

Professor Bernal

Here are the notes you asked me for,
on both TMV and the coal problem. I hope
this is what you wanted.

Rob

T. M. V. products obtained by Prof. Jaeger (Brussels)

TMV solutions contain a light fraction which can be separated by high-speed centrifugation. (The light fraction contains 2 components of slightly different molecular weight).

This substance possesses the immunological properties of TMV but contains no nucleic acid.

Reducing the pH to 3.9 causes it to aggregate into rods of the same shape and size as TMV (shown by EM photographs). These rods are subsequently stable at normal pH.

It would therefore be interesting to make an X-ray study of the following substances: —

- 1 Normal TMV
- 2 The light fraction containing no RNA
- 3 Same as 2 aggregated into rods
- 4 RNA obtained in a high-molecular-weight form

Rd Franklin

18.5.53