

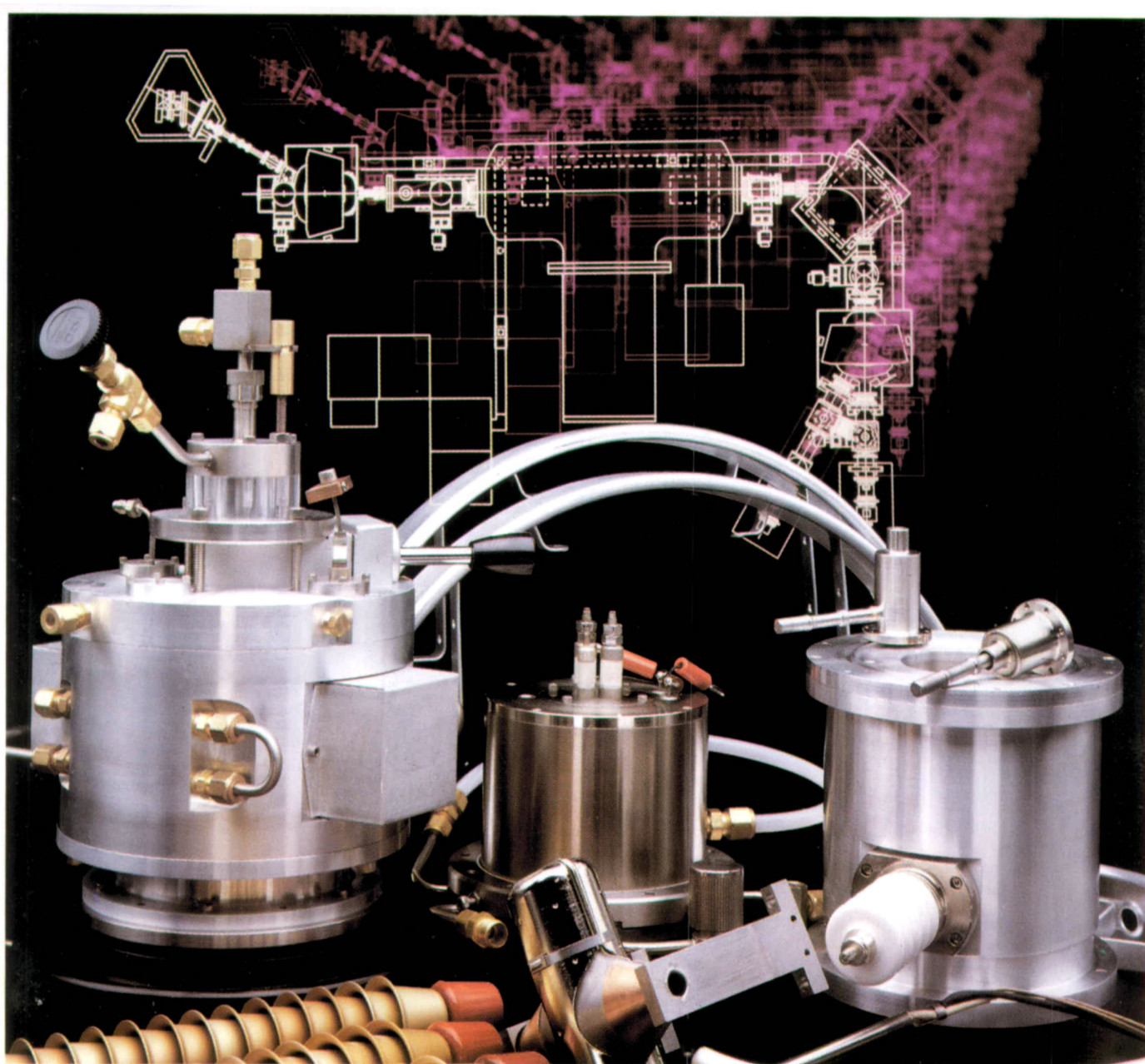
# MRS BULLETIN

Serving the International Materials Research Community

January 1989  
Volume XIV, Number 1

## High $T_c$ Superconductors





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**ON THE COVER:** Photographs depict the preparation and properties of high transition temperature ( $T_c$ ) oxide superconductors. Lower right: metal oxide and carbonate starting materials (white, black, and yellow powders). Center:  $\text{YBa}_2\text{Cu}_3\text{O}_7$ , pressed powder pellet being fired in oxygen to produce  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  ( $\delta=0.1$ ) superconductor with  $T_c = 93$  K. Lower left: oscilloscope display of electrical resistivity vs. temperature for  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ . Top: levitation of a permanent magnet above a superconducting  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  disk cooled to 77 K with liquid nitrogen. Photos taken by C.L. Seaman and E.A. Early in the laboratory of Prof. M. Brian Maple, University of California, San Diego.

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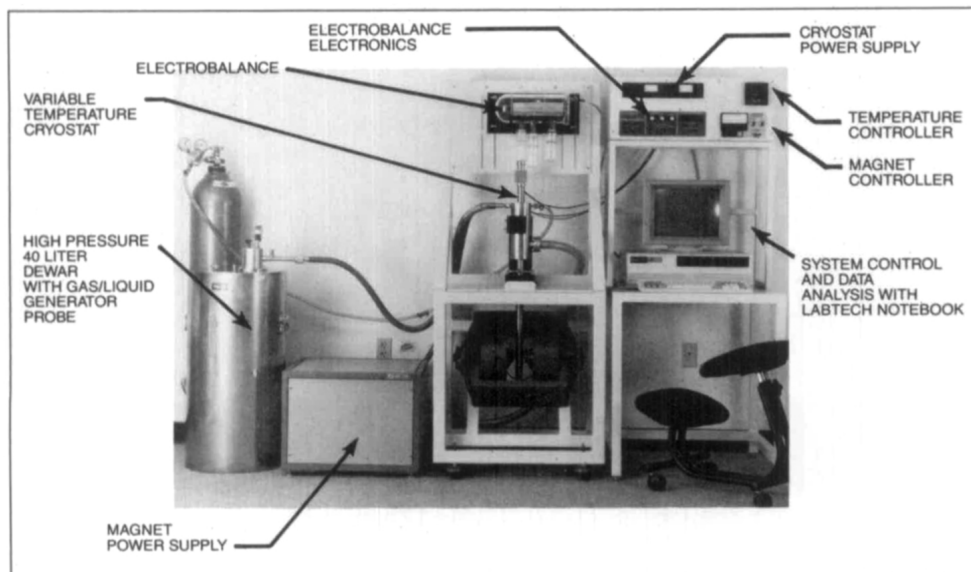
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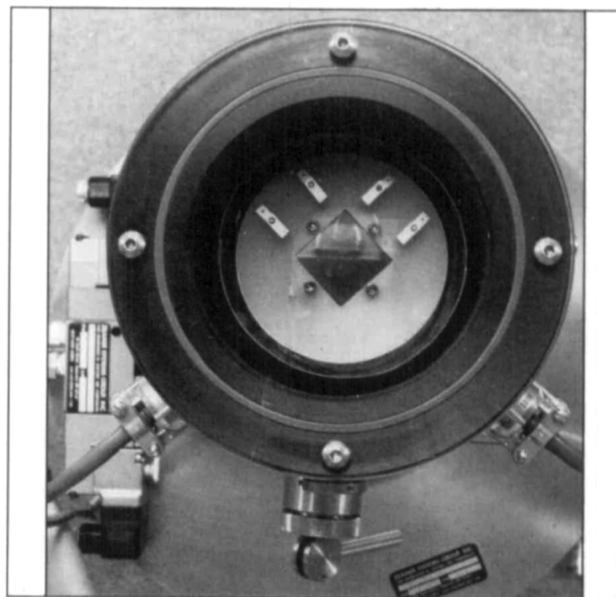
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