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 has 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 lowest micro-organism and in man.

**MORNING PROGRAM**

8:30-9:15 A.M.—REGISTRATION
Debney Hall of the Humanities

9:30-10:30 A.M.
One of the following:

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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 Eaglestone, Professor of English
   Professor Eaglestone 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. C. Coun, 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.

**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

3:50-4:30 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 Dev. 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.