

OFFICIAL PROGRAM



Tenth 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 scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established



August 23-26, 1955



YOUNG LIFE CAMP—STAR RANCH

Colorado Springs, Colorado

Program Summary

Tuesday, August 23, 1955

- 9:00 a.m. Registration
- 10:00 a.m. Opening Session
- 11:00 a.m. Technical Session
- 1:00 p.m. Technical Session
- 8:00 p.m. Public Lecture

Wednesday, August 24, 1955

- 7:15 a.m. Devotions
- 9:00 a.m. Technical Session
- 1:00 p.m. Business Meeting
- 3:00 p.m. Field Trip
- 8:00 p.m. Moving Pictures
- 9:00 p.m. Discussion Groups

Thursday, August 25, 1955

- 7:15 a.m. Devotions
- 9:00 a.m. All-day Field Trip
- 8:00 p.m. Guest Speaker

Friday, August 26, 1955

- 7:15 a.m. Devotions
- 9:00 a.m. Technical Session
- 1:00 p.m. Technical Session
- 8:00 p.m. Farewell Devotions

Convention Committees

General Chairman

Russell L. Mixter, Ph.D.
Professor of Zoology
Wheaton College
Wheaton, Illinois

Committee on Papers

George H. Fielding, M.A.
Naval Research Laboratory
Washington, D.C.

Walter R. Hearn, Ph.D.
Baylor College of Medicine
Houston 25, Texas

Robert D. Knudsen, Th.M.
Rockmont College
Longmont, Colorado

Committee on Arrangements

James C. Rayburn, Th.M.
Young Life Camp
Star Ranch
Colorado Springs, Colorado

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 Holy One of Israel hath created it." Isaiah 41:20

Program

Tuesday, August 23, 1955

- 9:00 A.M. **Registration**
- 10:00 A.M. **Opening Session**
Dr. Russell L. Mixter presiding
1. Invocation
 2. Welcome
Mr. James C. Rayburn, Field Director
Young Life Campaign
 3. President's Annual Report
Dr. H. Harold Hartzler
 4. Announcements
- 11:00 A.M. **Technical Session**
Dr. C. W. Taylor presiding
1. "The Christian Physician and 'Faith Healing'"
Dr. Jon H. Rouch
- 11:45 A.M. **Adjournment**
- 1:00 P.M. **Technical Session**
Dr. Donald S. Robertson presiding
- Symposium on Cosmogony:
1. "Modern Cosmogony; Historical Survey"
Dr. George K. Schweitzer
 2. "Modern Cosmogony; The Observations"
Mr. W. Roger Rusk
 3. "Modern Cosmogony; The Hyperdense State Theory"
Mr. W. Roger Rusk
 4. "Modern Cosmogony; Continuous Creation"
Dr. George K. Schweitzer
 5. "Modern Cosmogony; The Scriptural View"
Dr. George K. Schweitzer
 6. "The Red Shift of Galactic Light and Its Meaning"
Mr. J. Lowell Butler
- 4:00 P.M. **Adjournment**
- 8:00 P.M. **Public Lecture**, Location to be Announced

Wednesday, August 24, 1955

- 7:15 A.M. **Devotions** led by Mr. Delbert Eggenberger
- 9:00 A.M. **Technical Session**
Dr. Brian P Sutherland presiding
1. "Karl Heim and the Transformation of the Scientific World View"
Mr. Robert D. Knudsen
 2. "Objective Interpretation, a Fiction?"
Mr. Melvin J. Loewen
 3. "Time and the Timeless God"
Dr. John F. Gates
 4. "Science and Human Welfare"
Dr. Russell L. Mixter
- 11:30 A.M. **Adjournment**
- 1:00 P.M. **Business Meeting**
Dr. H. Harold Hartzler presiding
- 3:00 P.M. **Field Trip Briefing Session**
Dr. Karl Turekian presiding
- 4:00 P.M. **Adjournment**
- 8:00 P.M. **Moving Picture**; "Time and Eternity"
Moody Institute of Science
- 9:00 P.M. **Discussion Groups**, to be announced

Thursday, August 25, 1955

- 7:15 A.M. **Devotions** led by Dr. Oscar L. Brauer
- 9:00 A.M. **Repature** in automobiles for all-day geological field trip to Florissant fossil beds and points of special interest en route.
Dr. Karl Turekian in charge
- 8:00 P.M. **Guest Speaker**
Dr. H. Harold Hartzler presiding
"Communication in Relation to the Structure of Behavior"
Dr. Kenneth L. Pike,
Executive Director of the Summer Institute of Linguistics

Friday, August 26, 1955

- 7:15 A.M. **Devotions** led by Mr. Robert R. Sanders
- 9:00 A.M. **Technical Session**
Dr. Irvin A. Wills presiding
1. "The Nature and Formation of Sedimentary Rocks"
Dr. Roy M. Allen
 2. "The Length of the Days of Genesis in Relationship to Biological Principles"
Dr. Irwin A. Wills
 3. "Paradoxes in Mathematics"
Dr R. P. Oilworth
- 11:30 A.M. **Adjournment**
- 1:00 P.M. **Technical Session**
Dr. Russell C. Artist presiding
1. "The Victoria Institute"
Dr. Brian P. Sutherland
 2. "A New Opportunity in Christian Witnessing"
Mr. Herbert Seal
 3. "Creation"
Mr. John C. Sinclair
 4. "Does the Study of Human Anatomy and Physiology Lend Credence to Special Creation"
Mr. Maurice A. Yoder
- 4:00 P.M. **Adjournment**
- 8:00 P.M. **Farewell Devotions** led by Dr. George K. Schweitzer

ABSTRACTS OF PAPERS

"The Red Shift of Galactic Light and Its Meaning"

John Lowell Butler

The conclusion that the present Universe of galaxies is expanding is based on the red shift of their spectrum light, which is generally regarded as caused by the Doppler principle, or motion in the line of sight. The speeds of individual stars in their orbits in our Milky Way galaxy have been determined by parallax and timed photography, and the amounts of the shifts of their spectrum lines compared with these known speeds aways from and towards us. Red shifts are caused by movement away from us: blue shifts by movement toward us. The amount of the shift from normal position is a measure of the speed in the line of sight. All of the galaxies of stars that lie beyond a few of the nearest in our neighborhood show pronounced red shifts of all of their spectrum lines, and the farther away they are the greater is their red shift. These red shifts of the galactic light indicate speeds of recession for the galaxies that range up to 37,600 miles per second for the most remotely photographed galaxies. Nearly a dozen theories have been proposed, unsuccessfully, to explain the pronounced galactic red shift as due to other causes than motion away from us. The Doppler principle, however, is so well proved that today it is generally held as the only reliable cause of the galactic red shift.

This means that our Universe is expanding. And it means also that there must have been a Beginning of this Expansion about six billion years ago, when a tremendous Explosion occurred. At that remote time, when all the matter in the Universe occupied a relatively small volume of space, there were temperatures and pressures great enough to create all the elements in a very short time. Then much time was needed for the Universe of galaxies and stars to unfold or grow from this mighty Beginning.

The Christian Physician and "Faith Healing"

Jon H. Rouch, M.A., M.D.

In this paper, the supernatural element is acknowledged and the Scriptures are referred to as the only adequate guide in discussing the matter of so-called "faith healing". Biblical data must be considered in the light of their historical and literary contexts, and as God's progressive revelation to man. The main

emphasis, however, in this paper is to demonstrate how a discussion of the origin of evil and of God's over-all redemptive plan must constitute the framework and foundation for dealing with the secondary matter of "faith healing".

Major subdivisions of the presentation are: the origin of disease; the benefits of redemption; the purpose of disease; God's place for medicine and the physician; and miraculous healing.

Does the Study of Human Anatomy and Physiology Lend Credence to Special Creation?

Maurice A. Yoder

This paper is an effort at presenting both the Organic Evolutionary and the Vitalistic thinking of today. The first part deals with the negative side of the question with the definite statement that **THE STUDY OF HUMAN ANATOMY AND PHYSIOLOGY DOES NOT LEND CREDENCE TO SPECIAL CREATION** because Organic Evolution has proved this belief to be unscientific and therefore obsolete. The negative proposition shows how the inorganic chemical elements might have become organic by the enzyme catalytic reaction. Half-living, half dead, the organic side prevailed and genes ensued. Abiogenesis is not known today. However, that it must have happened some time in the past under different circumstances is not outside of the realm of possibility. Gradual evolution has been traced through the invertebrates into the vertebrates through the ape-man to Homo sapiens with upright posture and functional brain.

The second part, the affirmative, states that **THE STUDY OF HUMAN ANATOMY AND PHYSIOLOGY DOES LEND CREDENCE TO SPECIAL CREATION**, because Organic Evolution fails to give man a scientifically accurate and meaningful concept of the origin and function of the body in which he lives.

There are far too many evidences found in the study of human anatomy and physiology that there was a mathematically precise intelligence working in and through the organism to accept Organic Evolution. Unaided, Nature could not have happened on to such exacting ways and methods of carrying on the functions of this human body. These evidences are found particularly in:

1. The precise calcium maintenance of the blood stream which equals the "feed-back" in the body.
2. The presence of the exact kind and correct num-

ber of tracer elements necessary for the proper functioning of the body cells.

3. The production of the "keyboard" inside the cochlea of the inner ear.

4. The eye with its rods and cones plus the constant renewal of the aqueous humor and vitreous humor.

5. The production and function of the hormone of the endocrine system.

6. The production of the defense mechanism found in the blood stream.

7. The production of a mind and spirit which is found only in man.

Science and Human Welfare

R. L. Mixter, Prof. of Zoology, Wheaton College

The beliefs of scientists have been collected regarding such subjects as effects of atomic energy on man, the age of the earth and man, and food supply and population. Disagreement exists on how harmful atomic fall-out may be. Some fear that population will increase out of all proportion to the development of new sources of food. Recent drugs used in treating hearts and minds are hopeful discoveries. Because it is probable that a half-million scientific articles are published each year, the only topics chosen are those of interest to the Christian in his attempts to further the welfare of man or understand his existence on the earth.

The Nature and Formation of Sedimentary Rocks

Roy M. Allen

This paper presents petrographic evidence of the various ways in which sedimentary rocks of all types have been compacted and lithified.

A common concept, exemplified by one of the articles in "Modern Science and Christian Faith" and recently by Ramm's book, "The Christian View of Science and Scripture" is that pressure alone is responsible for the lithification of sedimentary rocks, this pressure resulting from an over-burden of a mile or more in thickness. Petrographic study of rock structures of all types reveals the exact nature of the forces,

constituents, and conditions responsible for the formation of rocks of sedimentary or other origin.

In the case of sedimentary rocks it demonstrates that pressure is but one of several modes of their formation. Various types of sedimentary rocks, siliceous (both argillaceous and arenaceous) and calcareous of many varieties are discussed and numerous examples are illustrated by photomicrographs of petrographic sections of rocks from various parts of the world.

The entire history of sedimentary rocks is often revealed in much detail (as evidenced by the micrographs)—the original rocks from which they were derived, the minerals and other constituents of which they are composed, and the manner in which they have been lithified from unconsolidated detritus to their final state.

The Paradoxes of Mathematics

R. P. Dilworth

Contrary to popular opinion, the most exact of the sciences, mathematics, has been particularly plagued with paradoxes which lie very close to the foundations of the subject. Such paradoxes consist either of true mathematical theorems which appear to contradict the evidence of the senses or of intuitively valid mathematical systems which contain self-contradictory theorems. This paper is devoted to an account of the most famous of these paradoxes and some of their philosophical implications.

The Victoria Institute

Brian P. Sutherland, Ph.D.

This paper presents a review of The Victoria Institute, a society which originated in London, England, over 90 years ago. In forming this new organization, the founders had as their general objective the combatting of the unbelief which seemed prevalent at the time. The main methods used were by investigation of questions of science and philosophy bearing upon Holy Scripture, by arranging addresses dealing with these subjects, and by publishing reports of the same. Throughout the years The Victoria Institute has continued its work without interruption and it still carries on, holding regular meetings and publishing

annual volumes of transactions. The original conservative Christian position has been consistently maintained. It is hoped that this report will interest and stimulate us in the A.S.A. so that learning from the experience of others, we may be the better fitted to undertake the tasks set before us. The subject should be timely because of our present concern with constitutional revision.

Creation

John C. Sinclair, U.C.L.A. Medical School

Many things being taught our Sunday School pupils as God's Word are really only an interpretation of God's Word. Some of these interpretations can never be reconciled with the facts of science. Conversely many things being taught in our Universities as facts are really only interpretations of experimental observations. Some of these interpretations can never be reconciled with the Word of God. This account of creation is given from the best scientific evidence I know of today. Tomorrow parts of it may be obsolete in the light of new discoveries. After a brief statement that God created, Genesis chapter one goes on to describe how God shaped this original creation for man's habitation. The laws of nature are God's laws. We may assume therefore that God used these laws and the time they require. There are local discontinuities in the fossil record, and long range cycles and trends, yet it tells but one unbroken account of life on this planet.

Five Lessons in Modern Cosmogony

W. Roger Rusk, M.S., and George K. Schweitzer, Ph.D.

The present situation with respect to views on the origin of the universe is examined in a series of five short papers. The first paper (GKS) deals with the history and background of cosmogonical beliefs. The second paper (WRR) presents the observational data on the structure and properties of the universe. The third paper (WRR) sets forth the interpretation of the data as seen by the Eddington-Lemaitre-Gamow school, this view being the hyperdense state one. The fourth paper (GKS) outlines the interpretation of the Bondi-Gold-Hoyle group, the view of continuous creation. The fifth paper (GKS) examines the Biblical doctrine of the creation and compares it with these two modern interpretations of cosmogony.

Karl Heim and the Transformation of the Scientific World View

Robert D. Knudsen

Karl Heim is a contemporary theologian of great importance who believes that recent changes in the scientific world view make the secular mind ask again the question of God, a mind grown so secular that it considers itself to be totally emancipated from the theological context. Modern physics has progressively destroyed certain absolutes which man had erected in a religious search for security: the absolute object, absolute time and space, and absolute determination. It has completely relativized the view of the world, so that there is no longer an immanent handhold where man can find the security he needs.

On the one hand, this is a destruction; but on the other hand, Heim claims, this relativization has opened up the question of the self in a new way, because it demands that the self be included in the picture of the object. Man is led to reflect on this "I" with its corresponding "Thou", and along this road he is led to ask in a penetrating way the question of God. The relativity of all things places man before the either/or: to choose the Void or to cast himself on an eternal Thou, a personal God.

Heim has many points of contact with the evangelical Christian; but there are also important points of divergence. Philosophically speaking, I question his existentialism and his use of the I-Thou scheme. It is also of real importance to ask whether he has really solved the problem of causality.

Whatever further inquiry might uncover with reference to these points, Heim provides elightfully written and theoretically powerful works which throw a challenge to evangelical philosophers, who are working without due attention to the radical changes which have occurred within the world view of physical science.

Communication In Relation To The Structure of Behavior

Kenneth L. Pike

University of Michigan and the Summer Institute of Linguistics

Verbal communication does not occur in a culture vacuum. Communication depends in part upon the structural system of the behavioral units of the community in which it occurs.

This structural system, furthermore, channels behavior, including communication behavior, in such a way as to affect strongly the attempt of members of one community to interact understandingly with another. Some communication can be predicted if one knows in advance the structure of the two respective cultures.

The study of behavioral structure, therefore, interests the Christian missionary or the Bible translator who wishes to communicate with members of a different culture. It should also interest the person attempting to understand the relation of the activity of God reported in the Old Testament as over against His activity reported in the New.

MEMBERS OF THE EXECUTIVE COUNCIL

- H. Harold Hartzler, Ph.D. (1955), * President
Professor of Mathematics
Goshen College
- Brian P. Sutherland, Ph.D. (1956) Vice-President
Administrative Assistant, Consolidated Mining
and Smelting Co.
Trail, British Columbia
- Hendrik J. Oorthuys, M.S. (1958) Secretary-Treasurer.
Assistant Professor of Electrical Engineering
Purdue University
Lafayette, Indiana
- Delbert N. Eggenberger, M.S. (1957)
Research Chemist
Armour and Company
Chicago, Illinois
- John R. Howitt (1959)
Superintendent, Hospital
Port Arthur, Ontario

* Year of retirement from Council

PAST COUNCIL MEMBERS

- Russell L. Mixter, Ph.D. (1954)
Chairman, Division of Science and Professor of
Zoology
Wheaton College
Wheaton, Illinois
- J. Laurence Kulp, Ph.D. (1953)
Associate Professor of Geology
Columbia University
New York, N. Y.
- Roger J. Voskuyl, Ph.D. (1952)
President, Westmont College
Santa Barbara, California
- F. Alton Everest, E.E. (1951)
Associate Director
Moody Institute of Science
Los Angeles, California
- Allan A. MacRae, Ph.D. (1950)
President and Professor of Old Testament
Faith Theological Seminary
Wilmington, Delaware
- 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 result 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 word 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 believe there can be no discrepancies when both are properly interpreted. 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

General Information

Registration

Registration will be held from 9:00 to 10:00 A.M., Tuesday, August 23rd. The fee will be \$2.00 per ASA member.

Accommodations

Meals, room, linens and blankets will be furnished at a cost of approximately \$5.00 per adult per day. Children from three to twelve years old will be charged \$2.50 per day; there will be no charge for children under three years. Rooms will be assigned on the basis of the reservation request forms received by Star Ranch.

Owing to the presence of campers, ASA members are requested not to arrive at Star Ranch before 9:00 A.M., on Tuesday, August 23rd. If desired, departure may be deferred until Saturday, August 27th.

Insurance against sickness or accident is offered by Star Ranch for a nominal fee.

Field Trip

On Thursday, a guided field trip will be made in members' automobiles to the world-famous Florissant fossil beds. The Garden of the Gods and other points of special interest will be seen enroute. A briefing session on Wednesday will offer preparation for the trip.

Star Ranch

Star Ranch is one of the four summer camping ranches operated by the Young Life Campaign primarily for high school boys and girls, with the object of translating the principles of Christianity into terms that they can grasp and build into their daily lives.

The Ranch is six miles from Colorado Springs. The route from Colorado Springs is shown in a sketch mailed to the ASA membership with reservation forms. The elevation of the ranch is 6600 feet, and its climate is described as cool nights and bright, sunny days. The recreational facilities include hiking, swimming, baseball, basketball, shuffleboard, table tennis, and others. The immediate vicinity of Colorado Springs, as well as other areas of Colorado, offers those attending the ASA convention many unusual opportunities for a vacation preceding or following the convention. Literature describing such opportunities will be sent gratis by the Colorado Springs Chamber of Commerce.