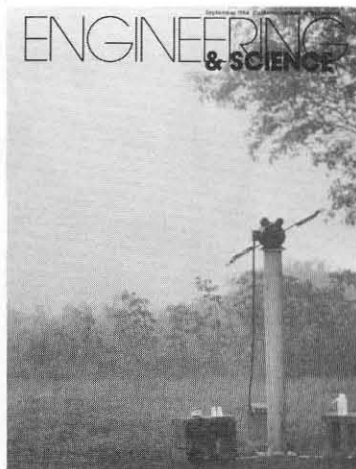


In This Issue



In a Fog

On the cover — Caltech's rotating arm collector (RAC) gets set to capture fogwater droplets for a study of the acidity of fog. The scene is Albany, New York, which, despite the Northeast's reputation for dirty air, had the cleanest fog of all the sites studied by Michael Hoffmann and his research group.

Hoffmann got into fog when he came to Caltech as associate professor of environmental engineering science in 1980 after five years at the University of Minnesota. He describes himself as an applied chemical kineticist and had previously worked — in the laboratory — on the reactions of sulfur dioxide in aqueous systems. On looking around for a problem appropriate to southern California, an aqueous system that immediately suggested itself was fog, a project that took him out of the laboratory and into the clouds.



One of Hoffmann's most important findings was that air quality in southern California is directly related to relative humidity, or the presence of fog along the coast. His detailed studies of the chemical composition of fogwater have shown that it can be 100 times more acidic than southern California's acid rain and potentially more hazar-

dous. "Acid Fog," Hoffmann's account of some of his findings, which begins on page 5, was adapted from his Seminar Day talk last May. Hoffmann is a graduate of Northwestern (1968) and earned his PhD in chemistry from Brown in 1974.

On the Spot

Rochus (Robbie) Vogt has been Caltech's provost and vice president for a little over a year and a half, a post he was perhaps destined by his ancestry to hold: His surname in German means literally "provost," among other things, all harking back to the chief administrator of a castle in medieval times.

Before submitting to this fate, Vogt had been a member of the physics faculty since 1962, most recently as the R. Stanton Avery Distinguished Service Professor (since 1982) and as chairman of the Division of Physics, Mathematics and Astronomy (1978-83). He arrived at Caltech by way of the University of Chicago, Antarctica, and Germany. In a series of interviews this summer Vogt discussed how he got here from there and what he thinks of his new job. "Caltech's Vogt," based on those interviews, begins on page 12.

New Look

Jacquelyn Bonner, editor of *E&S* for the past five years, decided last spring that the constant hassle of deadlines was perhaps not the most enjoyable thing in life and that working half time would be preferable.

Caltech will still keep some of the benefit of her valued editorial expertise, however. She will continue as senior editor on the Publications staff but, along with her husband, Institute Registrar Lyman Bonner, who is also going on half time, will spend part of her days in less demanding pursuits.



Jackie has worked at Caltech for 22 years, since 1965 with *E&S*. She became associate editor in 1968 and managing editor in 1971, and when Ed

Hutchings, the magazine's long-time editor, retired five years ago, Jackie was his obvious successor. Ed's 31-year-old identification with *E&S* was a tough act to follow, but Jackie followed his tradition admirably well with a good show of her own.

Jane Dietrich, who has been on the *E&S* staff for the past five years, is the new editor. The September issue was put together with the editorial assistance of Neil Saccamano and other members of the Public Relations staff. Dennis Meredith, director of the News Bureau, and Sylvia McBride in the Division of Engineering and Applied Science contributed articles.

For the first time, all the type for this issue was set on the phototypesetter at Caltech's Booth Computing Center with the invaluable help of Kim Border, associate professor of economics.

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PICTURE CREDITS: Cover — Jed Waldman/Inside front cover, 28-29, 31 — Robert Paz/7 — Peter McMurry/8 — Michael Hoffmann/11 — E. J. List/12-17 — Jane Dietrich/18-24 — Steven Reece/30 — Richard Kee, Chris Tschoegl

Engineering & Science (ISSN 0013-7812) is published five times a year, September, November, January, March, and May, at the California Institute of Technology, 1201 East California Boulevard, Pasadena, California 91125. Annual Subscription \$7.50 domestic, \$15.00 foreign, \$20.00 foreign air mail, single copies, \$1.50. Third class postage paid at Pasadena, California. All rights reserved. Reproduction of material contained herein forbidden without authorization. © 1984 Alumni Association California Institute of Technology. Published by the California Institute of Technology and the Alumni Association. Telephone: 818-356-4686. Postmaster: Send change of address to Caltech, 1-71, Pasadena, CA 91125.