

## PRICE LIST



### Leading Manufacturers of:

- Amino Acids O. S. and Derivatives
- Purine and Pyrimidine Compounds
- Sugars and Sugar Phosphates
- Enzymes, Coenzymes, other Biochemicals
- Biochemical Reagents
- Radiochemicals

**SCHWARZ LABORATORIES, INC.**  
230 Washington Street  
Mount Vernon, N. Y.

**NOW READY!**

**SCHWARZ**

**PRICE LIST**

**of Biochemicals**

**1958 Edition**

## Some SCHWARZ Biochemicals for Industry and Research

- |  |                                      |
|--|--------------------------------------|
| • Purines and Pyrimidines              | • Glutathione                        |
| • Phosphorylated Adenosine Compounds   | • Sulfhydryl Reagents                |
| • Cozymase                             | • Sugars                             |
| • Nucleosides and Nucleotides          | • Triphenyl Tetrazolium Chloride     |
| • Nucleic Acids and Metallic Nucleates | • Deoxynucleosides                   |
| • Sugar Phosphates                     | • Optically Standardized Amino Acids |
|  | • Radioactive Chemicals              |

**Send the Coupon for your copy**

### **SCHWARZ LABORATORIES, INC.**

230B Washington Street, Mount Vernon, N. Y.

Please send me copy of your 1958 Price List of Biochemicals

Name

Position

Company

Street Address

City  State  Zone

## Letters

### Current Scientific Journals

May I briefly discuss one statement made in your timely and excellent editorial entitled "Strength through union" and published in the 14 February issue of *Science* [127, 313 (1958)].

At the end of the second paragraph you speak of "50,000 scientific journals" which "currently publish about 2 million articles per year." On several occasions I have seen a like estimate of the number of current scientific journals and of published scientific articles, and I have never understood the estimates. For a discussion of this subject please read the editorial entitled "Lost-literature legend" which appeared in *Chemical and Engineering News* [30, 505 (1952)].

It seems to me that some definitions and some qualifying comments would be appropriate in this connection. What is a *scientific* journal?

From time to time chemistry is used in the experimental work of most branches of natural science. Accordingly, *Chemical Abstracts* must examine many scientific journals in order completely to report the new information of chemical interest appearing throughout the world. We have been striving for complete coverage for over fifty years now and feel that we have been succeeding reasonably well. We only find articles suitable for abstracting in about 7500 current periodicals.

We realize, of course, that there are a good many scientific journals which do not carry even a single article of at least a little chemical interest now and then, but I would be surprised if there can be proved to exist more than 15,000 or 20,000 journals worthy of being rated as current *scientific* journals. At least, I believe this to be true for publications which deserve to be considered in connection with scientific research. Perhaps the high estimate which I believe to be wrong includes the many small local publications such as county health bulletins, city medical association circulars, house organs, lesser trade journals, hospital bulletins, and publications for agriculture, home economics, and clinical medicine as examples of fields in which much is published. Some publications of these kinds do contain new information of a scientific nature, but a great many of them are of no real value in connection with scientific research. Such publications have various kinds of values (I do not belittle them), but they are hardly scientific journals for the most part, and abstracting journals published to aid in scientific research can usually pass these publications by with impunity.

At least it is misleading to speak of 50,000 current scientific journals if the inference is made that the information in all should be made available to scien-

tific research workers by the abstracting and indexing services. The research worker would be hindered instead of served thereby.

E. J. CRANE

Chemical Abstracts Service,  
Ohio State University, Columbus

### Communicative Accuracy

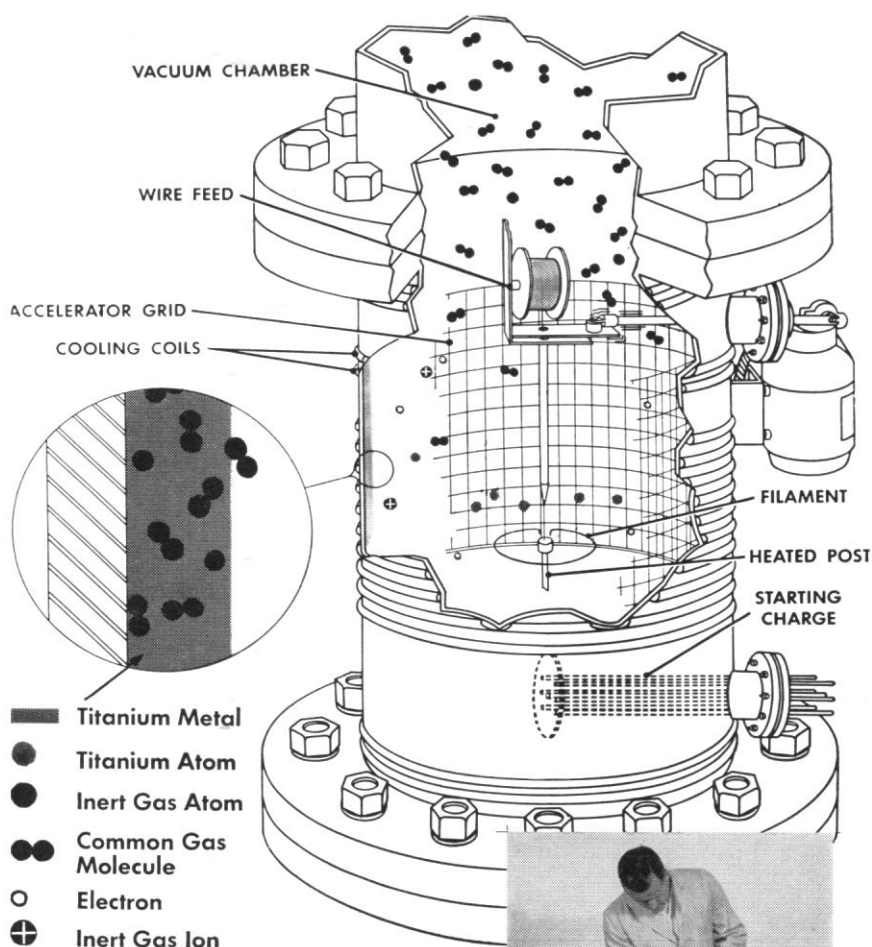
*Science* has touched on a timely and urgent point in Warren Weaver's editorial on "Communicative accuracy" [127, 499 (1958)]. I suggest that it be an opening to a more extensive and thorough study. Pushed on its way by the AAAS, such a study can be of great service to the country.

Serious and difficult as the problem posed by Weaver is, it is multiplied in complexity for both the public at large and the Government by the simple fact that too often the scientists who are describing their activities are interested in more than "communicative accuracy" as such. They have axes to grind. Many of their topics involve problems sufficiently technical so that, even if the scientists spoke as precisely as they would like, and used caveats, it still would be difficult to come to a common understanding leading to a practical solution—that is, one that could lead to a policy, for instance. If scientific problems—particularly those involving a dispute, real or apparent—are aired in public without precision of statement and use of qualification, it may turn out that sides are picked and each side talks at the other, and a real solution becomes ever farther away.

I would suggest that part of the reason that scientists, in talking to the public or to the Government, find their communications problems difficult is that they have not thought either deeply or comprehensively enough about the public policies which their scientific statements are supposed to relate to. They have not thought enough about the framework in which policy will be made or about the constraints and conceptual models that might apply. The result is that scientists, even those most sincere and wishing to be and appear unbiased, will overstate points and then find themselves trapped by a misinterpretation of something that didn't need to be said in the first place. Often enough, too, it is the scientist speaking in too narrow a framework, lacking the vision to speak in a properly informative way.

In defense of the scientist it should be pointed out that neither the Government nor the press—even the "blue-ribbon" press—is inclined, even if able, to be always unbiased in seeking the facts. They too grind axes. In interviews, hearings, and even in conversations, questions are fed that invite the biased answer, particularly—as is often true and not

16 MAY 1958



## A dry high vacuum electronically

With this new electronic vacuum pump—the Evapor-Ion—you can produce a vacuum of  $10^{-4}$  to  $10^{-9}$  mm Hg completely free of contaminating vapors.

### How the Evapor-Ion pump works

The new CEC Evapor-Ion pump uses no liquids.

The filament bombards the post with electrons. Titanium wire, periodically fed onto this hot post, evaporates. Common gas molecules form stable compounds with the titanium layer condensed on the cooled wall of the pump.

At the same time other electrons

emitted by the same filament ionize the inert gas atoms. The electrical field of the accelerator grid violently repulses these positive ions and drives them into the titanium layer where they are held and later buried under new layers of titanium.

The gettering action of the deposited titanium plus ion entrapment produce high pumping speeds and low ultimate pressures. Vapor-free operation makes the Evapor-Ion ideal for numerous electronic applications.

For further information on this unique pump, write to the Rochester Division for Bulletin 6140-Z-3.

## Consolidated Electrodynamics

Rochester Division, Rochester 3, N. Y.



SALES AND SERVICE OFFICES IN PRINCIPAL CITIES