This Week in Science ................................. 603

LETTERS Emotions and Facial Expression: A. J. Fridlund, A. N. Gilbert; C. E. Izard; A. N. Burdett; R. B. Zajonc: ........... 607

EDITORIAL Air Pollution and Acid Rain ...................... 617

ARTICLES Energy Extraction and Use in a Nomadic Pastoral Ecosystem: M. B. Coughenour et al. ....... 619
Perspective: Tumor Necrosis Factor (TNF): L. J. Old ........... 630
Structure of the Human Interleukin-2 Receptor Gene: W. J. Leonard et al. ........... 633

NEWS AND COMMENT Patent Dispute Divides AIDS Researchers ........... 640
What's in a Name? ........................................ 641
HTLV-III and LAV: Similar, or Identical? ........... 643
Briefing: Reagan Reinterprets the ABM Treaty; Rumors of China-Iran Trade Cloud Nuke Pact; Surveillance Laws Need Overhaul; A Plan to Save Tropical Forests ........... 644
Experts Cast Doubts on X-ray Laser ........... 646

RESEARCH NEWS A Potpourri of Membrane Receptors ........... 649
New Mysteries at the Galactic Center ........... 652
Predictable Quake Damage............................................................. 65

BOOK REVIEWS
Non-Proliferation and Safeguarding the Atom, reviewed by W. H. Donnelly; The Intellectual and Social Organization of the Sciences, R. L. Simpson; The Biology of Terrestrial Isopods, R. C. Brusca; Solar Maximum Analysis and Solar-Space Observations and Stellar Prospects, J. B. Zirker; Books Received................................................................. 65

REPORTS
The Structure of the Core of the Spiral Wave in the Belousov-Zhabotinskii Reaction: S. C. Müller, T. Plessor, B. Hess.................. 66
Intracellular Free Calcium Localization in Neutrophils During Phagocytosis: D. W. Sawyer, J. A. Sullivan, G. L. Mandell ................. 66
High-Frequency Switching of Colony Morphology in Candida albicans: B. Slusky, J.Buffo, D. R. Soll .................................................. 66
Psoriatic Fibroblasts Induce Hyperproliferation of Normal Keratinocytes in a Skin Equivalent Model in Vitro: P. Saiag, B. Coulomb, C. Lebreton, E. Bell, L. Dubertret .......................................................... 66
Chromosomal Locations of Human Tissue Plasminogen Activator and Urokinase Genes: B. Rajput et al. ........................... 67
Phytochelatins: The Principal Heavy-Metal Complexing Peptides of Higher Plants: E. Grill, E.-L. Winnacker, M. H. Zenk .................. 67
Wounding and Its Role in RSV-Mediated Tumor Formation: D. S. Dolberg, R. Hollingsworth, M. Hertle, M. J. Bissell .................. 67
Iron(II) EDTA Used to Measure the Helical Twist Along Any DNA Molecule: T. D. Tullius and B. A. Dombroski ...................... 67
Hypoglycemia-Induced Neuronal Damage Prevented by an N-Methyl-D-Aspartate Antagonist: T. Wieloch .......................... 68

PRODUCTS AND MATERIALS
Cell Culture Labware; Immunoassay; Syringe Filters; Data Recorder; Research Immunoassays; Spectrometer; Literature ................................. 68

DOROTHY NELKIN
JOHN E. SNYER
Sheila E. Widnall
Linda S. Wilson
William T. Golden
William D. Carey

ANTHROPOLOGY (H)
Anthropology (H)
Anthropology (H)
Anthropology (H)
Anthropology (H)
Anthropology (H)
Anthropology (H)
Anthropology (H)

GEOLOGY AND GEOGRAPHY (E)
William H. Matthews III
Helen M. McCormick
Medical Sciences (N)
Alfred F. Fishman
Jonathan E. Rhodes
Statistics (U)
J. Stuart Hunter
Edward J. Wegman

BIOLOGICAL SCIENCES (G)
Biology (G)
Biology (G)
Biology (G)
Biology (G)
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AGRICULTURE (G)
Agriculture (G)
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Agriculture (G)

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The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objects are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

COVER
Section (4.5 by 4.5 millimeters) of a spiral wave of chemical activity traveling through a 1-millimeter layer of a quiescent, excitable Belousov-Zhabotinskii reagent catalyzed by ferrum. The concentration distribution of ferroin was measured by means of a two-dimensional spectrophotometer based on a video camera, a video frame buffer, and a computer. The core of the spiral—a singular site at which the ferrroin concentration remains almost constant—is contained within the green circle. The colored curves are Archimedian spirals fitted to iso-intensity levels that correspond to the lowest (blue) and the highest (red) measured intensities and to the intensity at the core (yellow). See page 661. [S. C. Müller Max-Planck-Institut für Ernährungsphysiologie, D-4600 Dortmund, Federal Republic of Germany]