

The Brinkmann Gel Column

Slicing It Pretty Thin

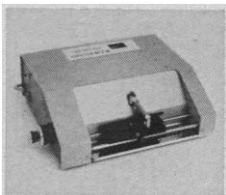
It's a safe bet you won't find one in every household. Or in every laboratory. But if you're moving in the sort of specialized area of electrophoretic analysis of RNA, for example, and you have to serve up slices of polyacrylamide gels, a lot of laboratory types think the MICKLE GEL SLICER is the best thing since delicatessens.

It figures.

How else can you cut a frozen gel column up to 10 cm long and 1 cm thick into flawless slices of less than 1.0 mm, in increments of 0.1 mm, and leave the rest of the column undisturbed?

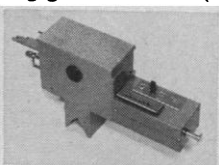
Cutting force and blade angle are adjustable for hard-frozen dilute gels, or softer, concentrated cylinders. Slices are easily collected for processing and scintillation counting.

Twenty cuts per minute. Foot switch leaves hands free. Electromagnetic counter keeps score on slices. Write for complete details.



How To Look Good, Fast.

Costs being what they are today, the guy (or gal) who can save a few dollars gets the hero medal. Here's a way to look good while you're looking good and fast (while you're rapidly scanning polyacrylamide gel columns optically, that is).



Be the first to recommend purchase of the VICON LINEAR GEL SCANNER—the attachment that fits right into your Zeiss PMQ II Spec. cell compartment without modification (and avoids costly instrument duplication).

It scans at 6 mm/min—even faster (25 mm/min) for coarser separations—in either direction. Resolution? Slit aperture is 100 μ thin to catch those narrow bands. Columns to 10 x 100 mm can be handled. Wavelength is variable from 200 to 750 μ . And there are a host of options available to meet your specific needs. Want to scan fast? Want to look good? Get the details. Write:



Dept. B.G.C.
Brinkmann Instruments, Inc.
Cantiague Road,
Westbury, N.Y. 11590
(516/334-7500)

Brinkmann Instruments
(Canada), Ltd.
50 Galaxy Boulevard,
Rexdale (Toronto), Ontario

Circle No. 92 on Readers' Service Card

216

picketing of individual scientists at their homes.

Through the UCS publications on MIRV, ABM, CBW, and environmental issues, we have expressed our belief that a strengthening of the democratic process would lead to a more humane exploitation of scientific and technical knowledge, and to a reduction of the very real threats to the survival of mankind. UCS has become the Boston chapter of the Federation of American Scientists. We are bending our own energies toward that revitalized organization in its concerted and continuing effort to influence public policy in areas where our scientific knowledge and skill can play a significant role. We hope that SESPA would eschew tactics so alien to civil libertarians, and join us in this cause.

LEE GRODZINS

*Union of Concerned Scientists,
Room 26-413, Massachusetts Institute
of Technology, Cambridge 02139*

Political Discussions at

Gordon Conference: Suggestions

It is natural that members of the scientific community are deeply concerned with the social structure of our nation. One would expect them therefore to participate actively in political dialogues and to contribute their individual thoughts on what changes are desirable to improve the lot of the individual and that of mankind. As scientists, one would expect that their contributions would be unbiased, if not impartial, and based on a thorough analysis of all controversial subjects. However, one would be reluctant to accept their choice of scientific meetings as a sounding board for their political beliefs.

Two members from Harvard's and M.I.T.'s departments of bacteriology and biology describe three political sessions they organized at last year's Gordon Conference on Biological Regulatory Mechanisms where the following topics were presented: trip of one of the signers of the letter to Hanoi, Saigon, and Vientiane; films on the People's Park at Berkeley and on the Black Panther Party; discussion of political repression and of the newly formed Scientific and Medical Workers Committee to Support the Panthers; discussion of destructive aspects of competition, and the exploitation of graduate students. To top it off, one of the signers showed slides of a 1964 trip to the People's

Republic of China. The authors express the "hope that discussions of these and related issues will be organized regularly at scientific conferences and elsewhere."

Undoubtedly, in future sessions topics such as "Should Policemen be Referred to as Fascist Pigs or merely as Pigs," and "Revolution for the Hell of It" will be discussed. Should the organizers of the political sessions run out of topics involving the "Rottenness of the Establishment" the following subjects could be suggested to insure lively meetings: "Why the Russians Liberated Czechoslovakia in 1969," "Why Comrade Mao's People's Guard Knocked off Several Million Right-Wingers during the Great Proletarian Cultural Revolution," "How to Organize Political Sessions in Moscow or Peking at Meetings of Biologists and Bacteriologists," and a companion subject: "The Happy Life of Dissenting Russian Biologists and Bacteriologists in a Siberian Detention Camp." Finally a nonpolitical pastoral subject: "How to Grow Daisies on the Berlin Wall."

SILVE KALLMANN

*Ledoux & Company,
359 Alfred Avenue,
Teaneck, New Jersey 07666*

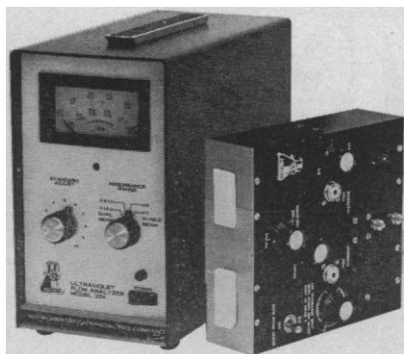
UN Conference in Stockholm

As an occasional participant in the work of the World Health Organization, I have become concerned with the role and responsibility of the scientific community of the United States in matters affecting the human environment. The United Nations Conference on the Human Environment, set for Stockholm in 1972, will serve as a focal point for primarily political decisions. What these decisions will be depends largely on the scientific community. In this country the mechanisms for active and constructive participation by the scientific community do not seem to be well developed.

The UN Secretary-General has identified the main problems for the Conference as problems of human settlements, territorial problems, and global problems (1). The first group concerns urbanization, its technology, its organization, the challenges of industrialization, and the attendant threats of air and water pollution. Territorial problems include requirements for long-term conservation and rational use of the human environment. Territorial problems differ in the different climatologi-

SCIENCE, VOL. 172

ASK WHAT AN ISCO UV MONITOR CAN DO FOR YOU



It will do your job.

It will operate at 254 m μ , 280 m μ , or other wavelengths to 950 m μ . It can record two wavelengths at the same time, or two columns at the same time. It features high sensitivity *plus* wide range. Flow cells for fractionating density gradients, as well as new micro volume chromatographic cells, are available for special applications.

It will save you time.

Direct absorbance monitoring of your columns eliminates endless cuvette handling. Wavelengths are selected by turning a knob; calibration standards are built in; and standard flow cells require no degassing.

It will save you money

The Model 224 with dual beam optical unit operating at 254 and 280 m μ is priced at \$1095.00, less than all other popular monitors not having ISCO's features.

It won't let you down.

The over 2500 ISCO flow monitors in use for the last ten years have gained an enviable (and deserved) reputation for reliability. New solid state electronics make the Model 224 even more maintenance free.

ISCO also makes other UV monitors and more instruments for biochemical research, all described in our current catalog with the brown square on the cover. Send for it today.



**INSTRUMENTATION
SPECIALTIES COMPANY**
4700 SUPERIOR LINCOLN, NEBRASKA 68504
PHONE (402) 434-0231 TELE 48-6453

Circle No. 91 on Readers' Service Card

cal areas of the world, and they take different forms according to the state of development of a country and its social and scientific resources. As a massive consumer of energy and goods, the United States is directly or indirectly responsible for many of the decisions regarding mining, harvesting, fishing, processing, and marketing, all of which can lead to unplanned and uncontrolled pollution of rivers, lakes, and oceans as well as the extinction of species and the destruction of ground cover. Since many of these processes are irreversible, the predictive capacities of science and technology become crucial. Global problems are those of worldwide pollution or environmental modification which are amenable to solution only by international agreement and a willingness of nations to act in concert for their common betterment.

U.S. scientists can contribute to these problems such as research on improved methods for measuring and monitoring pollutants and environmental quality changes, on methods for predicting and evaluating trends in environmental effects on weather, diversity of plankton, soil fertility and mutation rate, and improved models for dealing with the interactions of environmentally related phenomena and their behavior under alternative procedures of management. Just as the interpretation of the biological consequences of continued atmospheric nuclear weapons testing has led to international agreements limiting such testing, so the interpretation by knowledgeable scientists of ecologically disruptive practices such as defoliation, biological warfare, and oceanic dumping of wastes can lead to effective international agreements.

It is also reasonable to expect that cooperative international research on selected matters will be agreed upon next year in Stockholm. Among important (but not well enough known) examples are the International Biological Program (IBP) which is stressing biological adaptation and unique biological species. The report of the work of the International Agency for Research on Cancer by Higginson (2) describes another example of a significant program of biological research.

Forecasts of political agreements to which the work of the UN Conference might lead have been published by the David Davies Memorial Institute of International Studies (Thorney House, 34 Smith Square, London S.W.1). They include "Draft Rules Concerning Changes in the Environment of the Earth," "Oceanic Pollution: A Survey

and Some Suggestions for Control" and the Annual Lecture for 1970 by J. E. S. Fawcett on "Priorities in Conservation."

There is every reason to hope that the columns of *Science* and the operations of the AAAS can continue to assist the scientific community in this country to play a more significant and active role in dealing with environmental problems on a worldwide scale.

JOHN R. GOLDSMITH

767 San Diego Road,
Berkeley, California 94707

References

1. "Problems of the Human Environment," United Nations Economic and Social Council, 26 May 1969.
2. J. Higginson, *Science* 170, 935 (1970).

Professional Performance of Women Physicians

The Carnegie Commission on Higher Education's report, *Higher Education and the Nation's Health: Policies for Medical and Dental Education* (McGraw-Hill, New York, 1970), will be regarded as a definitive and scholarly treatise. It is regrettable that a grievous error in citation presents a grossly distorted view of the professional performance of women physicians. Such an error is likely to be used, both wittingly and unwittingly, in "justification" of present prejudicial medical admission policies. Clark Kerr, the Commission chairman, has assured me that the error will be removed from future printings. Unfortunately, tens of thousands of copies are already extant.

On page 26, after noting the low percentage (6 percent) of U.S. physicians who are women in contrast to Germany (30 percent) or the Netherlands (20 percent), the report states: "Increasing the proportion of women in medical and dental schools, in the absence of other changes, would not increase the supply of physicians' and dentists' services, since many married women in these professions who have young children work only part time or drop out of the labor force entirely." This statement is "documented" by a footnote which reads: "Among female medical school graduates active from 1931 to 1956, 45% were working full time or part time in 1964." If, however, the reader consults the paper by Powers *et al.* (1) cited as the reference for this "datum," he will discover that 45 percent is the figure for *full-time practice* and that the correct figure for *full-time and part-time practice* (page 483) is