



**Figure 13-11**

*X*-ray scattering observed in the laboratory for a two-dimensional array perpendicular to the direction of incident radiation. Each part shows patterns for both cylindrical and spherical film. (a) Sample geometries. (b) Layer lines resulting from the *a* periodicity of the array. (c) Layer lines resulting from the *b* periodicity of the array. (d) Actual scattering observed is the product of the functions shown in parts b and c with the atomic scattering pattern shown in Figure 13-9b.