LETTERS

EDITORIAL
Scientific Instrumentation

ARTICLES
Thermal-Wave Imaging: A. Rosencwaig
Microholography of Living Organisms: J. C. Solem and G. C. Baldwin
Liquid Chromatography in 1982: D. H. Freeman
Multichannel Detection in High-Performance Liquid Chromatography: J. C. Miller, S. A. George, B. G. Willis
Developments in Electrochemical Instrumentation: J. Osteryoung

NEWS AND COMMENT
Atom Bomb Tests Leave Infamous Legacy
New Slant on Engineer Training
Against the Grain: Soviet Trade
Security Controls Hurt Research, NAS Warns
Briefing: Scientists Meet with Pope on Nuclear War Danger; PBS to Broadcast Soviet Program on Nuclear War; NSF Gets a Billion-Dollar Budget; Governor Brown Vetoes Gene-Splicing Bill; The Breeder Lives

RESEARCH NEWS
Do Monopoles Catalyze Proton Decay?
Planetary Rings Briefing: New Outer Rings for Saturn?; The F Ring Becomes a Little Less Baffling; Spokes, SKR, and SED: A Connection?; The Uranian Rings Get Stranger and Stranger

To Attract or Repel, That Is the Question

ANNUAL MEETING
Call for Contributed Papers

BOOK REVIEWS
Phase Transitions, reviewed by P. C. Hohenberg; Glial-Neurone Interactions, I. Selak; Geology of the Northwest African Continental Margin, R. E. Sheridan; The Idea of Race in Science, T. M. Porter; Books Received

REPORTS
Fossil Land Mammal from Antarctica: M. O. Woodburne and W. J. Zinsmeister
Nonimmunological Production of Leukotrienes Induced by Platelet-Activating Factor: N. F. Voelkel et al.
Inhibitory Action of Gossypol on Enzymes and Growth of Trypanosoma cruzi: E. E. Montamat et al.
Biospecific Labeling with Undecagold: Visualization of the Biotin-Binding Site on Avidin: D. Safer et al.
Angiogenesis Induced by “Normal” Human Breast Tissue: A Probable Marker for Precancer: H. M. Jensen et al.
Destruction of Trypanosoma cruzi by Natural Killer Cells: F. M. Hatcher and R. E. Kuhn
An Estrogen-Binding Protein and Endogenous Ligand in Saccharomyces cerevisiae: Possible Hormone Receptor System: D. Feldman et al.

COVER
Design created from the thermal-wave image of a test pattern that has been generated through proton irradiation of bare gallium arsenide (GaAs). Optical and electron images of the sample appear featureless, while the thermal-wave image clearly shows the test pattern. The thermal-wave microscope is able to differentiate the undamaged and damaged regions by the disruption in the GaAs lattice structure. See page 223. [Therma-Wave, Inc., Fremont, California]