and an extremely minor role for any other purpose. (The version of the code to which Dr. Leonard refers is a very useful unofficial publication of the present official English translation of the definitive French text of the Règles. This translation is known to be defective on some points, and a new official translation is in preparation by the Commission.) It is a criterion for precedence (not priority) between simultaneous names under Recommendation C of Article 28, and for the selection of the type species of a genus under Recommendation t of Article 30. In both it is the last and least significant criterion listed, to be employed only when other things are equal. But recommendations are not articles of the Règles. They indicate preferred, not required, procedure. Priority is determined solely by the date of publication. All parts of a work issued at the same time bear the same date and for purposes of priority are simultaneous. If both names are equally valid, a choice between two synonymous names published simultaneously rests with the first writer to reconsider the point, and thus again priority is a matter of publication date. The revising author may or may not have based his choice on page precedence. It makes not the slightest difference.

The other questions raised here concerning Dr. Leonard's criticisms of Dr. Dickerman's usage must be examined in the light of helminthological taxonomy, but the conclusions of Dr. Leonard appear to us to be far from demonstrated by the evidence he presents.

J. Brookes Knight and R. E. Blackwelder
Smithsonian Institution, Washington, D. C.

Inhibition of Surface Growth

Preserved and embalmed material, including museum specimens, may be attacked superficially by highly resistant organisms. Multiplication and growth of these is of common occurrence both with dry embalmed comparative anatomy specimens and cadavers used in the study of human anatomy. Two chemical inhibitors have been used in our laboratory which are effective in preventing or stopping surface growth. Roccal (a commercial preparation sold by the Winthrop Chemical Company, New York City, to which acknowledgment is due and defined by the maker as a mixture "of high molecular alkyl-dimethyl-benzyl ammonium chlorides") is added to fluid supplied to students for wetting the wrappings of their dissection material. Roccal (commercial grade) is used in concentration of 1: 100 of the usual phenol-formalin dilutions. (The additional cost is approximately $.04 per gallon.)

Similarly, sodium azide in a concentration of 0.1 per cent will usually inhibit all growth. This is more concentrated than that which has been used in agar-plate tests (J. D. Kempf and W. J. Nungester. *Science*, 1944, **100**, 411–412). Sodium azide, 0.1 per cent, is more expensive ($.20 additional per gallon).

Especially resistant surface growth has been stopped by increasing concentration of sodium azide to 0.5 per cent, or of Roccal to 1: 50, and sponging the surface with either solution. No attempt has been made to use either chemical in vats or embalming fluid, since our problem has been one of the dissecting room or laboratory.

There seems to be a personal factor involved in their effective use. This is related to care in sponging off infested areas as well as degree of wetness of cloths used to keep specimens from drying. Students tend to keep their material sopping wet, which encourages growth of molds even on the cloths. All coverings should be twisted or wrung out by hand until the fluid no longer flows freely.

James M. Sanders
Department of Anatomy,
University of Missouri Medical School

Book Reviews

Structural inorganic chemistry. A. F. Wells. Oxford, Engl.: Clarendon Press, 1945. Pp. viii + 590. (Illustrated.) $7.50.

In the Introduction the author says: "The study of the solid state has greatly increased our knowledge of the different types of chemical bonds." He also states that one not only wishes to know the general preparative methods but also asks ". . . about a compound . . . what is it made of, what holds the constituent parts together, and how are they arranged?"

Much of the material with which the author deals is now being studied in the new subdivision of chemistry called "crystal chemistry." It is amazing that he has been able, during the strain of the past few years, to review and correlate the tremendous mass of information found in this book. An idea of the scope of the work may be obtained from the following list of topics: I. The Structure of the Atom; II. Forces Between Atoms; III. Spatial Arrangement of Atoms; IV. The states of Aggregation; V. The Crystalline State; VI. The Experimental Methods of Structural Chemistry; VII. Hydrogen; VIII. The Halogens; IX, X, and XI. Oxygen and Sulfur; XII. Nitrogen and Phosphorus; XIII. Carbon; XIV. Silicon; XV. Boron; XVI. Stereochemistry of Certain Metals; and XVII. Metals and Alloys.

Since there are so many more metallic than nonmetallic elements, the method of arrangement of the material by the author lends itself to better correlation of information. The various types of bonding involved in the solid state and the hypotheses and theories proposed to explain