joint Function of Directions and Distribution of Practice. Merrell E. Thompson, University of Arkansas.

PS-2-67  The Effect of Time of Exposure to an Anxiety-Arousing Conditioned Stimulus, Robert S. Hicks, University of Arkansas.

PS-3-68  The Medical College Admissions Test Score as a Criterion for Admission to Medical School. Edmond F. Erwin, University of Arkansas.

PS-4-69  Directed Attention in Rote Serial Learning. Frank P. Gatling, University of Arkansas.

SOCIOLGY AND ANTHROPOLOGY SECTION
Chairman: Fred W. Voget, University of Arkansas

S-1-70  Patients in Arkansas State Hospital From Two Arkansas Counties. Leta Adler, University of Arkansas.

S-2-71  Male Sex Behavior at a Southern University. L. R. Floerchinger, University of Arkansas.

S-3-72  Land Tenure Process in the Arkansas Coastal Plain. J. L. Charlton, University of Arkansas.

S-4-73  The American Indian in Transition. F. W. Voget, University of Arkansas.