

## New Composite Materials Based on NiTi

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**NiTi alloy is characterized by many interesting properties associated with the shape memory behaviour. Since this material can be superelastic and recover the shape after deformation, it can be considered as potential matrix for composites. In this work, the possibility of preparation of NiTi matrix composites was tested. Two kinds of materials were studied – NiTi matrix composite reinforced by ceramic particles and in-situ composite containing NiTi and hard Ti<sub>2</sub>Ni phase obtained by reactive sintering of Ni+Ti mixture.**

**Keywords:** NiTi, powder metallurgy, composite

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