

公立大学法人 九州歯科大学

第22回 歯工学連携講演会

九州工業大学 若手研究者フロンティア研究アカデミー

日時: 2013年8月19日(月) 16:30-18:30

場所: 九州歯科大学本館4階 401講義室

In vitro models to address the cell response to biomaterials for bone tissue applications

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This talk gives an overview on representative *in vitro* models to address the cellular response to materials for bone related applications: cultures of (i) osteoblastic cells, (ii) osteoclastic cells (iii) endothelial cells and, also, co-cultures of (iv) osteoblastic and osteoclastic cells and (v) endothelial and osteoblastic cells. The application of these models provides integrated information on the bone/biomaterial interactions at a cellular and molecular level, being the first stage of the biocompatibility testing.

Bonelike®: a bonegraft material developed by researchers from Faculty of Engineering at University of Porto

Dr. Maria Ascensão Lopes

Department of Metallurgical and Materials Engineering,
Faculty of Engineering, University of Porto, Portugal



Bonelike® is a trademark of "Glass reinforced hydroxyapatite", a material obtained by a liquid sintering process of a mixture of P_2O_5 -CaO glasses and hydroxyapatite, which is composed by hydroxyapatite and b- and a-tricalcium phosphates secondary phases. Results of its physicochemical characterization, *in vitro* biological behavior- cell culture studies, *in vivo* behavior - animal experimentation and clinical trials in humans will be presented in the talk.

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