This Week in Science

Planetary Fluids

Sodium-Calcium Exchange in Excitable Cells: Fuzzy Space: W. J. Lederer, E. Niggli, R. W. Hadley


Stanford Erupts Over Indirect Costs
East Germany Struggles to Clean Its Air and Water
NIH: The Endless Search
Scientific Misconduct Cases Revealed
Bromley Promises Small Science Focus
Gordon & Breach Impanels a Journal Jury
How the United States Stacks Up in Key Technologies

A Generational Rift in Geophysics • Not So Irreconcilable Differences?
Is AIDS Dementia Due to Increases in Calcium?
Polymer Chemists Are Having a ROMP
“Hairy Enzymes” Stay in the Blood

Briefings: Update: RU 486 • Math Students Needed • Ordinary Is Beautiful • AIDS Meeting: Visas • The Dimmest “Star” • Social Science: NSF’s Poor Relation • Changing U.S. Demography • Truth in Labeling

Atmospheric Dynamics of the Outer Planets: A. P. Ingersoll
The Dynamics of the Oceanic Subtropical Gyres: J. Pedlosky
Scales and Effects of Fluid Flow in the Upper Crust: L. M. Cathles III
Fluid Processes in Subduction Zones: S. M. Peacock
Mantle Oxidation State and Its Relationship to Tectonic Environment and Fluid Speciation: B. J. Wood, L. T. Brandyia, K. E. Johnson
Paleomagnetism and the Nature of the Geodynamo: R. T. Merrill and P. L. McFadden
The Champagne Pool, named for its CO₂ bubbles, provides an interesting window into fluid processes beneath Waiotapu, the largest area of surface thermal activity in New Zealand. The pool occupies a 900-year-old hydrothermal explosion crater. Evaporation cools the surface waters from 100°C to about 75°C, producing the steam. Amorphous silica, blown by the wind to the sides, settles as an orange coating that contains 80 parts per million of gold and 175 parts per million of silver. See page 323. [Photograph by L. M. Cattles]
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