This Week in Science

Editorial

1381 Two Plus Two Equals Five

Letters

1385 Grant Financing: PI Salaries: R. M. ROSENZWEIG • Carrel's Cultures: J. A. WITKOWSKI • Asteroid Paradox: G. W. WETHERILL • The Antibiotic Record: H. T. SWAN • A Broken System?: C. S. FOOTE • Conservation of Rare Plants: R. W. KASTEN, JR.

News & Comment

1400 Head Start at 25: False Start, Sure Future • Can There Be “Success for All”?
1403 DOE's Born-Again Solar Energy Plan
1404 Who Should Study Radiation Effects?
1405 Stanford Psychiatry Deal Falls Through • Problem Foreshadowed at Harvard
1406 Trials and Tribulations of AIDS Drug Testing

Research News

1407 Paleontology by Bulldozer
1410 Physicists Tackle Theory, Tubes, and Temperature: Anyon Superconductivity? • 101 Uses for Tiny Tubules • Brrr! How Cold Is It?
1412 Fiber Fracas at FASEB
1413 “Rocking” on the Banks of the Columbia River
1414 Briefings: Outside SSC Funding Is Limited • Brits Cool to Physics Ad Blitz • Say What? • Slick Soviet Ads • China Scholar Drops Stanford Suit • New Grants from Rockefeller • England Versus the World’s Worms • Protecting Software • A Big Bird in the Sky for Scientists? • Billions Needed for Child Care

Articles

1431 Observational Constraints on the Global Atmospheric CO₂ Budget: P. P. TANS, I. Y. FUNG, T. TAKAHASHI
1439 Sonochemistry: K. S. SUSLICK

Research Article

1446 Neurotrophin-3: A Neurotrophic Factor Related to NGF and BDNF: P. C. MAISONPIERRE, L. BELLUSCIO, S. SQUINTO, N. Y. IP, M. E. FURTH, R. M. LINDSAY, G. D. YANCOPoulos

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives 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, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.
The micrograph on the cover shows interparticle collisions induced by ultrasound between tin and iron particles about 20 micrometers in size. The velocity of such collisions can be as high as 500 meters per second (1100 miles per hour). The elemental composition dot map was produced by scanning Auger electron spectroscopy and shows tin in orange and iron in blue. See page 1439. [Photograph courtesy of Stephen J. Doktycz on instrumentation in the Center for Microanalysis of Materials, University of Illinois at Urbana–Champaign]