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HYDROGEN STORAGE INITIATIVE SERBIA**

**PROGRAM AND THE BOOK OF ABSTRACTS**

**JOINT EVENT OF THE 11<sup>TH</sup> YOUNG RESEARCHERS' CONFERENCE: MATERIALS  
SCIENCE AND ENGINEERING**

**AND**

**THE 1<sup>ST</sup> EUROPEAN EARLY STAGE RESEARCHERS' CONFERENCE ON HYDROGEN  
STORAGE**

**Edited by:**

**Jasmina Grbović Novaković**

**Nenad Ignjatović**

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## **BIOACTIVE COMPOSITE MATERIALS IN REGENERATION OF THE RESORBED BONE OF ALVEOLAR RIDGES**

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Bone loss during the systemic osteoporosis has an important role in dentistry and medicine. The aim of the study was the application of bioactive micro- and nano-composite materials, alone, and in combination with autologous plasma in osteoporotic jaw bones of rats with artificially induced osteoporosis. The effect of these composites was measured by histomorphometric and atomic absorption spectrophotometric analysis. According to the best obtained results in regeneration and recovery of the resorbed alveolar bone, it can be concluded that nano-composite combined with autologous plasma may be the material of choice to replace the osteoporotic damaged jaw bone.

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