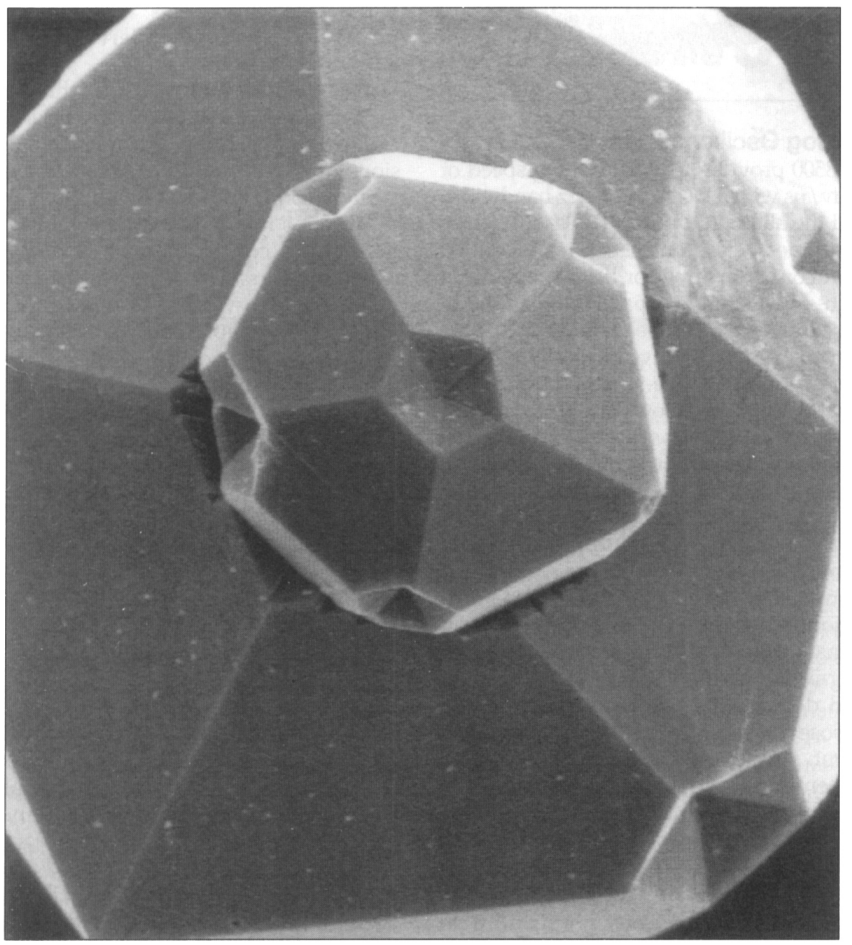
Figures appearing in EDITOR'S CHOICE *are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated to the original meaning. Submissions of candidate figures are welcome and should include a complete source citation, a photocopy of the report in which it appears (or will appear), and a reproduction-quality original drawing or photograph of the figure in question.*



Included in a standard battery of psychological tests is the trial that determines if one can distinguish between round and square holes and then correctly correlate these with round and square pegs. The next level of sophistication, as illustrated in this month's EDITOR'S CHOICE, is correlation of the pentagonal face of an icosahedron with a matching cavity. From the perspective of this SEM micrograph, it's hard to tell if this particular subject passed or failed the test, but this test variant is clearly designed to diagnose the more extreme conditions. The pictured icosahedron was itself born of boron and oxygen under the stress of great pressures and high temperatures, and it retains in its makeup a legacy of distortions and strains. Perhaps this is why it exhibits uncommon hardness in the face of the most abrasive situations at the same time it manifests its delicate 20-facetted elegant symmetry. The cause of the multiple personality lies in the answer to the riddle, "When is crystal not a crystal?" A crystallographer would say, "when it has a forbidden five-fold axis." But, the authors who reported synthesis of the pictured ~10- and ~25-micrometer "crystals" of suboxide of boron (B_6O_{1-x}) would answer, "when it is comprised of multiply twinned icosahedral particles." A full explanation of the schizophrenic motif and more micrographs can be found in H. Hubert et al. *Nature* **391** (1998) p. 376 and *Chem. Mater.* **10** (6) (1998) p. 1530.

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