Smart electrical bi-layers lipopeptides: novel peptidic chains like zigzag map esterified with phospho-glyceride as mono-layer moieties capable in forming a meso-sphere- envelop with scaffold- ability to cellular impurities

ABSTRACT

Cell impurities are an emerging nucleating molecular barriers having the capability in disordering the metabolic chain reactions of proteolysis, glycolysis and lipolysis. Their massive effects induced by copolymer crystal growth in compaction with metal and mineral transients are extended as well as in damaging DNA and mRNA structure motif and other molecular assembly e.g. histones structure unites. Their polycrystalline packing modes, polydispersity and their tendency to surface and interface adhesion prompted us in structuring scaffold biomaterials enriched with biopeptides, layered by phospho-glycerides ester-forms. The interface tension of the formed map is flexible and dependent to the surface exposure and its collapse modes to the surrounding molecular ligands. Thus, the attempts in increasing surface exposure e.g. the viscoelastic of structured lipopeptides and types of formed network structures interplays an extra- conjugating biomolecules having a least cytotoxicity effects to cells constituents. Disulfides molecules are selected to be the key regulatory element in rejoining both lipidic and proteic moieties by disordering atoms status via chemical ionization using organic catalyst. The insertion of methionine based peptidic chain at the lateral surfaces of scaffold biomaterials enhances the electron-meta-static motions by raising a molecular disordering status at distinct regions of the map e.g. epimerization into a nonpolar side that helps the chemical conjunction of disulfide groups with the esterified phosphoglycerides mono-layers. These effects in turn are accomplished by the formation of meso-sphere nonpolar-vesicles. The oxidation of disulfide group would alter the ordering of initial molecules by raising a newly molecular disorders to the map with high polarity to surface regions. In the same time indicates a continuation in the crystallization growth factor via a low chemical lesions between the impurities and a supersaturation in the intra-atomic distances with maximum cross linking to the deformed ligand with scaffold biomaterials.

Keyword: Crystal growth; Disulfide moieties; Ester; Histone; Lipopeptides; Mesosphere vesicles; Methionine; Non-polar groups; Polar groups; Scaffold biomaterials