

PROGRAM SUMMARY

Tuesday, August 29, 1950

- 10:00 A.M. Registration
- 11:00 A.M. Opening Session
- 1:30 P.M. Technical Session
- 7:30 P.M. Technical Session

Wednesday, August 30, 1950

- 7:15 A.M. Devotional Period
- 9:30 A.M. Technical Session
- 1:30 P.M. Guided Nature Hike
- 7:30 P.M. Technical Session

Thursday, August 31, 1950

- 7:15 A.M. Devotional Period
- 9:30 A.M. Technical Session
- 1:00 P.M. Technical Session
- 3:00 P.M. Business Session
- 8:00 P.M. Public Session

Friday, September 1, 1950

- 7:15 A.M. Devotional Period
- 9:00 A.M. Visit to Mennonite
Historical Library
- 10:00 A.M. Technical Session
- 12:00 Noon Adjournment of the
Convention

OFFICIAL PROGRAM



FIFTH ANNUAL CONVENTION

The American Scientific Affiliation

(Incorporated)

A group of Christian scientific men devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and the scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established.



August 29th through
September 1st
1950



To Be Held at
GOSHEN COLLEGE
Goshen, Indiana

CONVENTION COMMITTEE

General Chairman:

H. Harold Hartzler, Ph.D.
Professor of Mathematics
Goshen College
Goshen, Indiana

Committee on Papers:

Hendrik J. Oorthuys, M.S. (Chairman)
Assistant Professor of
Electrical Engineering
Purdue University
Lafayette, Indiana

Delbert Eggenberger, M.S.
Research Chemist
Armour and Company
Chicago, Illinois

Roy M. Allen, Sc.D.
Consulting Metallurgist
Glen Ridge, New Jersey

David M. Spaulding, M.A.
Instructor in Life Sciences
Pasadena City College
Pasadena, California

Committee on Arrangements:

Paul Bender, Ph.D. (Chairman)
Registrar and Professor of Physics
Goshen College
Goshen, Indiana

Alta E. Schrock, Ph.D.
Professor of Biology
Goshen College
Goshen, Indiana

The Purpose of the Convention:

"That they may see and know, and consider,
and understand together that the hand of the
Lord hath done this, and the Hand one of Israel
hath created it."

Isaiah 41:20

Tuesday, August 29, 1950

10:00 A.M. REGISTRATION

11:00 A.M. OPENING SESSION

- Dr. H. Harold Hartzler presiding
1. Invocation
 2. Word of Welcome—
Dr. Carl Kreider, Acting President of
Goshen College
 3. Annual President's Report—
F. Alton Everest
 4. Announcements—
Hendrik J. Oorthuys

12:00 Noon LUNCH

1:30 P.M. TECHNICAL SESSION

- Dr. Alfred C. Eckert presiding
1. "Methods of Dating the Earth and
the Universe"—
Delbert Eggenberger
 2. "Joshua's Long Day"—
Dr. Roy M. Allen
 3. "Laban and Jacob's Wage Agree-
ment"
"The Speckled and Spotted Goats
and the Black Lambs Shall Be
My Wages"—
Wm. J. Schepp, Director of Chemical
Research, East Paterson, N. J.

3:30 P.M. ADJOURNMENT

6:00 P.M. DINNER

7:30 P.M. TECHNICAL SESSION

- Dr. Joseph S. Maxwell presiding
1. "The Guilt Reaction"—
Dr. John R. Howitt
 2. "Comparative Psychology of Mice
and Men"—
Dr. Philip B. Marquart

Wednesday, August 30, 1950

7:15 A.M. DEVOTIONAL PERIOD—

Dr. Irving A. Cowperthwaite

7:45 A.M. BREAKFAST

9:30 A.M. TECHNICAL SESSION

- Dr. R. Laird Harris presiding
1. "Recent Developments in the
Carbon 14 Method of Dating
Fossils"—
Dr. J. Laurence Kulp
 2. "The Unifying Principle of the
Universe"—
Dr. John R. Howitt
 3. "Recent South African Fossil Finds"
Miss Marie Fetzer

11:30 A.M. ADJOURNMENT

12:00 Noon LUNCH

1:30 P.M. GUIDED NATURE HIKE—

in charge of Dr. S. W. Witmer

- 5:30 P.M. PICNIC DINNER
 7:30 P.M. TECHNICAL SESSION
 1. "Conservation, A Christian Responsibility"—
 Dr. Alta Schrock
 2. Devotional Meditation—
 Professor Edmund N. Gathercoal

Thursday, August 31, 1950

- 7:15 A.M. DEVOTIONAL PERIOD—
 Professor Martin Karsten
 7:45 A.M. BREAKFAST
 9:30 A.M. TECHNICAL SESSION
 Dr. Edwin Y. Monsma presiding
 1. "The Paleontology of the Horse"
 Miss Cordelia Erdman
 2. "Heredity and Fossil Horses"—
 Dr. Russel Mixter
 3. "Experimental Evidence for the
 Formation of New Species
 of Plants"—
 Dr. O. J. Eigsti
 11:30 A.M. ADJOURNMENT
 12:00 Noon LUNCH
 1:00 P.M. TECHNICAL SESSION
 Dr. Wilbur L. Bullock presiding
 1. Symposium—Education
 2. "Why God Called His Creation
 Good"—
 Dr. Wm. J. Tinkle
 3:00 P.M. BUSINESS SESSION
 6:00 P.M. DINNER
 8:00 P.M. PUBLIC SESSION
 F. Alton Everest presiding
 Address by Stanley W. Olson, M.D.,
 Dean of the College of Medicine,
 University of Illinois
 MOVING PICTURES of Sea Elephants
 taken near Guadalupe Island by
 F. Alton Everest

Friday, September 1, 1950

- 7:15 A.M. DEVOTIONAL PERIOD—
 Dr. Roger J. Voskuyl
 7:45 A.M. BREAKFAST
 9:00 A.M. VISIT TO MENNONITE HISTORICAL
 LIBRARY
 Dr. H. S. Bender, Dean of the Biblical
 Seminary of Goshen College will
 tell of some of the work carried on
 in this library.
 10:00 A.M. TECHNICAL SESSION
 Dr. Paul E. Stanley presiding
 1. "Intimations of Modern Physical
 Science in Some Very Ancient
 Books (Bible)"—
 Maurice T. Brackbill
 2. Round Table—
 Place of the ASA in Other Science
 Groups—
 Dr. Paul Bender presiding
 12:00 Noon ADJOURNMENT OF THE CONVENTION

ABSTRACTS OF PAPERS

**METHODS OF DATING THE EARTH
 AND UNIVERSE**

D. N. Eggenberger, M.S.

The age of the earth and the date of creation have been controversial questions, particularly during the last century. At present only the order of magnitude appears reasonably certain. The validity of the methods used are examined. Several methods of confirmation not so generally known are discussed. All point to a beginning of the order of several billion years ago.

THE GUILT REACTION

John R. Howitt, M.D.

Feelings of guilt are experienced very early in life and are universal among men. The sense of guilt is similar to an instinct and stems from man's prior knowledge of good and evil. Conscience and the doctrine of rewards and punishment are discussed. The guilt reaction may lead to fear, anxiety and increased nervous tension. The modern solution to this problem is to ignore the moral code which is responsible for the tension. This leads to lawlessness and a hopeless situation. The doctrine of the atonement is the only logical solution to the problem and results in release of tension and inward peace which are the basis of true mental hygiene.

**THE UNIFYING PRINCIPLES OF
 THE UNIVERSE**

John R. Howitt, M.D.

Man has always sought for a unifying principle in life which would reduce the mass of knowledge to a simple formula. The doctrine of uniformity and evolution have for years been accepted as such but today there is a restlessness which is believed to reflect a further search for some more satisfactory integrative principle in the universe. This is to be observed in the scientific and philosophical world as well as in the realm of religion and politics. There also appears to be here and there a tendency to reduce the time element in nature from the astronomical figures that were so popular a few years ago. The supreme integrative principle in the universe is Christ Himself for "by Him all things consist."

RECENT SOUTH AFRICAN FOSSIL FINDS

Marie Fetzner

The Australopithecinae have been known in the paleontological literature since 1925, when the skull of the Taungs ape-man was described by Dr. R. A. Dart. In the past three years, much material has been recovered from South Africa and has been described under the general title of South African Man-Apes. The morphological resemblance of these fossils to both man and the higher primates has led many to the conclusion that they are an important link in the evolution of man. A description of these fossils, and a summary of the general interpretation of them, is presented.

WHY GOD CALLED HIS CREATION GOOD

William J. Tinkle, Ph.D.

Four times in the first chapter of Genesis God pronounced His creation good. Is it true that "Whatever is right," or is the created world now no longer good? What about weeds, insects, predatory animals, disease germs, and congenital cripples?

Some organisms have virtues which, in our short sighted vision, we pass by. Again, we should not define the word "good" as that which brings immediate pleasure.

Another explanation is that some animals and plants have degenerated through mutation and disease so that God's statement no longer applies fully. But organisms are good raw material for man's breeding. God gave man dominion over nature that he might restore and improve.

"INTIMATIONS OF MODERN PHYSICAL SCIENCE IN SOME VERY ANCIENT BOOKS (BIBLE)"

Maurice T. Brackbill

The Bible contains at least 300 references to physical science. Without thought to divine inspiration one would expect to find in the Bible, as well as in any other ancient book, the science, if any, only of the times in which it was written, and little that would check with modern ideas. The purpose of this paper is to show, without strain or twist, that a number of these references to physics and astronomy make sense today.

THE PALEONTOLOGY OF THE HORSE

Cordelia Erdman

One of the most frequently cited "evidences of evolution" is the sequence of fossil horses from primitive to modern types. This paper examines the validity of the accepted sequence both strati-graphically and morphologically, paying particular attention to the Oligocene fauna of the Dakota Badlands.

HEREDITY AND FOSSIL HORSES

R. L. Mixter, Ph.D.

An evaluation by means of known hereditary processes of the changes that the horse appears to have undergone. The feet have changed from a five-toed to a one-toed foot by mutations. This amount of change is the most that is possible. Hereditary changes have not produced horses from another order of animals.

FORMATION OF SPECIES WITHIN THE PLANT KINGDOM

O. J. Eigsti, Ph.D.

Experimentally produced genetic types of plants that simulate recognized and established species, have been synthesized in the laboratory. Moreover, a study of chromosomal mechanics and chromosomal numbers affords a better basis for interpreting the origin of certain present-day species. Furthermore, a comparison between natural and synthetic types aids us in constructing a picture of plants that existed in the ages past. The proper use of a drug called colchicine permits one to produce fertile species-hybrids. These

genetic entities are of great interest to Botanists in widely different fields of study. As an example, the doubled number of a species-hybrid which involves an Asiatic wild cotton-species (*Gossypium arboreum*, n-13) and American wild cotton (*G. Thurberi*, n-13) is now considered as a synthetic American Cultivated cotton (*G. hirsutum*, n-26). The origin of species by hybridization and doubling of chromosomes is "cataclysmic." To the extent that such changes can be reproduced in the laboratory we may now review certain processes that brought into existence some of the plant groups we know today.

RECENT DEVELOPMENTS IN THE CARBON 14 METHOD OF DATING FOSSILS

Dr. J. Laurence Kulp

The principles of the carbon 14 method of age determination of fossils for the last 30,000 years will be reviewed. Recent data obtained by workers during the past academic year will be described and interpreted in terms of the implications for an objective apologetic.

JOSHUA'S LONG DAY

Dr. Roy M. Allen

The story of the sun and moon standing still at the command of Joshua, as recorded in the scriptures, has never been accepted by the scientific world at large as anything but an Israelitish myth. To those subscribing to the accuracy of the Scriptures and at the same time possessing a scientific background it appears logical inasmuch as a physical phenomenon is involved, that a scientific explanation of it in accordance with natural laws must exist. Such an explanation is presented in this paper. It involves the shifting of the axis of rotation of the earth rather than a stoppage of its rotation.

COMPARATIVE PSYCHOLOGY OR MICE AND MEN

Philip B. Marquart, M.D.

Associate Professor, Medicine and Psychiatry
Wheaton College
Wheaton, Illinois

A basis for a Christian, Theistic, comparative psychology is set forth. Points of similarity and differences between men and other forms of life are discussed but copious scriptural evidence is presented indicating that man is essentially unique and totally different from all other creatures.

LABAN AND JACOB'S WAGE AGREEMENT "THE SPECKLED AND SPOTTED GOATS AND THE BLACK LAMBS SHALL BE MY WAGES"

Wm. J. Schepp

Director of Chemical Research
East Paterson, New Jersey

Events leading up to Jacob's wage agreement with Laban are reviewed to indicate the significance of the

marks he selected to brand his wages. Then follows a discussion of melanism. The author holds that the theory of maternal impression belongs in the realm of mythology and presents evidence that Jacob deliberately crossed black and white animals by employing aphrodisiacs, withholding stimulants from solid colored animals.

Accommodations:

Rooms will be provided in the Goshen College dormitories, and meals will be served in the Goshen College dining hall. There are being arranged especially for the ASA group, and the charges will be nominal.

Fees:

A registration fee of \$1.00 will be requested in order that the normal work of the ASA will not be handicapped due to convention expenses.

Members of the Executive Council

F. Alton Everest, E.E. (1951)*, President

Associate Director
Moody Institute of Science
Los Angeles, California

Allan A. MacRae, Ph.D. (1950), Vice-President

President and Professor of Old Testament
Faith Theological Seminary
Wilmington, Delaware

Russell L. Mixter, Ph.D. (1954), Secretary-Treasurer

Chairman, Dept. of Biology and Professor of
Zoology
Wheaton College
Wheaton, Illinois

Roger J. Voskuyl, Ph.D. (1952)

Dean, Wheaton College
Wheaton, Illinois

J. Laurence Kulp, Ph.D. (1953)

Lecturer in Geology
Columbia University
New York, N. Y.

*Year of retirement from Council

Past Council Members

Edwin Y. Monsma, Ph.D. (1948)

Professor of Organic Science
Calvin College
Grand Rapids, Michigan

Marion D. Barnes, Ph.D. (1947)

Research Chemist
Lion Oil Company
El Dorado, Arkansas

Peter W. Stoner, M.S. (1945)

Chairman, Dept. of Mathematics,
Engineering, Astronomy
Pasadena City College
Pasadena, California

Russell D. Sturgis, Ph.D. (1944)

Head, Department of Chemistry
Ursinus College
Collegeville, Pennsylvania

Irving A. Cowperthwaite, Ph.D. (1943)

Plant Engineer
Thompson Wire Company
Milton, Massachusetts

John P. Van Haitzma, Ph.D. (1942)

Professor of Organic Science
Calvin College
Grand Rapids, Michigan

The Objects of the American Scientific Affiliation are:

- "(1) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures.
- (2) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures.
- (3) To promote the dissemination of the results of such studies."

—Article I of ASA Constitution

Each candidate for membership in the ASA must sign the following statement:

"I believe the whole Bible as originally given to be the inspired work of God, the only unerring guide of faith and conduct. Since God is the Author of this Book, as well as the Creator and Sustainer of the physical world about us, I cannot conceive of discrepancies between statements in the Bible and the real facts of science. Accordingly, trusting in the Lord Jesus Christ, the Son of God, my Saviour, for strength, I pledge myself as a member of this organization to the furtherance of its task.

Signed

—Article II of ASA Constitution