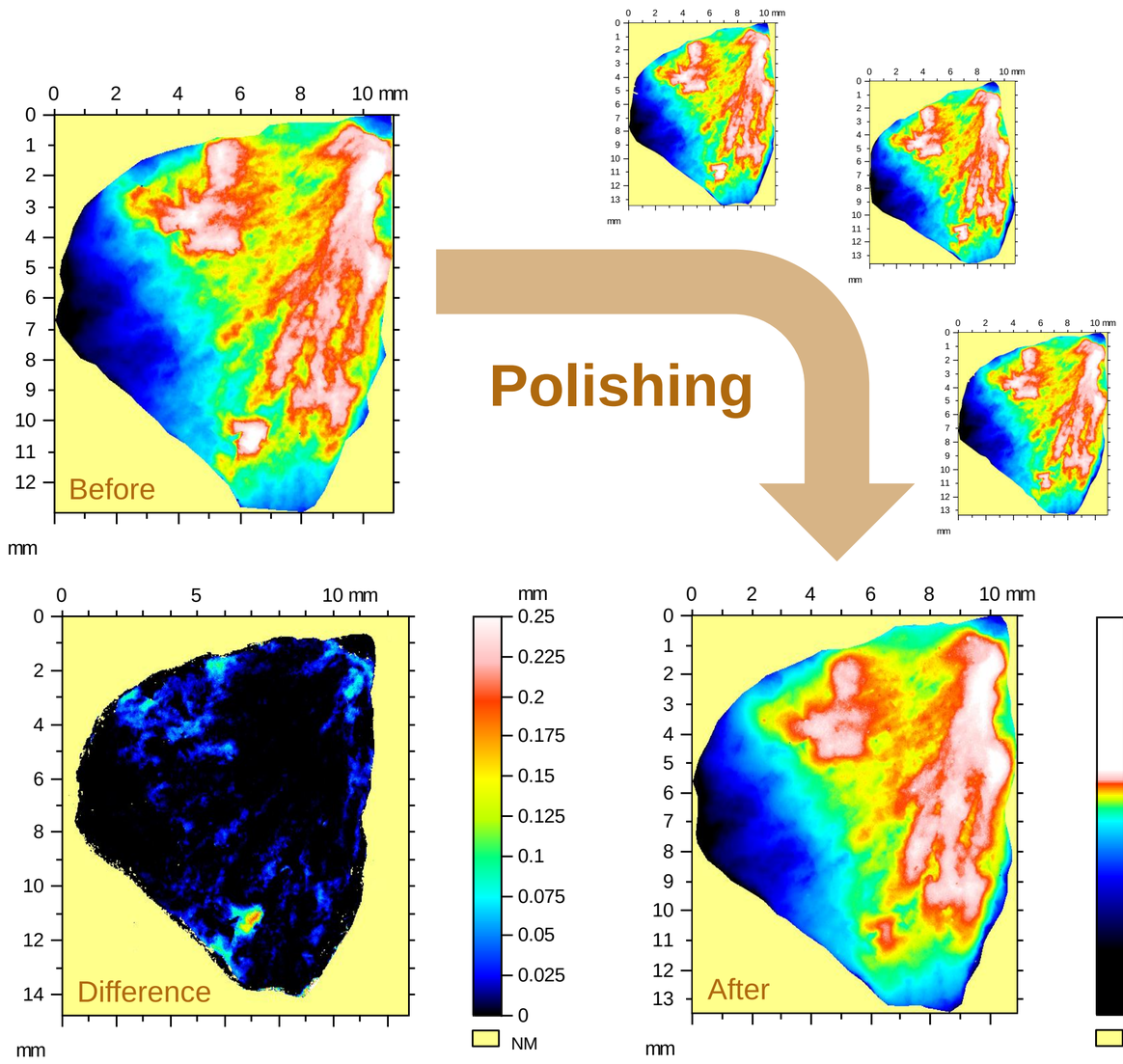
Texture and friction

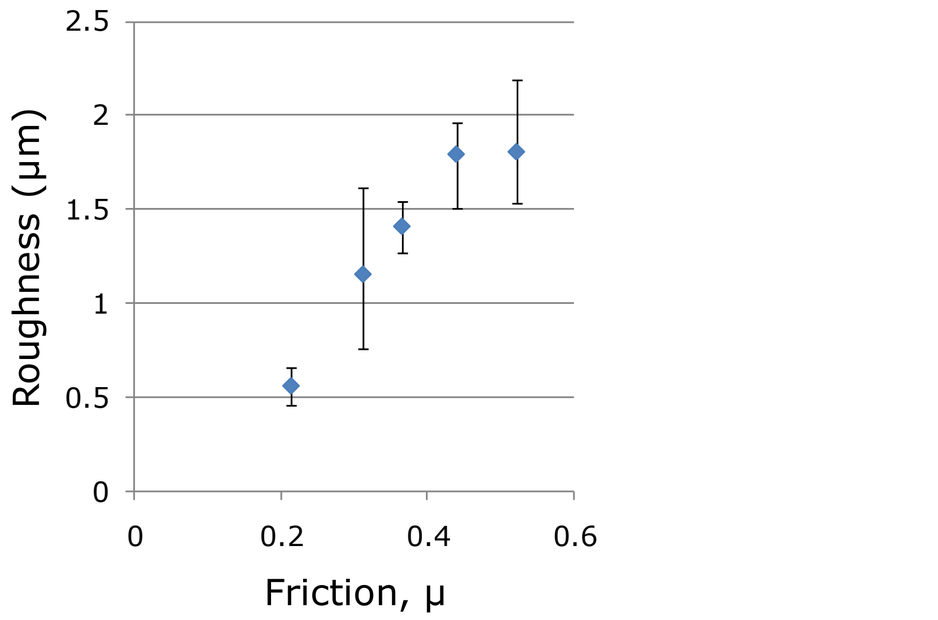
Three-dimensional characterisation of surface texture for road stones undergoing simulated traffic wear

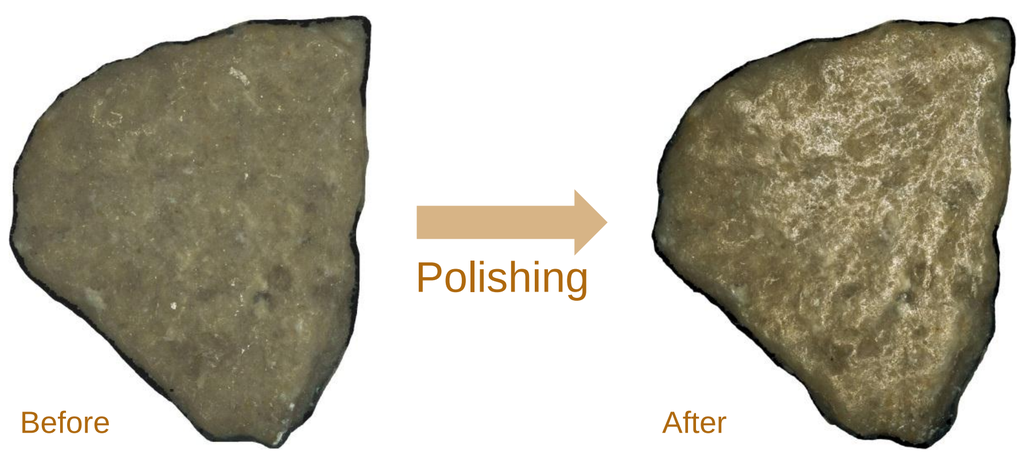
The mechanism by which friction is generated at the tyre/road interface is complicated and its dependence on the roughness of the road surface (at any wavelength) is not well understood.

Experiments are being carried out to examine the surface texture of aggregate particles as they are polished in the laboratory. At five stages of polishing, and therefore five levels of friction, aggregate particle surfaces were examined using an optical, three-dimensional surface profile measurement system.

The results allow detailed exploration of the link between abrasion and surface texture and have the potential to provide a clearer understanding of the link between surface texture and friction.







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