



## **Examining the Real Merits of the Virtual Microscope**

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The Geoscience e-Laboratory (GeoLAB) project is a cooperative digital petrological microscopy technology enhanced learning (TEL) resource development project involving the four main university geoscience teaching centres in Ireland. Collaborating with the Open University (UK), a new digital library of petrographic thin sections has been added to the Virtual Microscope for Earth Sciences (VMfES) online repository. The collection was compiled with a view to introducing high-quality samples to teaching programmes in a manner that hitherto was limited by sample and microscope availability and cost and the temporal limits of laboratory access. The project has proceeded to explore the pedagogical implications of using the Virtual Microscope in teaching programmes. Online assessments and self-guided exercises developed using applications such as Google Forms have been introduced into programmes at each centre, and complimented by tutorial and interactive videos designed to support self-guided learning. The GeoLab project is reporting on the pedagogical implications of providing students with unimpeded access to high-quality petrographic learning resources during the term of semester and in advance of student assessments. Additionally, the project is collating data on the perceptions of both teachers and learners to using online learning media in mineralogy and petrology programmes, and if there are benefits therein to the more traditional styles of petrology and microscopy teaching and learning.