to the biosubstratum, in particular the adsorption and bonding of albumin on active centers (Benson, Castle, 1958).

The major value of the surface conditions and its activity can be judged from the results of several series of our experiments with asbestos-bearing dust. The asbestos content in them varied from 20 to 60%. They all, however, were distinguished by the fact that the surface area of the fiber was more or less covered by any bonding agent: polycondensed Bakelite, vulcanized rubber, hydrated cement, magnesia and calcium carbonate. Such powders are formed during the machining of asbestos-Bakelite, asbestos-rubber, asbestos-cement and sovelite articles.

All these powders revealed a very moderate fibrogenic nature in spite of the increased hardness and acicular form of some of them and the increased solubility of others.

The hydroxyproline content in animals into which the dust of sovelite was introduced (2200 µg.) is substantially less than in those receiving a mechanical mixture of 85% magnesium carbonate and calcium and 15% chrysotile-asbestos, i.e., in the same proportion as in sovelite. The introduction of asbozurite, a mechanical mixture of 15% asbestos and 85% diatomite, led to an even greater increase in the hydroxyproline content (3232 µg), this despite the fact that after 4 months the quantity of dust of the mixture of asbestos and magnesia alba in the lungs was equal to 3 mg, i.e, 1.5 times less than sovelite (4.5 mg). The indices of the fibrogenic action of these artificial mixtures confirm the hypothesis about the decisive importance of free nonsaturated ionic bonds.

Recently under our supervision there was conducted an investigation of the fibrogenic nature of faolite, a material which contains 60% anthophyllite, and as a bonding agent phenol-