LETTERS
Chemical Science and Technology: E. M. Arnett and H. E. Simmons; Benefits of a Science Department: A. W. Hughey; Chimpanzee Colony: T. L. Wolfe

EDITORIAL
Patents: E. Q. Daddario

ARTICLES
Promoting Functional Plasticity in the Damaged Nervous System: W. J. Freed, L. de Medinaceli, R. J. Wyatt.
Three-Dimensional Flow in the Upper Ocean: R. A. Weller et al.

NEWS AND COMMENT
A Forceful New Hand on the Reins at NSF
Breifing: Newman's Motor: Does It Work or Doesn't It?; NIE's Director Ousted, Its Survival in Doubt; Jury Clears Bendectin; Europeans RACE to Close Telecommunications Gap
Britain's Ivory Tower Goes High Tech
Who Runs NIH?

RESEARCH NEWS
The 1985 Pittsburgh Conference: A Special Instrumentation Report
Robots Automate Sample Preparation

Instrument Highlights:
- $^{252}$Cf Plasma Desorption Mass Spectrometer; New Spectrometer for Remote Sensing; Automated Motion Analysis System; An Inexpensive FT-UV/Vis Spectrophotometer for HPLC

A New Trend: Training on "the Tube"
A New Dimension in Gas Chromatography .......................................................... 1570
Ion Beams for Compositional Analysis ................................................................. 1571

BOOK REVIEWS

The Florida Scrub Jay, reviewed by J. D. Ligon; The Earth’s Magnetic Field, F. D. Stacey; Psychology in Utopia; M. A. Miller; Books Received .................. 1573

REPORTS

Ground Water as a Silica Source for Diatom Production in a Precipitation-Dominated Lake: J. P. Hurley et al. .......................................................... 1576
Geologic Youth of Galápagos Islands Confirmed by Marine Stratigraphy and Paleontology: C. S. Hickman and J. H. Lipps ........................................ 1578
Receptor-Mediated Transport of Insulin Across Endothelial Cells: G. L. King and S. M. Johnson ................................................................. 1583
Separation Techniques Based on the Opposition of Two Counteracting Forces to Produce a Dynamic Equilibrium: P. H. O’Farrell .......................... 1586
On the Nature of a Defect in Cells from Individuals with Ataxia-Telangiectasia: M. N. Cornforth and J. S. Bedford ...................................................... 1589
Isolation of the Gene for a Glycophorin-Binding Protein Implicated in Erythrocyte Invasion by a Malaria Parasite: J. V. Ravetch, J. Kochan, M. Perkins .......................... 1593
Developmentally Controlled Expression of Immunoglobulin V\textsubscript{H} Genes: R. M. Perlmutter et al. ................................................................. 1597
Plasma Homovanillic Acid Concentration and the Severity of Schizophrenic Illness: K. L. Davis et al. .................................................................................. 1601

Cover

View from a porthole on the research platform FLIP, looking out at one of the booms used to lower instrumentation into the ocean away from FLIP’s hull. Oceanographic instrumentation hangs down below the boom; meteorological instrumentation (including anemometers and solar radiometers) is mounted on the boom. See page 1552. [Jerry Dean, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts 02543]