Fabrication of multi-layer composed of proteins for Bioelectronic Device

<u>정용호</u>, 이 택, 민준홍¹, 최정우* 서강대학교; ¹경원대학교 (jwchoi@sogang.ac.kr*)

Multi layer composed of proteins was fabricated by the method of layer-by-layer assembly. The electrochemical property variation resulted from stacking of different proteins was investigated for the application to the bioelectronic device. The thickness changes due to the immobilization were monitored by surface plasmon resonance spectroscopy (SPR) and the variation of morphology was confirmed by atomic force microscopy (AFM). The electrochemical property variation generated from multi-protein layer was validated with cyclic voltammetry.

Acknowledgement: This research was supported by The Nano/Bio Science&Technology Program(M10536090001-05N3609-00110) of the Ministry of Education, Science and Technology (MEST), by the Original Technology Research Program for Brain Science through the National Research Foundation of Korea(NRF) funded by the Ministry of Education, Science and Technology (2009-0093907), by This work(research) is financially supported by the Ministry of Knowledge Economy (MKE) and Korea Institute for Advancement in Technology (KIAT) through the Workforce Development Program in Strategic Technology.