sumption that less energy is necessary to move several molecules out of their places in the three-dimensional lattice than to move the same molecules singly. The melting behavior of the material in bulk is determined by cooperative phenomena connected with the long-range order of the molecules in the solid state, whereas the behavior of the surface seems to depend more on the interaction of the neighboring molecules only.

The great importance of the surface of a solid body in all its communications with its surroundings makes surface research a vital part of our endeavor to understand the physical behavior of solid matter. The new possibility of observing the behavior of the topmost molecular layer of solids by radioautographs will be beneficial to a wide variety of experimental research and theoretical discussion. The application of this method on the observation of the phase transition is an example. It confirmed earlier observations of the melting phenomena of a surface in a more direct way.

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Comments and Communications

Zoological Nomenclature

NOTICE is hereby given that, as from October 15, 1952, the International Commission on Zoological Nomenclature will start to vote on the following cases involving the possible use of its plenary powers for the purposes specified in brackets against each entry. Full particulars of these cases were published on April 15, 1952, in the *Bulletin of Zoological Nomenclature,* those relating to cases (1) to (4) in Part 5 of Vol. 6, those relating to cases (5) to (18) in Parts 7/8 of Vol. 7.

1) Meigen, 1800, *Neuvelle* classification [suppression].
2) *Lysippe* Kinahan, 1858 (Class Crustacea) [validation].
3) *Cummingella* Reed, 1942 (Class Trilobita) [designation of type species].
4) *Dionide* Barrande, 1847 (Class Trilobita) [validation].
5) Vol. 1 of Cramer's *Uitl. Kapellen*: Schiffermüller's "Wiener Verzeichniss;" Fabricius' *Syst. Ent.*; Vols. 6 and 7 of the *Naturforscher*. [relative to priority for names of butterflies in].
6) *Naucoris* Geoffroy, 1762 (Class Insecta, Order Hemiptera) [validation].
7) *geoffroyi* Leach, 1817 *Corixa* (Class Insecta, Order Hemiptera) [validation].
8) Sand crab [trivial name for].
9) *Acmaea* Eschscholtz, 1833, and *Acmea* Hartmann, 1821 (Class Gastropoda) [settlement of problem relating to].
10) *Petalifera* Gray, 1847 (Class Gastropoda) [validation, if name found invalid].
11) *punctata* Cuvier, 1803, *Aplysia* (Class Gastropoda) [validation].
12) *Ammonia* Brünnich, 1771 (Class Cephalopoda or Rhizopoda) [suppression].
13) *Encrinus* Schulze, 1760 (Class Crinoidea) [validation].
14) and 15) *Archaeocidaris* McCoy, 1844, and *Pholidocidaris* Meek & Worthen, 1869 (Class Echinoidea) [validation].
16) *Eriechinus* Pomel, 1883 (Class Echinoidea) [suppression].
17) *Odobenus* Brisson, 1762 (Class Mammalia) [validation].
18) *Chinchilla* Bennett, 1829 (Class Mammalia) [determination of type species].

Comments on the above cases should be sent as soon as possible to Francis Hemming, Secretary to the Commission, 28 Park Village East, Regent's Park, London, N. W. 1, England.

FRANCIS HEMMING

Secretary to the International Commission on Zoological Nomenclature

Salivary Amylase Inhibition

SEVERAL papers have appeared recently describing an inhibition of salivary amylase by indole derivatives (*1, 2*) and several plant hormones (*3, 4*). This was rather surprising to us, for during our study of the crystalline amylases (*5–7*) incidental work was done in the presence of similar substances without any observable effect. We therefore thought it necessary to clarify this point.

Both crude human saliva and crystalline human salivary α-amylase (*6*) have been used. The amylolytic power has been determined at 20° C by a reductometric method (*8*), using Sumner's 3–5 dinitrosalicylic acid (*9*), as well as by a method based on the change of color of the starch-iodine complex (*10*). The latter method, however, is not suitable in the presence of indole derivatives, as these compounds use up the iodine, a large excess of which must therefore be added. The substrate, a 1% solution of Zulkowski starch,[1] was buffered at pH 6.90, and the determination made in presence of 0.0067 *M* NaCl. The following substances have been tested for their influence

[1] Prepared in our department by R. Menzi.