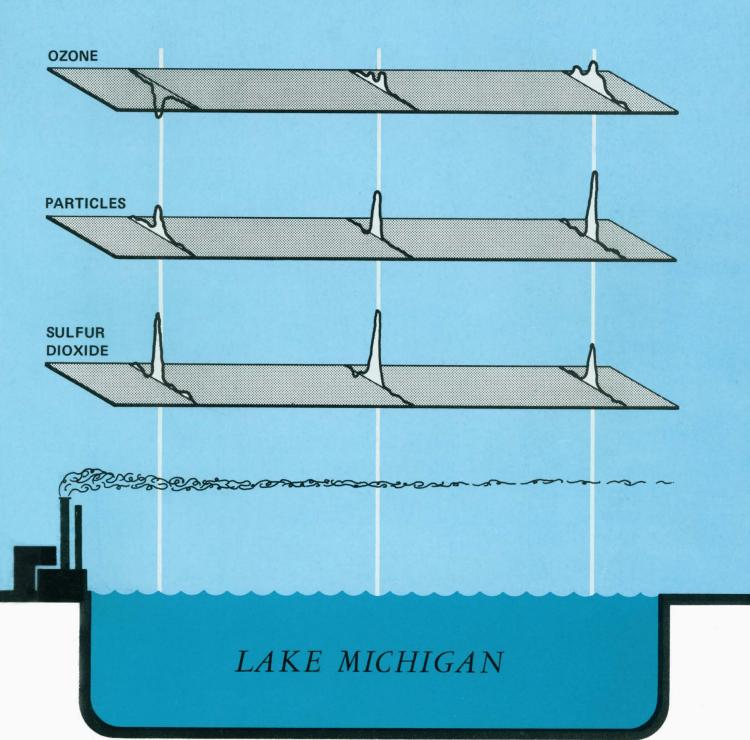
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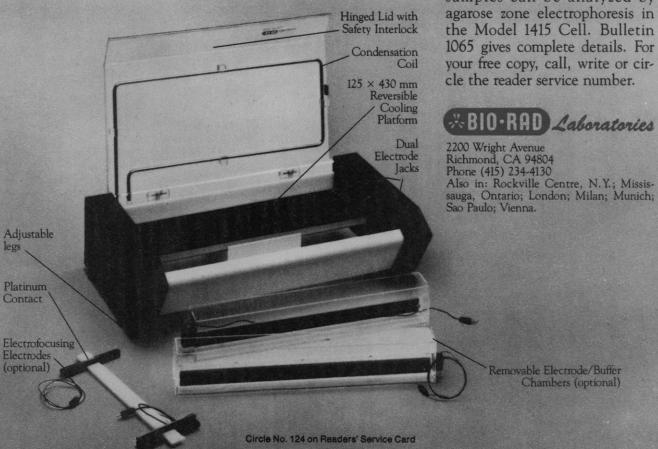
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Concentration profiles of gases and particles that resulted when a power plant's emissions reacted in a polluted atmosphere under solar radiation. In the near field of the plume, ozone diminished relative to the ambient concentration, but further downwind ozone rose above the ambient level. See page 1186. [Artwork by Dean Kette and Dean McCandlish, Battelle Columbus Laboratories, Columbus, Ohio]

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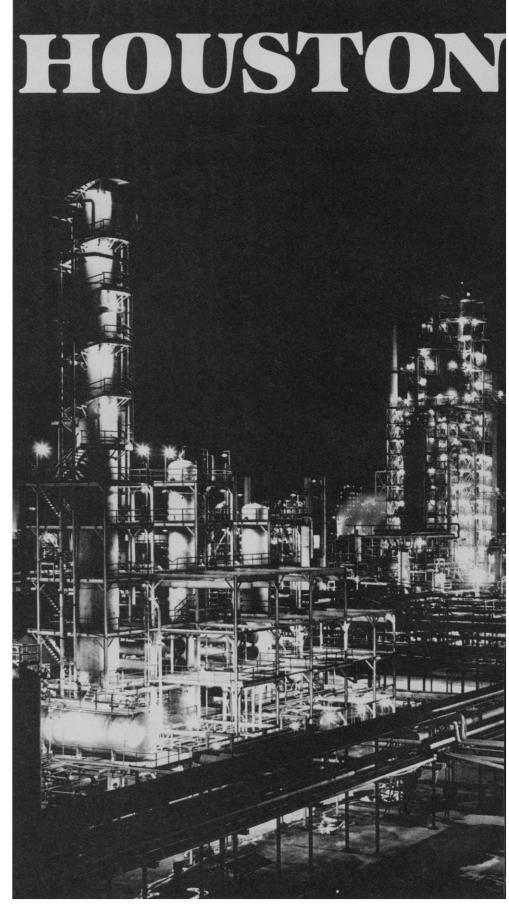




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1979 Mitchell Prize guidelines and application forms are available from: Woodlands Conference Office, University of Houston Central Campus, 312 C & O, Houston, Texas, 77004; telephone (713) 749-7478.

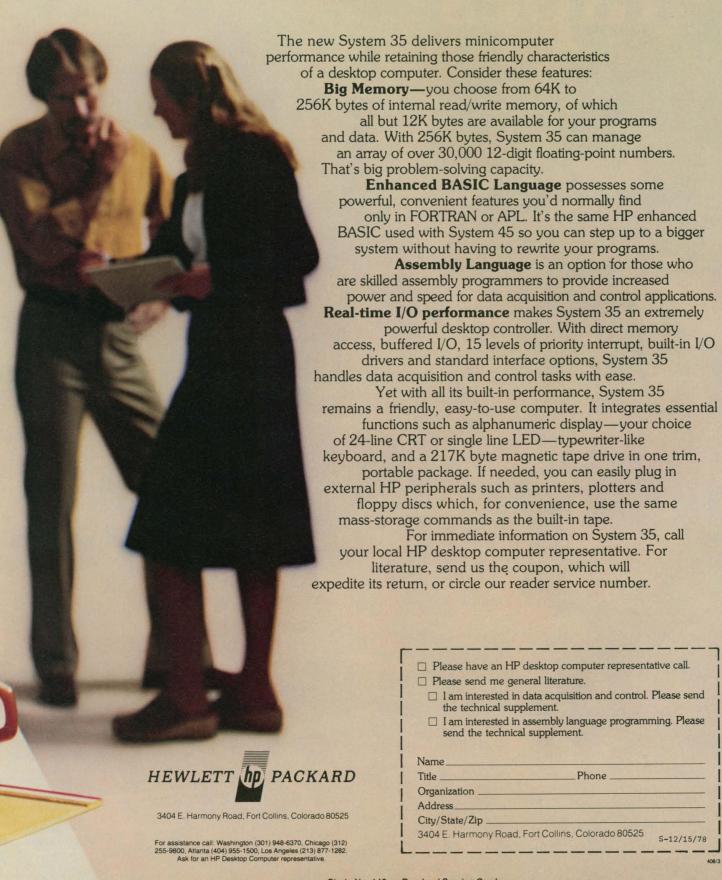
*Harlan Cleveland and Thomas W. Wilson, Jr., Humangrowth: An Essay on Growth, Values and the Quality of Life, (Aspen Institute for Humanistic Studies, 1978), pp. 28-29.

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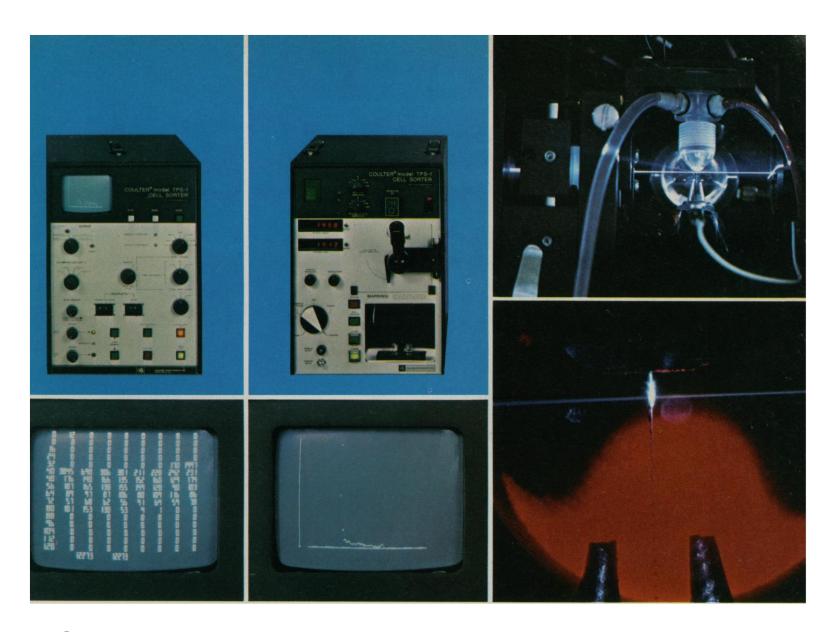
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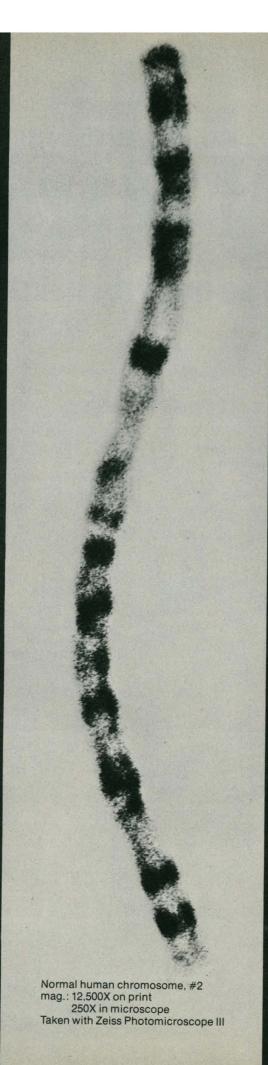
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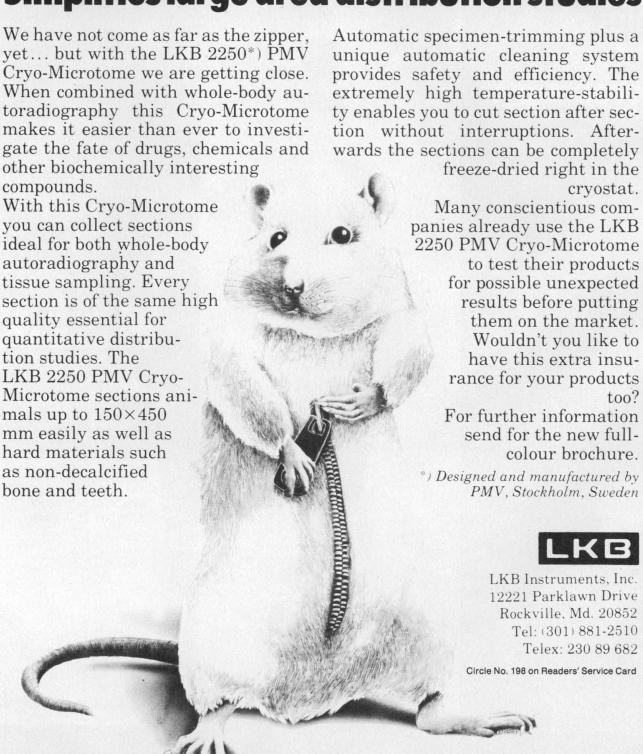


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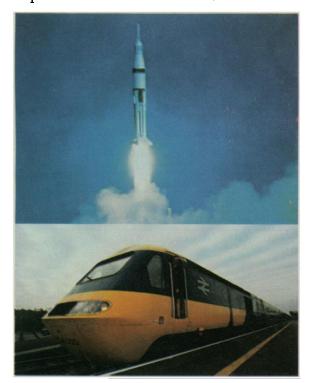
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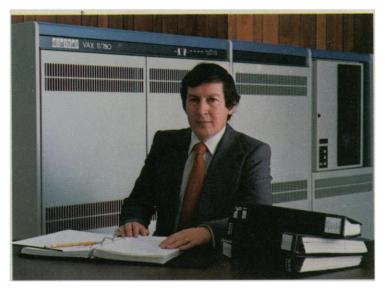
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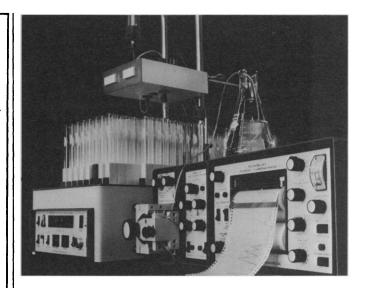
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Honoring Albert Einstein

There is a small piece of land that ru

There is a small piece of land that runs diagonally across the front corner of the National Academy of Sciences. From it, you can see the Lincoln Memorial, the Washington Monument, and, in the late autumn, a glimpse of the Jefferson Memorial. At any particular time some of our most gifted scientists walk by it to meet in the monumental Academy building. When L'Enfant planned his original system for the District of Columbia, the land was part of Upper Water Street and led to the C & O Canal. As the canal traffic died down the street lost its usefulness, and Charles D. Walcott, president of the Academy, was able to have it closed off in 1923 so that the site for the new Academy building could be squared off. Title did not pass, however, and the use of the land was restricted to "the construction of a low wall on the B Street side of the public ground and the improvement of the area with walks and shrubbery."

Casual events occasionally fall into place as part of a grand design. For it is on that land that the Academy is planning a memorial for Albert Einstein on the 100th anniversary of his birth, and at the request of Philip Handler, president of the Academy, the U.S. government has consented. What better place could be chosen than there, where we have in cluster so many heroes of our past? The memorial that the Academy has planned will add a further sense of character to our nation's Capital.

The texture of greatness is not easily captured, and perhaps least readily in the sciences, where knowledge is the sum of bits contributed by many. This memorial is as much a signature to the leaping inspiration which sets science in new directions as it is a tribute to Einstein himself. It is to remind all who pass by that there is more to life than Holmes's attributes of action and passion, and that what survive are the quality and the reach of thought. Old Europe understood this, and there is hardly a park or a plaza that is not graced by a remembrance of the poets, composers, writers, philosophers, and explorers whose work civilized and brightened their times and the centuries that came after. This new memorial will give expression again to the wonder of the force of intelligence concentrated on comprehending the cosmic puzzle, with Albert Einstein as its instrument. It speaks not to the dash and drama of science, but to the reverence for learning and discovery that marks science.

In the city that belongs to the nation, where the archives of the past and the enigma of the future run together, the value of perspective is not to be underestimated. Washington is the mecca for an endless American pilgrimage in search of the meanings of the collective experience. That experience, past and future, is touched profoundly by science and, in no small way, by Einstein the scientist.

The monument, featuring a bronze figure of Einstein three times life size, is being created and executed by Robert Berks, a distinguished sculptor. The cost of the finished monument, including landscaping, will be of the order of \$1.5 million. In principle, it would be practical and feasible to induce one or more wealthy donors to provide the total sum. Were this course to be followed, only a few individuals would participate personally. In contrast, were a substantial number of people to contribute, the monument would take on enhanced meaning both to the donors and to the public at large.

It is my feeling that this monument should be in substantial measure a gift from the scientific community and its friends to the American people, whose support has made possible the world's greatest scientific enterprise. In this endeavor the membership of the AAAS should join hands with the National Academy of Sciences. Individual and voluntary contributions would allow us to share in the building of the Albert Einstein Memorial on that parcel of land which seems to have been saved for a higher purpose.*

—Emilio Q. Daddario

*Contributions should be sent to Einstein Memorial Fund, National Academy of Sciences, 2101 Constitution Avenue, NW, Washington, D.C. 20418.

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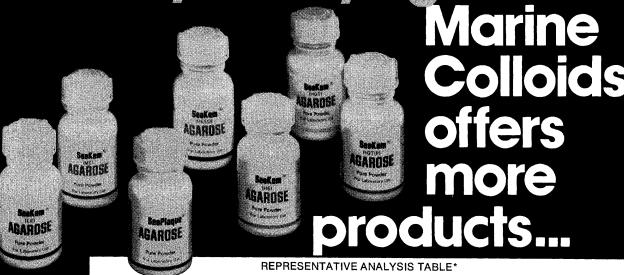
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Gef Strength

g/cm²

MCI 1.0%
>800
>800
>600
>450
>800
>1000
>150

^{*}Analytical methods available on request.

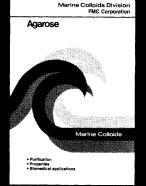
[†]Not standardized by this method. Values derived by extrapolation.

Gel Temperature	Electroendosmosis —m _r
36 36 36 36 42 42	0.10-0.15 0.16-0.19 0.23-0.26 >0.3 <0.1 <0.1
Static — will not gel at 37°C over- night. Dynamic (0.5°C/min. cool- ing rate) < 30°C.	<0.15

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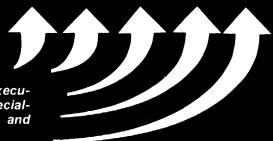
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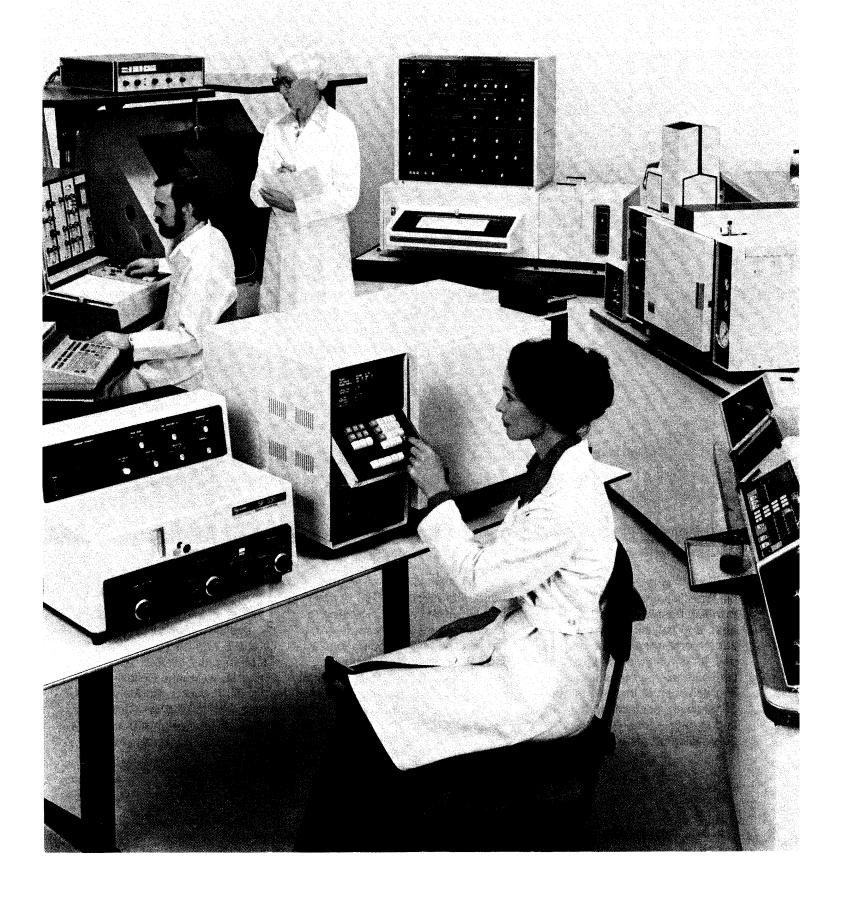
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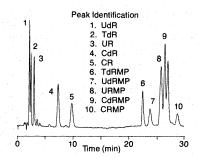
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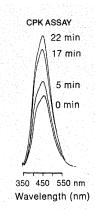
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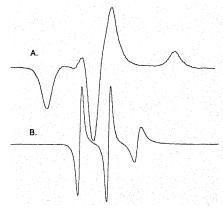
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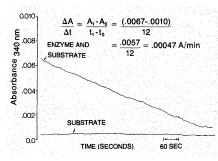
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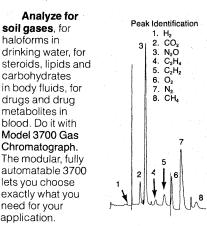
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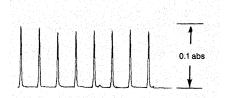
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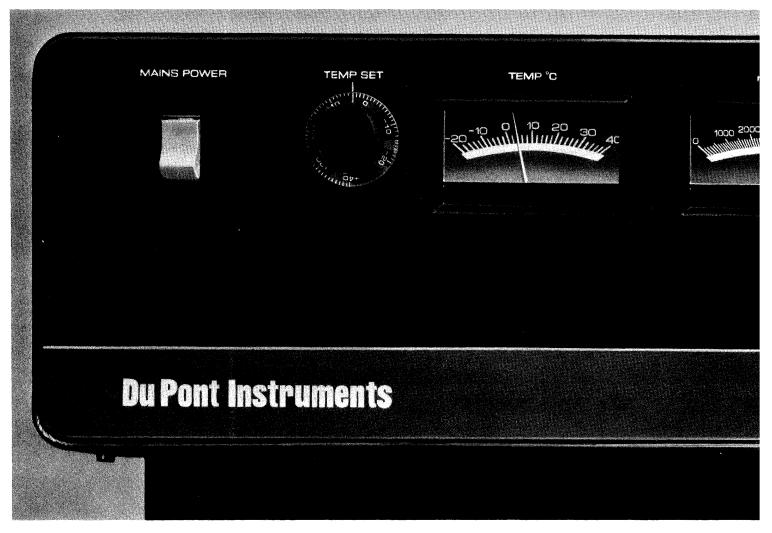
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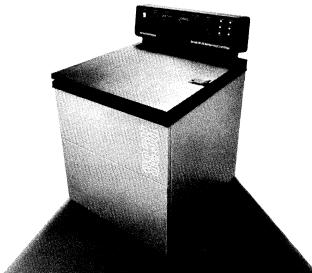
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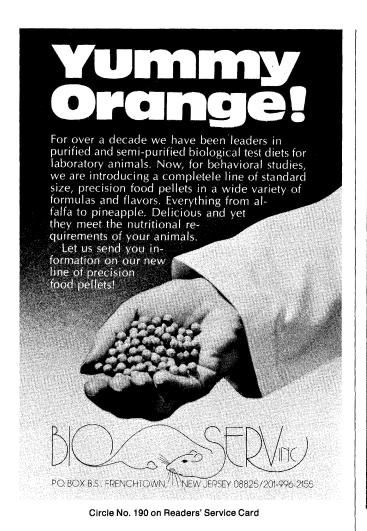


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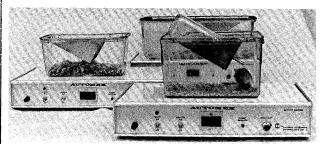
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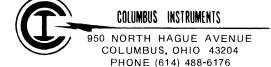


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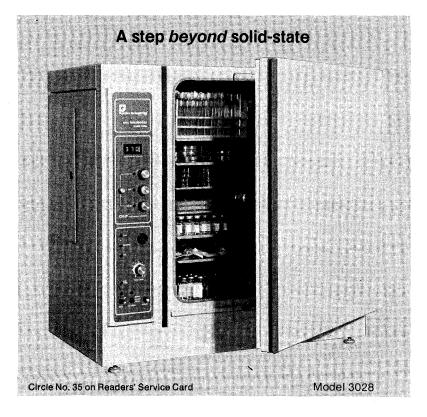
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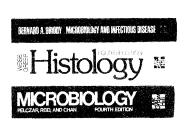


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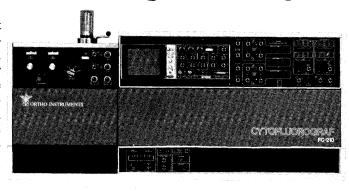
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It includes some interesting computer-drawn histograms in its description of how to distinguish mitotic cells from cells in interphase based on differences in chromatin structure. Methods and results are described, with discussion and references.

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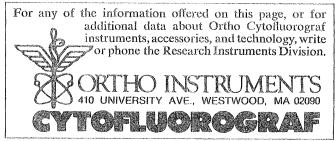
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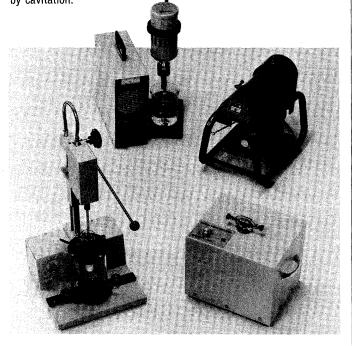


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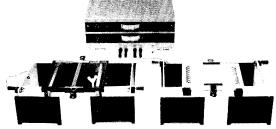
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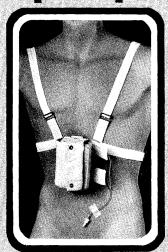
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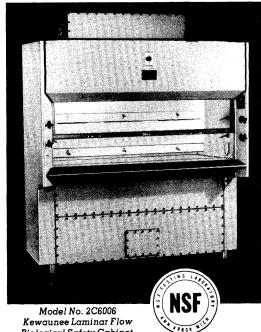
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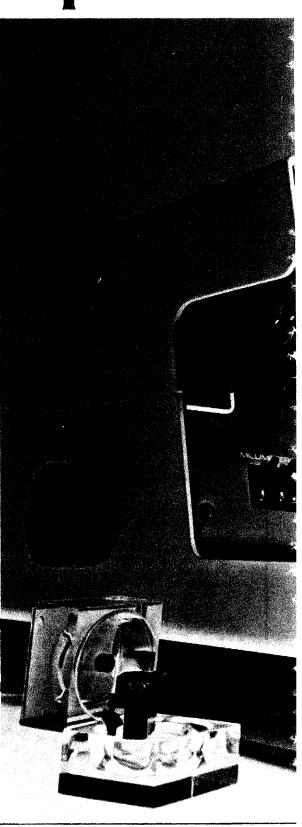
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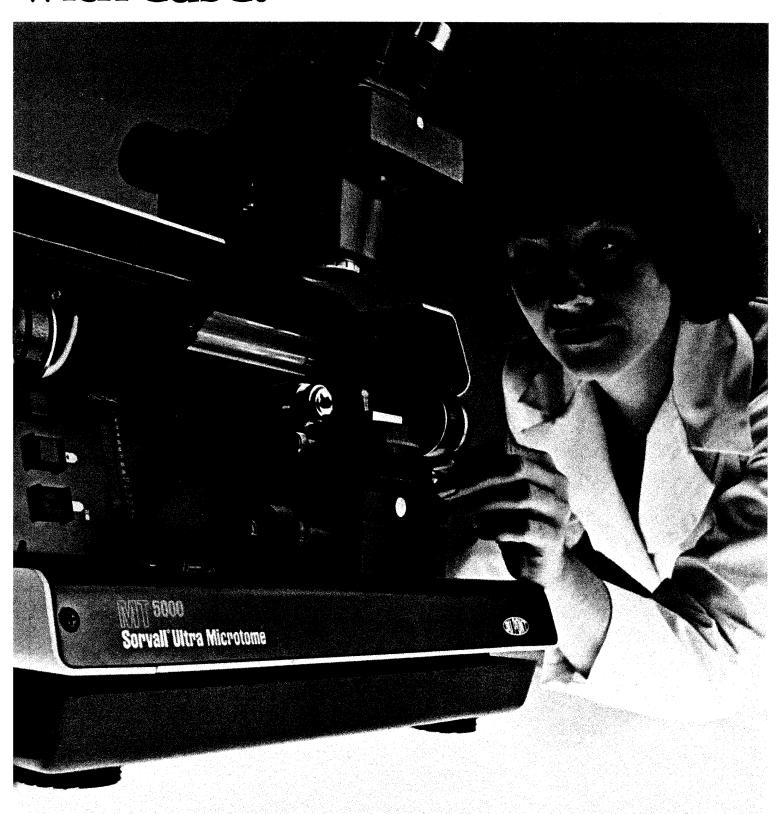
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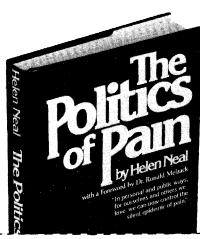
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