Materials for Bone and Dental Hard Tissue Substitutes

Message from the Guest Editor

The aim of this Special issue should be discussed in articles on the possible use of mineralized tissue substitutes in biomedicine. The successful use of bone substitute material allows a natural duplication of the bone cellular system. Better understanding of the bony nanostructure contributes to the more efficient use of synthetic biomaterials as bone substitutes. Special attention will be paid to new methods of nanomaterials use in bone substitution, as well as their effectiveness in clinical procedures.

Topics to be covered in this Special Issue include:

- Characterization of bone substitute materials;
- Application of bone substitute materials;
- Biocompatibility assessment of bone substitute materials;
- Physicochemical properties of bone substitute materials;
- Nanoscale modifications of bone substitute materials;
- 3D printing in bone regeneration;
- Modern titanium alloys in maxilla or mandible reconstructions;
- Materials in endodontic surgery;
- Mechanical and biocompatible properties of CAD/CAM restorative materials;
- Materials in osteosynthesis and implantology.