

NINETEENTH ANNUAL ALUMNI SEMINAR - SATURDAY, APRIL 7, 1956

8:30-9:15 A.M.—REGISTRATION

Debnay Hall of the Humanities

MORNING PROGRAM

9:30-10:30 A.M.

One of the following:

A. CALIFORNIA FAULTS AND EARTHQUAKES

Clarence R. Allen, Assistant Professor of Geology

San Francisco, Long Beach, and, most recently, Lower California have experienced violent and destructive earthquakes. Geologists and seismologists relate these crustal movements to an extremely complex local fault structure. Strain release studies and field observations have recently shed light on the mechanics of faulting and now allow limited predictions of future seismic activity.

B. METABOLIC STRATAGEMS WHICH STAY TIME'S ARROW

George Laties, Senior Research Fellow in Biology

The living state, representing as it does a high degree of organization, and reflecting in its myriad forms a vast store of chemical energy, is by all reasonable considerations a highly unlikely state. In the biological world, means have been evolved whereby evanescent uphill scrambles may be made in the face of a constant tendency for the stuff of which living organisms are made to run downhill to a final low energy state incompatible with life. Such means, powered by solar energy, are remarkably similar in the lowliest micro-organism and in man.

10:20-10:50 A.M.—COFFEE TIME

Served in the patio between Arms and Mudd

10:50-11:40 A.M.—

One of the following:

A. DICKENS, THACKERAY, AND GEORGE ELIOT; or How to Tell a Good Novel From a Bad One

Harvey Eagleson, Professor of English

Professor Eagleson is known and admired by all of us. His stimulating and entertaining approach to any facet of English literature makes his lectures memorable. This discussion is concerned with establishing standards by which one may judge the worth of a novel, using the authors named as illustrations.

B. COMPUTERS: APPLICATIONS AND IMPLICATIONS

Gilbert D. McCann, Professor of Electrical Engineering

The development of large scale computers and their applications in technology and business are progressing at a rapid rate. New principles of instrumentation and logical design permit machines with extremely high computational speeds which are capable of handling very complex analyses and data processing problems. This advance opens up completely new concepts in science, engineering, business administration, and manufacturing. In addition it requires new points of view in research and the training of technical personnel.

11:55-12:45 P.M.—

One of the following:

A. WHY THE EARTH SATELLITE?

William H. Pickering, Director, Jet Propulsion Laboratory

Why do we bother to launch an earth satellite into space? This magnificent technical achievement, due to become a reality during the coming International Geophysical Year, has ample justification in the scientific observations which will be made by instruments carried by the satellite. Dr. Pickering is a member of the National Academy of Sciences Committee in charge of the satellite, and will discuss the scientific aspects of the satellite program and the problems to be overcome.

B. MUSCOVITE MAKE-BELIEVE

Heinz E. Ellersieck, Assistant Professor of History

During the centuries of oppressive and arbitrary rule under the Tsars the Russian people developed many interesting techniques for physical and psychological survival. Under the even more oppressive rule of the Soviets the same methods continue to serve. Unfortunately, however, along with the all-pervading deceptiveness there is a great deal of self-deception. This enables Soviet Man to maintain his self-respect under abominable conditions. It also makes him extremely dangerous. Dr. Ellersieck, from his wide knowledge of Russian political history, will comment on these problems.

1:00-2:00 P.M.—LUNCH—Student Houses

AFTERNOON PROGRAM

2:15-3:45 P.M.

STARS AS NUCLEAR FURNACES—A SYMPOSIUM

Nuclear Physics and Astrophysics have recently combined forces to produce a new approach to the fascinating questions of the formation of the elements and the origin of the universe. By integrating their viewpoints and drawing on experiment and theory in several fields of science, the participants in this symposium make a novel and important contribution to the Alumni Seminar.

Speakers:

W. A. Fowler, Professor of Physics

J. L. Greenstein, Professor of Astrophysics and Staff Member, Mt. Wilson and Palomar Observatories

Fred Hoyle, Senior Research Fellow in Astrophysics and Lecturer in Mathematics, St. John's College, Cambridge

Chairman: *A. M. Zarem '40*

3:45 P.M.—COFFEE TIME

Served in patio between Arms and Mudd

OTHER EVENTS

Open from 2:00 to 4:00 P.M.

Synchrotron
Solar Furnace
200-inch Model Telescope
Geology Museum

Athletic Events, Tournament Park:
Track Meet—Varsity & Frosh
—Whittier
Tennis—Frosh—Whittier
Baseball—Frosh—Whittier

EVENING PROGRAM

Dinner Hour: 6:30 P.M. (Bar opens 5:30)

Elks Club, 400 W. Colorado Street, Pasadena
Dress—Informal

AFTER DINNER:

Introductions by C. W. Lindsay '35, General Chairman, Alumni Seminar Day. Remarks by Dr. Lee A. DuBridge, President, California Institute of Technology.

Guest Speaker—MR. PAUL G. HOFFMAN

His Subject—"FREE ASIA IN THE BALANCE"

Mr. Hoffman is Chairman of the Board, Studebaker-Packard Corporation, and serves as a Director of several other organizations. He has previously been President and Director of The Ford Foundation and Administrator of the Economic Cooperation Administration. Mr. Hoffman is the author of several books on international affairs.