

## ES2

### Electrochemical Applications of Boron-doped Diamond Electrode

붕소가 도핑된 다이아몬드 전극의  
전기화학적 응용

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Highly conductive boron-doped polycrystalline diamond thin films were prepared and its electrochemical behavior are known to have unique electrochemical properties. Until now, we have prepared BDD electrode and applied these BDD electrode to various electrochemical systems. Firstly, glucose sensing was achieved and detection limit was *ca.* 50  $\mu$ M. Secondly, ozone generator was fabricated using electrolyte flow system and its performance near to PbO<sub>2</sub> electrode. Thirdly, we are trying to detect bio-chemical, which exist in human body *i.e.* epinephrine, norepinephrine and metanephrine. So far, we tried to apply BDD electrode in electrochemical system. Nowadays, ozone washing machine using BDD electrode.

#### <Reference>

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