

# ***PHYSICS TODAY***

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**COVER:**

Oak Ridge National Laboratory's 25-megavolt tandem Van de Graff, seen here rising 30 meters to the ceiling of its domed pressure vessel, is the world's most powerful electrostatic accelerator. In the experiment described on page 16, it accelerated a beam of short-lived tin-132 ions to 630 MeV. The experimenters sought to test whether the  $^{132}\text{Sn}$  nucleus, with magic numbers of both protons and neutrons does indeed have the "doubly magic" properties predicted for it by the shell model of nuclear-structure theory. (Photo courtesy of ORNL.)