

## Optimization of PDA Liposome Immobilization Condition on the Glass Surface

박천교, 강창덕, 심상준\*  
성균관대학교  
(simsj@skku.edu\*)

Carboxy-terminated polydiacetylene(PDA) vesicles have been attracting steady interest by virtue of their unique, intense colorimetric properties. Polymerized diacetylene liposomes formed by Extrusion method. When diacetylene monomers are self-assembled and polymerized by UV light, they generally produce a blue color that changes to red under various stimuli such as temperature, pH, mechanical force, solvent, and most interestingly, ligand-receptor interactions occurring at the polydiacetylene matrix interface. With this unique property, we can apply to the biosensor system with immobilization of PDAs on the solid substrate such as glass.

The Immobilization of polymerized PDAs on the glass surface is depending on some condition such as temperature and ratio of PDA lipids. In this study, to optimize the PDA ratio and temperature for immobilization of PDA liposome on the glass surface, we designed some kind control test. The strategy would be useful in the development of polydiacetylene-based biosensors.