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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]