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- **Background:**

Dipl-Ing, Otto-von-Guericke University Magdeburg, 2008

PhD-student, University of Birmingham, since 2009



- **PhD topic:** Degradation of TiNi-based shape memory alloys (SMAs) during thermo-mechanical cycling

SMAs are interesting materials for actuator applications. Actuators are often exposed to repeated thermal and/or mechanical cycles affecting the mechanical and functional material properties and leading to their degradation. The degradation mechanisms are not well understood yet and are investigated in this PhD thesis using several in-situ techniques including synchrotron X-ray diffraction and DIC.

- **Experimental Techniques/Equipment:**

SEM, Synchrotron X-ray diffraction, mechanical testing, Thermal analysis (DSC, dilatometry), ETMT, DIC

- **Publications:**

Synthesis and characterization of lamellar and fibre-reinforced NiAl-Mo and NiAl-Cr, J Phys: Conf Ser 240 012063, 2010