

Funding for Slope Failure Monitoring Research Project



UK-based laser scanning specialist 3D Laser Mapping has embarked on a research project, in partnership with Durham University, following the award of a share of a multi-million pound government grant. The project aims to develop new models for slope failure monitoring, and will be used to improve the safety and operational efficiency of mining companies around the world.

Knowledge Transfer Partnerships (KTP) like this one between 3D Laser Mapping and Durham University help businesses improve their competitiveness and productivity through better use of the knowledge, technology and skills that already reside within UK colleges and universities.

KTP supports innovation-led partnerships between commercial organisations such as 3D Laser Mapping, leading academic institutions like Durham University and external stakeholders such as the Technology Strategy Board, commented Dr Graham Hunter, 3D Laser Mapping's executive chairman and founder. It is the leading knowledge-exchange programme in Europe and 3D Laser Mapping is extremely proud to be a part of it, he added.

By utilising the recently gained knowledge and expertise of its KTP Associate, the laser scanning specialist can build on its existing mine-monitoring solution SiteMonitor and incorporate the latest principles and innovations from academic research.

The project sees KTP Associate Dr Ashraf Afana join the 3D Laser Mapping team from Durham University where he will work on a three-year placement on the integration of full waveform (FW) data processing into the 'SiteMonitor' product. Dr Afana, who has a PhD in Fluvial Geomorphology from the University of Almeria in Spain, will be working in a 'hands-on' technical position developing and implementing a slope monitoring system that utilises strain-rate based failure modelling. He will work closely with 3D Laser Mapping's Research and Development division and will undertake project work with some of the world's leading mining companies.

Dr Afana stated this is a once in a lifetime opportunity. He is going to work at the cutting edge of slope monitoring research and development software using his knowledge and skills to further develop a system that is already saving lives and improving efficiencies. Afana will gain hands-on experience of the system and get the chance to extract first-hand feedback from existing and potential users.

This partnership received financial support from the Knowledge Transfer Partnerships programme (KTP), the Technology Strategy Board and other government funding organisations.