publication of a new *Southwestern Journal of Anthropology*, to appear early in 1945. Supplementing existing periodicals, this quarterly will provide additional space for articles in general anthropology. Contributions are invited by the editor, Dr. Leslie Spier, of the University of New Mexico.

A FIVE-VOLUME collection of photo-micrographs of more than a hundred meteorites, made by Stuart H. Perry, of Adrian, Mich., has been presented by him to the University of Michigan, where he conducted his work, to the Chicago Natural History Museum and to the U. S. National Museum. Three sets only have been made.

DISCUSSION

AMPHIPATHIC CHARACTER OF GELATIN SHOWN IN ITS ADSORPTION TO POLAR SURFACES

SOME experiments on the retention of gelatin by silver bromide made in these laboratories were described in 1932.[1] They were made with silver bromide grains centrifugally separated from a diluted silver bromide emulsion, and indicated that continued washing (at pH 6.5) brought down the retained gelatin to a limit after which no more was removed. The specific area of the grains was determined[2] and the thickness of gelatin estimated from experiments on film spreading.[3] From these measurements there was indicated a layer of the order of two molecules thick, *ca.* 16 Å. Further experiments, washing at higher temperature (boiling in water), reduced the value to one half. It was concluded that "a monomolecular layer was actually present, and that the rest of the gelatin was occluded in the grain, or . . . that a secondary layer is attached to the primary layer by weaker forces."

Recent experiments, using techniques developed in connection with the study of dye adsorption,[4] have enabled us to confirm the latter hypothesis, and to show that gelatin is primarily and irreversibly adsorbed, by polar groups, to silver halide as a monolayer, exposing nonpolar groups to the solution. As more gelatin is added to this, a second layer is built up, in which the nonpolar groups of the second layer adhere to—or cohere with—the nonpolar groups of the primary (priming) layer, while the polar hydrophile groups solvate and repeptize the first precipitate. This second layer—which is relatively reversible (Langmuir type of adsorption isotherm)—it is which confers on protein-covered silica—and other—particles the characteristic electric potential and charge of "adsorbed" protein, which is identical, therefore, with that of dissolved protein.[5] Whether molecularly stratified systems of still higher order can be built up[6] is still uncertain, though a reconsideration of some experimental work of A. H. Nietz,[7] of these laboratories, suggests that it may not be impossible. Concerning this and other aspects of the general problem of protein lamellae, fuller publication by the writer and colleagues is in preparation.

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EFFECT OF VITAMIN B_6 (PYRIDOXINE) IN THE TREATMENT OF LEUCOPENIA AND GRANULOCYTOPENIA OF TOXIC ORIGIN IN HUMANS. PRELIMINARY REPORT

AGRANULOCYTIC angina is a disease characterized by an acute febrile illness, necrotic and ulcerative lesions in the mouth and pharynx and an extreme reduction of the granulocytes in the blood. Granulocytopenia is pathognomonic of the disorder, although leucopenia is usually present as well. The disease is uncommon in the idiopathic form but occurs more often secondary to the administration of certain drugs such as amidopyrine, some barbiturates and dinitrophenol. Since the introduction of sulfonamides in the treatment of bacterial diseases, this complication has been noted more frequently. Within the past year, a similar hematologic catastrophe was described by Astwood[1] following the use of thiouracil for the treatment of hyperthyroidism. His findings have been amply confirmed. This hazard seriously interferes with and restricts the use of a large group of valuable therapeutic agents.

The accepted therapy relies on the use of blood transfusions and on pentose nucleotides. The result obtained by these means is often disappointing.

[1] S. E. Sheppard, R. H. Lambert and R. L. Keenan, *Jour. Phys. Chem.*, 36: 174–184, 1932.

[2] By photomicrographic scanning, *cf.* A. P. H. Trivelli and R. P. Loveland, *Jour. Franklin Inst.*, 204: 193, 377, 1927.

[3] S. E. Sheppard and R. L. Keenan, *Nature*, 121: 982, 1928; S. E. Sheppard, A. H. Nietz and R. L. Keenan, "Supermolecular State of Polymerized Substances in Relation to Thin Films and Interfaces," *Ind. Eng. Chem.*, 21: 126, 1929.

[4] S. E. Sheppard, R. H. Lambert and R. D. Walker, *Jour. Chem. Phys.*, 7: 265, 1939.

[5] H. A. Abramson, "Symposia on Quantitative Biology" (Cold Spring Harbor, N. Y.), I, 39 (1933).

[6] K. Blodgett and I. Langmuir, *Phys. Rev.*, 51: 964, 1937.

[7] A. H. Nietz: "Molecular Orientation at Surfaces of Solids, Pt. III. Monomolecular Films Measured by a Contact Angle Method," *cf. Ind. Eng. Chem.* (*News Edit.*), 6, No. 16, Aug. 20, 1928. Part III was presented at the 76th meeting of the American Chemical Society, September 10–14, 1928, but not published.

[1] E. B. Astwood, *Jour. Am. Med. Asn.*, 122: 78, 1943.