Karlsruhe Institute of Technology

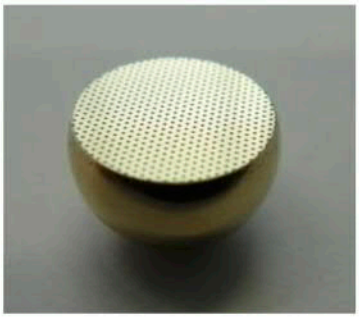
Institut für Angewandte Materialien

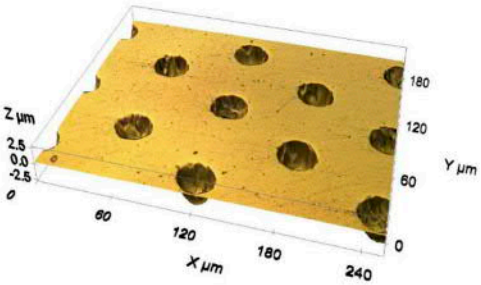
Bachelor / Master Thesis

Tribological performance of material with different sliding energy densities

Background:

The energy applied into the material under tribological loading is a key parameter in tribology. It is an elegant way to modify the sliding energy density by using laser surface texturing. By changing the dimple density and sliding orientation systematically, the elementary mechanisms of friction and wear will be revealed from the approach of varying sliding energy density.





Project description:

- Laser surface texturing of dimples
- Alignment of the dimples with different angles to the sliding direction
- Tribological investigation of samples with different dimple densities

Qualification:

- Interest in advanced material experimental methods
- Independence, reliability

We offer:

- Intensive support and supervision
- Cutting-edge topic
- Modern processing methods

Interested?

Please contact: Dr. Christian Greiner, IAM-CMS, greiner@kit.edu,
T: 0721/608-26407