

Topic: Investigation of the relaxation and rejuvenation behavior of metallic glasses using transmission electron microscopy and calorimetric methods

In glassy systems one can define the process of relaxation roughly as the change of the energetic state from one metastable state to a more favorable metastable state towards equilibrium. In my work the main focus lies on transmission electron microscopy and calorimetry of sulfur bearing glasses and the well-known PdNiP with micro alloyed additions. The investigations shall include different starting states of the glassy materials as well as specific thermo-mechanical pre-treatment and their impact on the relaxation behavior.