

**MRS**

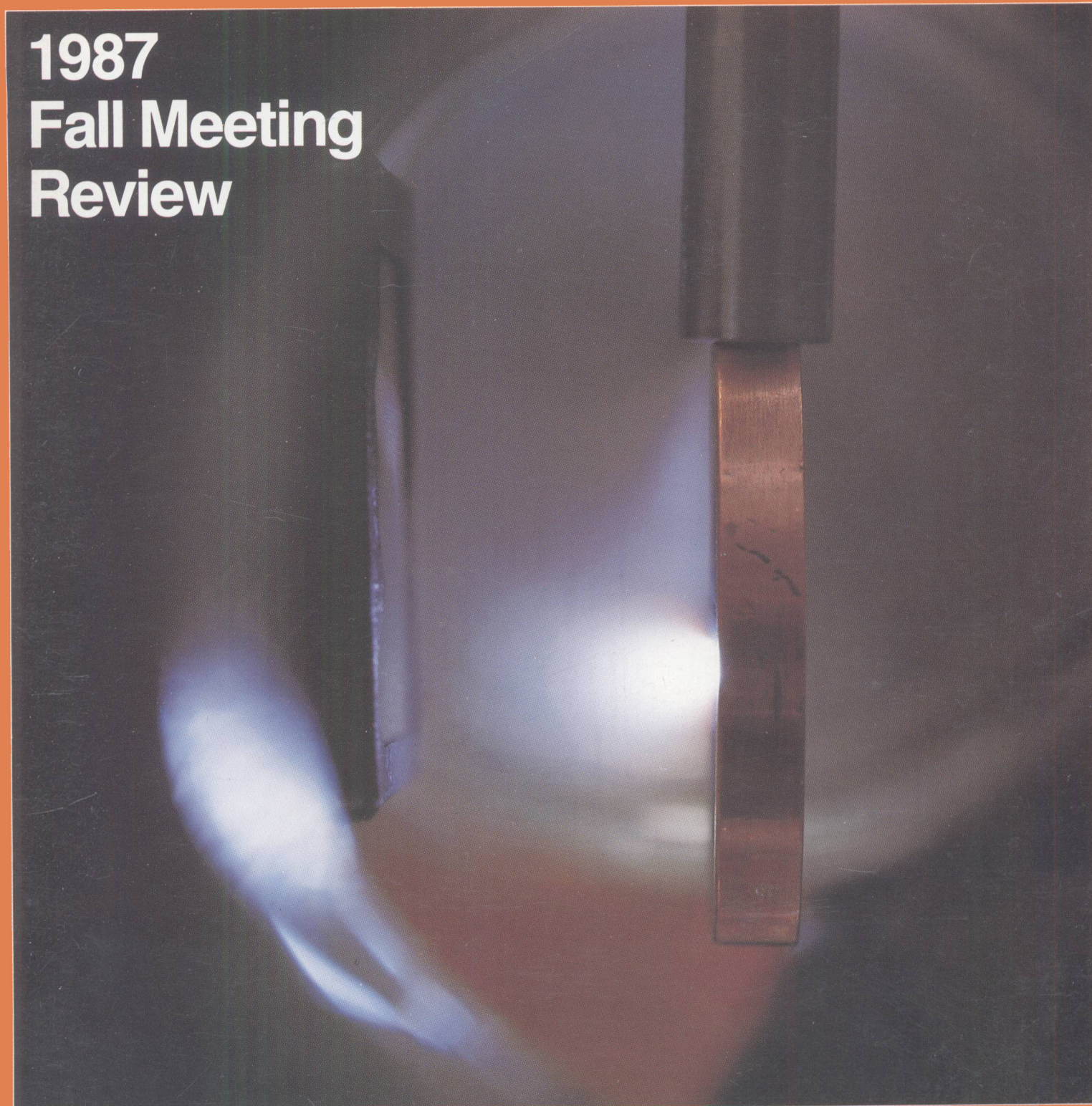
# BULLETIN

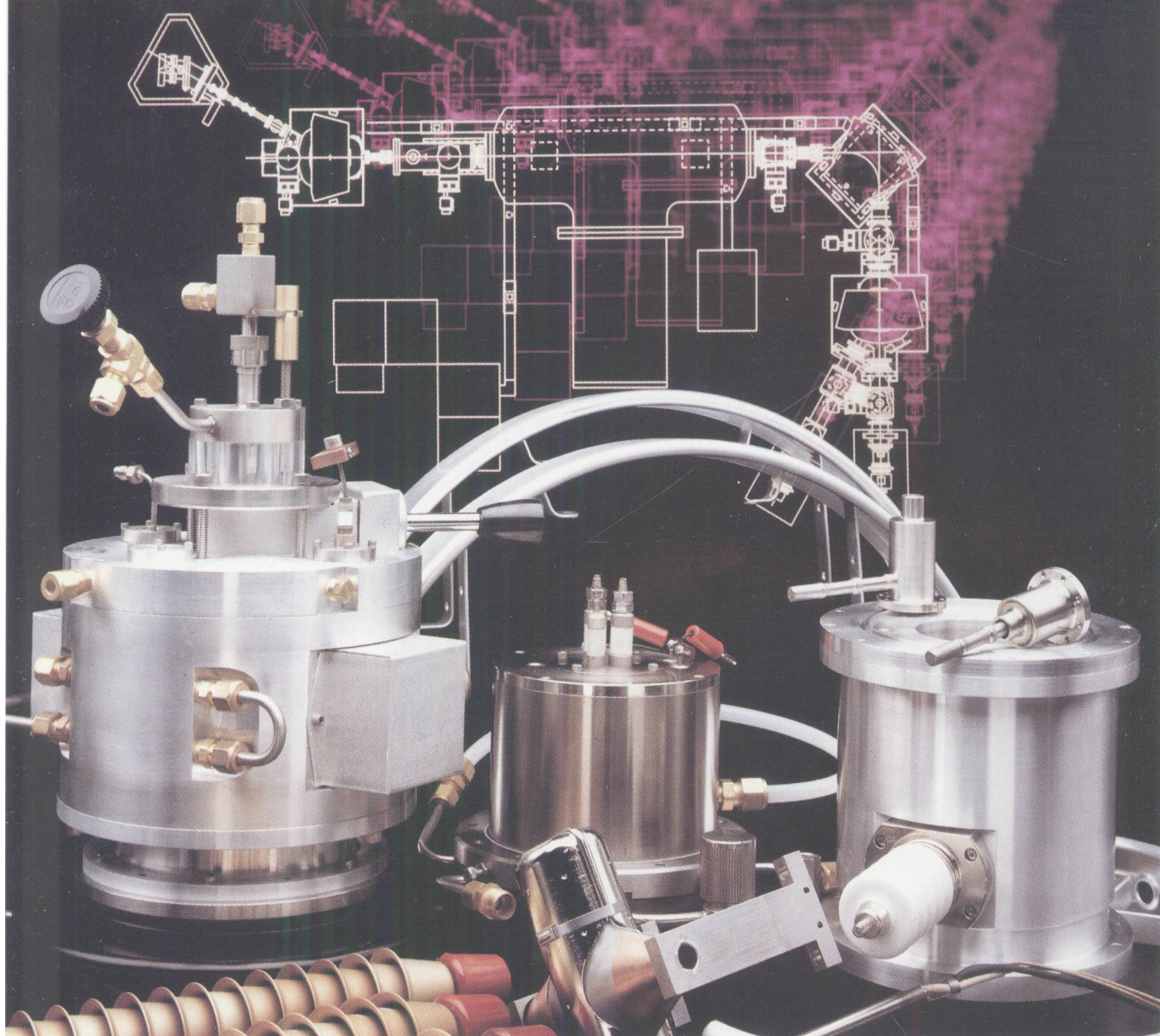
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Volume XIII, Number 3

Serving the International Materials Research Community

**1987  
Fall Meeting  
Review**





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# MRS BULLETIN

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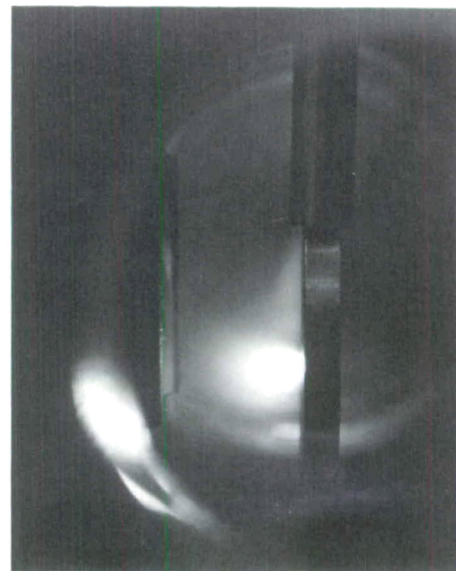
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**ON THE COVER:** The cover photo was taken during pulsed excimer laser deposition of a  $\text{HoBa}_2\text{Cu}_3\text{O}_7$  high temperature superconductor thin film. The intense white glow is emitted by the electrically charged plasma of ions and electrons produced when a ceramic pellet of the source superconducting material is ablated by focused KrF (248 nm) radiation. The KrF laser light is incident from the lower right onto the target superconductor (held inside the copper ring shown at left center). The "plume" of superconducting material is deposited on the substrate at the right, facing the pellet. (The glow further to the right is from scattered excimer laser light striking the back of the substrate holder.) This process results in a thin film deposit—typically a few microns thick—that becomes a high temperature superconductor after further annealing in an oxygen atmosphere at about 800°C. Photo courtesy of D.H. Lowndes, Oak Ridge National Laboratory.

High  $T_c$  superconductivity theories and practicalities continued to attract large audiences and much discussion at the 1987 MRS Fall Meeting. See the Fall Meeting review in this issue, p. 32 ff.

# MRS BULLETIN

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The Materials Research Society (MRS) is a nonprofit scientific association founded in 1973 to promote interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes more than 5,900 scientists from industrial, government, and university research laboratories in the United States and more than 25 countries.

The Society's interdisciplinary approach to the exchange of technical information is qualitatively different from that provided by single-disciplinary professional societies because it promotes technical exchange across the various fields of science affecting materials development. MRS sponsors two major international annual meetings encompassing approximately 30 topical symposia, as well as numerous single-topic scientific meetings each year. It recognizes professional and technical excellence, conducts short

courses, and fosters technical exchange in various local geographical regions through Section activities and Student Chapters on university campuses.

MRS is an Affiliated Society of the American Institute of Physics and participates in the international arena of materials research through associations with professional organizations such as European MRS.

MRS publishes symposia proceedings, the *MRS BULLETIN*, *Journal of Materials Research*, and other volumes on current scientific developments.

For further information on the Society's activities, contact MRS Headquarters, 9800 McKnight Road, Suite 327, Pittsburgh, Pennsylvania 15237; telephone (412) 367-3003; facsimile (412) 367-4373.

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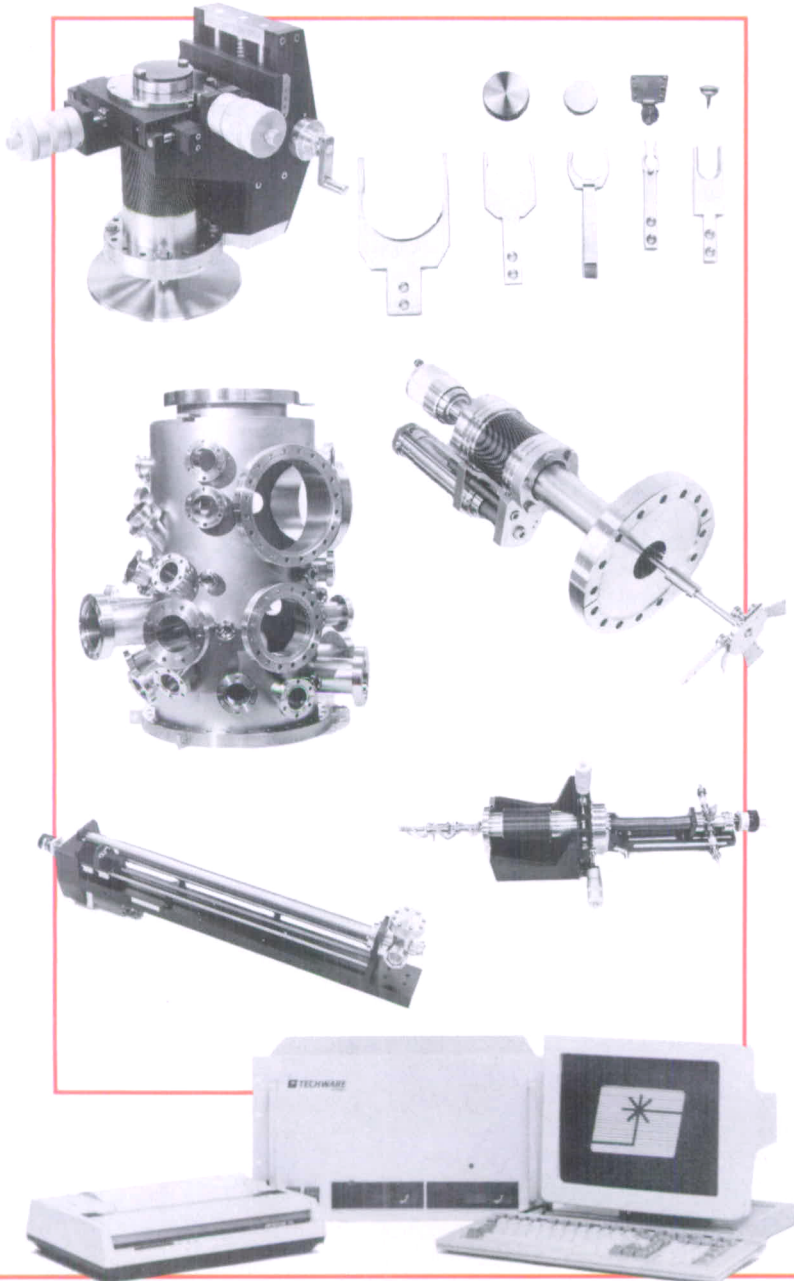
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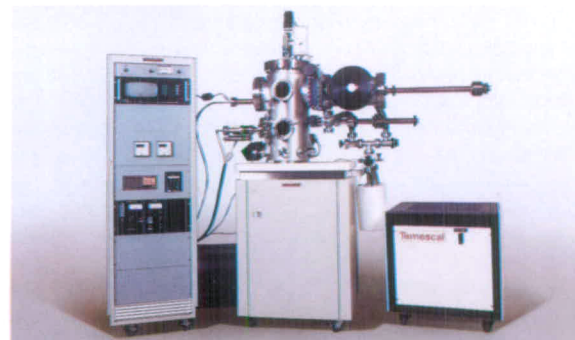
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