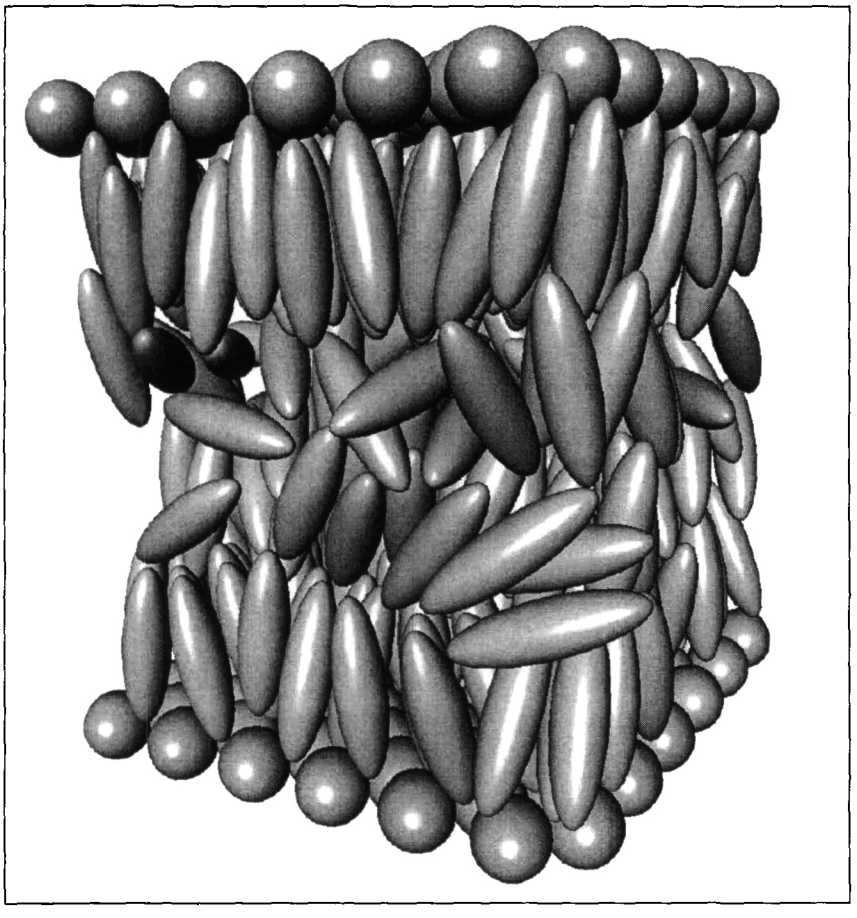
Figures appearing in EDITOR'S CHOICE *are those arising from materials research which strike the editor's fancy as being aesthetically appealing and eye-catching. No further criteria are applied and none should be assumed. When taken out of context, such figures often evoke images beyond and unrelated to the original meaning. Submissions of candidate figures are welcome and should include a complete source citation, a photocopy of the report in which it appears (or will appear), and a reproduction-quality original drawing or photograph of the figure in question.*



It is not clear whether these are prelarval eggs or postlarval cocoons. It is clear, however, that the ovoids in the middle are far less regimented than those aligned homeotropically, above and below, with the face-centered square array of spheres of which their hatchery walls are made. We are told by the creators of this ensemble that on retracting the walls somewhat to provide more room for maneuvering, the middle layer behaves in a more upright fashion. Their confidence in this prediction comes from applying a grand canonical ensemble Monte Carlo approach to simulate the ordering behavior as a function of wall separation. Of course a few other characteristics of these strata were involved. For example, they are treated exactly as if they were a thin film of molecules of a nematic liquid crystal in thermal equilibrium with a reservoir of like bulk liquid, and as if the effective intermolecular potentials and film-wall interactions were known. Microscopic directors are also introduced to tell the long axes of these "molecules" which way to point. You might think from the EDITOR'S CHOICE version of this picture that these little prolates would simply spill out the sides onto the page, but their creators (T. Gruhn and M. Schoen, *Thin Solid Films* **330** [1998] 46) hatched the idea of giving them lateral periodic boundary conditions to keep them caged. Calculations indicate that there may be interesting rheological consequences of the behavior of confined thin films of ellipsoidal molecules whose orientations are influenced by the structure of the confining surfaces. This presumes, of course, that the chrysalis-like forms do not produce butterflies that are more difficult to simulate.

https://doi.org/10.1557/S0883769400052106 Published online by Cambridge University Press