## PROBLEM How to: A. Maintain 37.5°C. B. Maintain 98%RH C. Maintain 5%CO<sub>2</sub>

# ...solved with National CO<sub>2</sub> Incubators

- A. Most microorganisms grow at temperatures around 37.5° Centigrade. However, the various optimums range from 18 to 80° C. And, National CO<sub>2</sub> incubators provide closest possible control throughout this range with uniformity as close as 0.2° and a safety control which precludes loss of cultures and time.
- B. For accurate measurement of growth of microorganisms, control of moisture content is essential. Humidities close to 98% RH without excessive condensation are possible in National CO<sub>2</sub> incubators. Cultures can be incubated without fear of medium drying or extreme weight fluctuation.
- An increasing number of microorganisms show accelerated growth under higher than normal concentrations of carbon dioxide. While five to 10% CO<sub>2</sub> is the most widely accepted concentration, varying percentages to 20% are often necessary. National CO<sub>2</sub> incubators offer close, metered control of CO<sub>2</sub> from 0-20 percent.



For complete information write:



Gardens, but this is a technicality which it should be possible to circumvent, or the law should be modified to take care of this particular case.

In any event, it seems clear that the relict Florida torreya, known to professional botanists throughout the world, and locally of significant general interest, is even now all but extinct in its natural habitat. Its preservation, in cultivation, can perhaps be accomplished if prompt and bold measures are immediately instigated.

R. K. Godfrey Herman Kurz

Department of Biological Sciences, Florida State University, Tallahassee

### **Interpreting Science**

Joseph Turner's editorial reviewing the recent Bell System television program "About Time" [Science 135, 635 (23 Feb. 1962)] was superb. His urbane appraisal of this latest attempt to make science palatable to the general public was very much to the point.

Many of us who are actively engaged in the interpretation of science realize that the fault lies not so much in the content as in the approach. The latest offering of the Telephone Company is a good example. The material treated was well selected, as one would expect from a practiced hand such as that of Feynman. It would appear, however, that once the material was in their hands, the "entertainment" people took over and injected the type of corn that they invariably insist is necessary in order to gain and hold the attention of the public.

In their search for a suitable "format" the production staff seemed to overlook the fact that a straightforward presentation may be worth trying, even if its adoption entails the possible loss of some of the fringe public. Of the shows currently on the air, the forthright, informative, and highly absorbing "David Brinkley's Journal" proves the point splendidly. By telling his story simply and telling it well, Brinkley proves, week after week, that an audience can be held without resort to special gimmicks of any kind. There is no reason why this approach would not work just as effectively for science material.

On the subject of science interpretation via radio and television, I would like to say one thing more. In recent

## automatic water stills



## with complete burn-out protection

Only Stokes Automatic Laboratory Water Stills give you the simple, inexpensive burn-out protection you've always wanted... plus the high purity you need. Patented built-in thermal unit—available only on Stokes stills—protects heavy-duty element against burn-out which could be caused by water supply failure or heavy build-up of scale. This burn-out protection is available on Stokes 1-, 1½-, and 3-gallon electric stills.

Stokes stills give you distilled water that's completely free of bacteria, pyrogens, and minerals... that's purer than the standards set by

United States and British Pharmacopoeia.

Rated capacities from ½ to 100 gallons per hour in electric, gas and steam models.



Specify high-purity
Stokes Stills at your local
Laboratory Supply House.

Pharmaceutical Equipment Division



F. J. STOKES CORPORATION 5500 Tabor Road, Philadelphia 20, Pa.

902

days the collective imagination of the American public has been dominated by John Glenn's orbital flight. Television did a remarkably competent job of presenting the actual flight and the festivities that followed its successful completion. But during this whole period not so much as a single halfhour segment of television time on any station or network was devoted to an explanation of the scientific background of this exploit. Presentation of a few basic principles—such as the concept of an orbit, weightlessness. physical conditions in space, and the physiology of space flight-could have lent meaning and substance to this great technological achievement.

Is it not the duty of the AAAS, as the spokesman for American science, to see that another such opportunity does not pass unheeded?

IRA M. FREEMAN

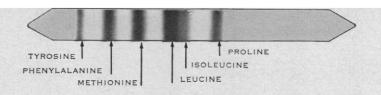
College of Arts and Sciences, Rutgers University, New Brunswick, New Jersey

#### Cell Growth

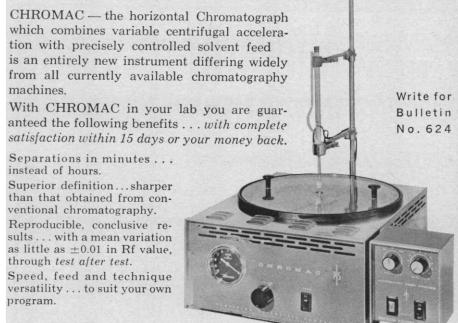
A preoccupation with Mendelsohn's concluding remarks in his report on chronic infusion of tritiated thymidine into mice with tumors [Science 135, 213 (1962)] to the effect that a tumor "literally doubles before one's eyes" should not deflect attention from the real significance of the finding that an appreciable number of tumor cells do not give evidence of DNA accretion during a 3- to 7-day period and are therefore not proliferating. If this conclusion can be stretched to embrace a corollary hypothesis—that cancer is not necessarily a wildly proliferative, exuberantly growing, racing reduplication of cells, that it may, in fact be just the reverse-it will then be found to fit in with a welter of ancillary evidence, emerging from all medical subdisciplines, that calls for a reassessment and readjudication of common (descriptively borne) notions of the nature of cancer.

If the question had arisen in connection with the usual experimental tumor—a transplant—I would not have bothered to comment. Arising as it does from studies of tritiated thymidine uptake (studies whose validity I feel to be established) by an autochthonous tumor which is as close as anyone can get to spontaneous human carcinoma, the factual data from Mendelsohn's Fig. 2,

# YOU'VE GOT TO BE SATISFIED WITH Chromac



## PRECISION'S New Paper Chromatography Accelerator For: The Separation of Amines, Steroids, Sugars, Amino Acids, Dyes



## ROUTINE ANALYSIS AND ADVANCE RESEARCH

Never before such versatility! Use the CHROMAC for conventional paper or thin layer chromatography without centrifugal force if desired. Use paper strips, wedges or circles at any speed from 300 up to 700 RPM. Select any solvent and feed it at exactly the right rate for fast accurate results. Any variations your research requires are yours with CHROMAC.

## **EASY TO OPERATE**

The sample strips shown above illustrate how simply and effectively routine — or unusual — separations can be performed by CHROMAC. Automatic controls make CHROMAC simple to operate — even with limited experience.

### GUARANTEED THROUGH TRIAL

You can't go wrong. CHROMAC is delivered furnished with a complete kit of prespotted paper. Use it to completely test CHROMAC under the most exacting conditions. Full satisfaction is guaranteed by both manufacturer and distributor.

For complete information, including name of nearest stocking distributor, please write for Bulletin 624.



3735 W. Cortland St., Chicago 47, III.

### Branches:

CHICAGO · NEW YORK
PHILADELPHIA · LOS ANGELES