IN THIS ISSUE

NEW UNDERSTANDING

The puzzle of the genetic substance DNA continues to be worked out piece by piece. Three new contributions to the emerging picture have recently been made by three Caltech scientists in three separate research projects. Robert Sinsheimer, professor of biophysics, participated in the Caltech-Stanford work which produced the first genetically active DNA in a test tube (pages 10-11). Giuseppe Attardi, professor of biology, and his wife, Barbara, have confirmed that messenger RNA is produced outside a cell's nucleus (pages 12-13). And Jerome Vinograd, professor of chemistry and biology, has found that ring-shaped DNA exists in chains of up to seven links (page 14).

NUCLEAR POWER

Milton Plesset, Caltech professor of engineering science, is an authority on the problems and progress of nuclear power. His article on pages 15-19 has been adapted from a talk given at Beckman Auditorium on November 6. In it he gives some background on the current draft of a nonproliferation treaty and suggests some amendments that might bring eventual agreement.

VISITOR FROM OUTER SPACE

A unique iron meteorite, named Colomera for the area in Spain where it was found, is now at Caltech. Its study is of special interest to nuclear geochemists because the silicate inclusions in its makeup contain information about the age and lifetime experiences of the meteorite. What is in store for Colomera is described on page 32.

CHITRAL REVISITED

Robert Huttenback is not only professor of history and master of student houses at Caltech, but he is a hardy traveler, a persistent researcher, and a teller of tales as well. "Chitral Revisited," on pages 22-27, is a happy result of the combination. Dr. Huttenback made the journey to Chitral with Peter Fay, Caltech associate professor of history. Their tale is illustrated by Dr. Huttenback's own photographs—slightly altered, for artistic effect, by a process called double-tint posterization.

LETTERS

NOT LIKE IT USED TO BE

Blacker House, Caltech

EDITOR:

I was disappointed in reading all three letters in the December *E&S*. If they are representative of letters received. I must conclude that Techers take their apathy with them when they graduate. One reader did not like the new format, but neither he nor his wife bothered to open the cover to see if the issue was *E&S* or a "drug or mail order store" catalog. He did not notice that Alumni News has been transferred to the *Caltech News*.

Another reader admitted his laziness in not wanting to read all of the longer, improved *E&S*. As a student I enjoy reading articles about campus research, about social problems related to technology, and about Caltech news and history.

In the third letter George Sawyer has closed his mind to change and has overlooked several facts. He claims, without basis, that "the Institute does not belong to the present group of students or employees." Yet they, particularly the energetic faculty, are "giving of their energies" just as much, if not more, than the anonymous "owners" of Caltech. Mr. Sawyer has ignored the fact that "the owners' policies and practices" have evolved over Caltech's entire 75-year existence. Those of today are not the same as in 1925, when Caltech began to chart its course; certainly they are different from those during World War II, when much campus research was directed toward the war effort. Present Caltech students and faculty members have not only the "natural rights" but also the responsibility to evaluate and to change, if necessary, Caltech's future. Mr. Sawyer himself states that "maintaining things of value requires constant monitoring and the rebuilding of parts that have decayed." If dissatisfied students and teachers left, instead of trying to make improvements, Tech would remain frozen, not keeping up with changes in society.

In his fear of the proposals submitted to ASCIT last spring, Mr. Sawyer has redefined "sloppy and dirty nature" to refer to people with whom he disagrees. But all alumni should take note of the changes proceeding on campus. Pass-fail grading is now a definite policy, both for freshmen and some upperclassmen. Students are now working with faculty committees. Only administration and trustees' approval is needed before women are admitted as undergraduates.

A growing social awareness, as evidenced by the interest in the ASCIT Research Project, is paralleled by an expansion of the humanities and social sciences at Tech, as detailed in the recent *President's Report*. It is the hope of many that the new wave of enthusiasm on campus will supplant any remaining apathy.

ROGER M. GOODMAN '70

A CHANGE OF NAME

Houston, Texas

EDITOR:

In recognition of Caltech's broadening view of its domain and responsibilities, I suggest you alter the title of your magazine to SEE, Science, Engineering and Environment.

R. S. MACALISTER '47

ARCHITECTS ANONYMOUS

South Pasadena

EDITOR:

In the December issue of *E&S* you feature Caltech buildings designed by some extremely distinguished architects, and yet no credit is given to them. I think it would add to the kudos of the campus if we gave credit to these gentlemen who are really making a fine contribution.

HENRY DREYFUSS

Much as we hate to admit it, you're right. A quick check through our back issues reveals that we pay all kinds of attention to the donors and the occupants of our buildings, but we seem to overlook the designers. For the record, here is an up-to-date list of the proposed buildings for which architects have been contracted:

Astrophysics—Edward Durrel Stone, Inc.
Graduate Residence Houses—Eggers, Wilkman & Whittle
Chemical Physics (completed)—Risley, Gould & Van Heuklyn
Behavioral Biology and Humanities—Robert E. Alexander & Associates
Geophysics—George Vernon Russell & Associates
Business Operations—Welton Becket & Associates
Gymnasium—Roland Coate
Central Plant (completed)—M. A. Nishkian Company
Radio Astronomy (at Owens Valley)—John Lautner
Palomar 60" Telescope dome—Richard Rose