

# PROCEEDINGS

## **BME 2006** **Biomedical Engineering Conference** "Biomedical Engineering in Education, Research and Industry"

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21 - 23 September 2006

### VENUE

HKPC Building  
78 Tat Chee Avenue  
Kowloon Tong  
Hong Kong

Organizer



Biomedical Division  
The Hong Kong Institution of Engineers

Co-organizer



Edited By  
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## KEYNOTE PRESENTATION ABSTRACT

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### PLASMA TREATED BIOMATERIALS

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The bioactivity, biocompatibility, biodegradation and bacteria disinfection of biomaterials are the key topics for materials as implants in the human body. The surface of biomaterials plays important role in the success of its applications as it directly contacts with human cells, tissues and blood. Surface modification of biomaterials becomes essential to enhance materials performance in human body. In the talk, we will present the motivations, challenges, roadmaps of the development of biomaterials and the merits of plasma surface modification of biomaterials. Undoped and doped diamond-like carbon applied in cardiovascular devices, plasma surface activation of silicon-based and titanium based materials as well as plasma treated polymeric materials for anti-bacteria will be studied.