

22nd European Conference on Biomaterials
The annual conference of the European Society for Biomaterials



ESB Workshop 1:

Understanding and Modifying the Cell Response to PEEK

Monday, September 7, 2009, 14:30-17:15

*Chair persons: Marcus Jarman-Smith (Invibio Ltd, UK) & Alexandra Poulsson
(AO Research Institute, Switzerland)*

Implantable polyetheretherketone (PEEK) polymers have a widespread use in medical devices, including spinal, orthopaedic, dental, and cardiovascular applications. The versatility of this biomaterial allows both the surface and bulk material properties to be fine tuned to specific applications. In this workshop the focus is on biological interactions with PEEK surfaces, two major areas of interest will be presented: (i) the effect of Chemical/Physical surface modifications and coating of PEEK to improve cell-surface interactions and (ii) the influence of surface topography and chemistry on bacterial adhesion

Programme:

- 14:30-15:00** ***Introductory Overview of the PEEK biomaterial and its growing use***
M. Jarman-Smith, Invibio Ltd, UK
- 15:00-15:30** ***The effect of oxygen plasma surface modification on primary human osteoblast adhesion in vitro***
A. Poulsson, AO Research Institute, Switzerland
- 15:30-15:45** Coffee/Tea break
- 15:45-16:15** ***Static and fatigue tensile properties of titanium-coated carbon fibre-reinforced PEEK***
G. Zappini, Eurocoatings, Italy
- 16:15-16:45** ***Bacterial adhesion and steps towards future infection studies, based upon experiences with titanium orthopaedic materials***
F. Moriartry, AO Research Institute, Switzerland
- 16:45-17:15** ***Chemical Surface Modification of PEEK with Polymer Layers upon experiences with titanium orthopaedic materials***
A. Brunsen, Max-Planck-Institut für Polymerforschung, Germany

Attendance of this workshop is free of charge for registered ESB participants

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