

In This Issue



California Institute of Technology May-June 1976

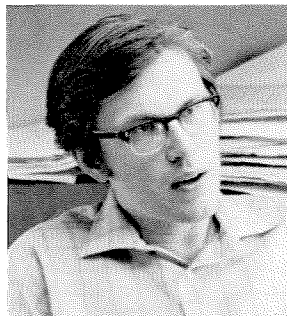
Package Deal

On the cover — parts of two series of nested containers, both from Russia, both more intricate and extensive than they seem, and both — in a way — connected with Caltech's "Lunatic Asylum." In fact, it was the Lunatic Asylum's Gerald Wasserburg who pointed out their similarities, thus giving *E&S* a chance to tell the story of some "Souvenirs from Russia" on page 18.

Shock Talk

Roger Noll, professor of economics, probably had no idea just how timely his April 12 Watson Lecture would be for backing up a colleague. One of Noll's chief points was that earthquake prediction should be a routine and public matter. A week later James Whitcomb, senior research fellow in geophysics, rocked some segments of southern California with just such a "prediction."

Whitcomb said — publicly — that an earthquake of magnitude 5.5 to 6.5, with an epicenter near that of the 1971 San Fernando earthquake, is likely to occur within a year. When Whitcomb's



Noll

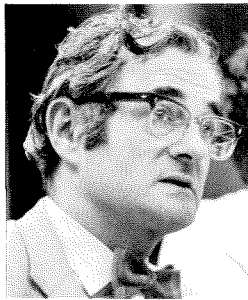
statement made headlines, Noll's words were also on the record. "Defending Against Disaster" on page 2 is an adaptation of Noll's talk at Beckman Auditorium, and on page 8 "Testing a Hypothesis" is a discussion of Whitcomb's "prediction."



Brown

Voice of Reason

Not long ago, President Harold Brown was invited to address the Business Council's national meeting at Hot Springs, Virginia. His subject was not Caltech research, nor was it the SALT deliberations — though he could have spoken knowledgeably about either. He did draw on his experience and observations in those two areas, however, to make a careful evaluation of the pro's and con's of nuclear power. "Nuclear Power Plants — Weighing Benefits and Risks" on page 10 is adapted from that talk.



Sinsheimer

Handle with Care

In the last year or so, Robert L. Sinsheimer, professor of biophysics and

chairman of the division of biology, has been increasingly concerned with the implications for human welfare of recombinant DNA research, and thus he has been a strong advocate for stringent safety regulations. But this is simply a specific instance of Sinsheimer's long-held general position that science and scientists are responsible to mankind. At a recent conference on Biomedical Research and the Public he spoke again on this subject. "An Inquiry Into Inquiry" on page 15 is a slight expansion of those remarks.



Throdahl

Good Management

The 1975 W. N. Lacey Lectures in Chemical Engineering at Caltech were given by Monte C. Throdahl, group vice president, technology, for Monsanto Company — and a lot of his listeners hoped that what he had to say could be shared with a larger audience. Throdahl was willing, but boiling two talks down to one article takes time, and he doesn't have much to spare for that kind of activity. Nevertheless, he turned to, and "Managing Innovation" (page 20) is the result.

It's a subject on which Throdahl speaks out of both conviction and experience. He has been with Monsanto since he joined the company in 1941 as a research chemist. He served as Director of Commercial Development, of Research, and of Marketing in one of Monsanto's divisions and became corporate vice president in 1964, transferring at that time to Brussels as general manager of the International Division. In 1966 he returned to St. Louis when he was elected a member of the company's board of directors and to its executive and technical committees. He was appointed to his present position in 1973.

STAFF: *Editor and Business Manager* — Edward Hutchings Jr.
Managing Editor — Jacquelyn Bonner
Photographer — Floyd Clark

PICTURE CREDITS: Cover, 9, 19, 24-28 — Floyd Clark/8 — Los Angeles Times.

Published four times a year, October-November, January-February, March-April, and May-June, at the California Institute of Technology, 1201 East California Boulevard, Pasadena, California 91125. Annual subscription \$4.50 domestic, \$5.50 foreign, \$11.00 foreign air mail, single copies \$1.25. Second class postage paid at Pasadena, California, under the Act of August 24, 1912. All rights reserved. Reproduction of material contained herein forbidden without authorization. ©1976 Alumni Association California Institute of Technology. Published by the California Institute of Technology and the Alumni Association.