

The importance of proteins in biomaterials science stems primarily from their inherent tendency to deposit on surfaces as a tightly bound adsorbate, and the strong influence these deposits have on subsequent cellular interactions with the surfaces.

Synthetic foreign materials acquire thrombogenicity only after first interacting with blood. The principle means by which the transformation from an inert, nonthrombogenic polymer to an active, thrombogenic surface takes place is the interaction of plasma proteins with the surface that then initiates foreign surface thrombosis.

All synthetic foreign materials are blood compatible in the sense that they do not have the intrinsic capability to cause thrombus formation that is characteristic of natural materials such as collagen and tissue factors.