# MRS BULLETIN

# May 1997

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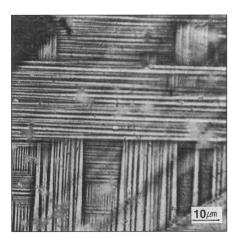
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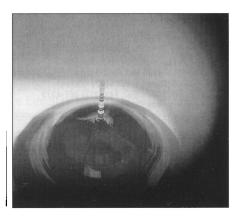
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**ON THE COVER:** Domain configuration of a  $(Na_{1/2}Bi_{1/2})TiO_3$  crystal grown by flux technique at 350°C (orientation <100>, magnification approximately 800 times). Ferroelectric crystals such as these are commonly used in capacitors, transducers, and actuators. Courtesy of Seung-Eek Park for Robert E. Newnham. For more information on this subject, see the article, "Molecular Mechanisms in Smart Materials," by Robert E. Newnham on page 20.

**Inset:** Czochralski-grown crystal being pulled from a polycrystalline silicon melt. The photograph was taken through the viewport window. Courtesy of Mitsubishi Silicon America. Photograph by Ron May, Fort Wayne, Indiana. For more information on the development of semiconductor silicon, see Links of Science & Technology that begins on page 47.



### About the Materials **Research Society**

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The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across the many technical fields touching materials development. MRS sponsors two major international opment. MKS sponsors two major international annual meetings encompassing approximately 60 topical symposia, and also sponsors numerous sin-gle-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction in local geographic regions through Sections and University Chapters.

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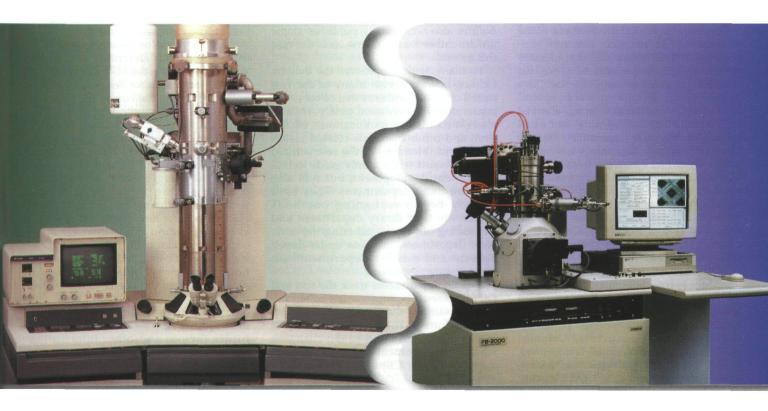
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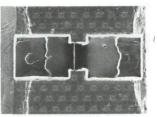
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