Abstract

The Surface Evolver has been used to minimise the surface area of various ordered structures for monodisperse foam. Additional features have enabled its application to foams of arbitrary liquid fraction. Early results for the case of dry foam (negligible liquid fraction) produced a structure having lower surface area, or energy, than Kelvin's 1887 minimal tetrakaidecahedron. The calculations reported here show that this remains the case when the liquid fraction is finite, up to about 11%, at which point an f.c.c. arrangement of cells becomes preferable.