Most Young Scholars Grant (Columbus Program): Innovative technology research: mitigating landslide damage under extreme conditions

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Continuous global environmental change, leading to extreme rainfall and frequent earthquakes, has played a pivotal role in recent geohazard activities, and the associated landslides and disasters would cause damages directly/indirectly. Notice that extreme events are becoming the new normal, geohazard activities will become more frequent and disruptive. Analyses of landslides under the condition of extreme events will require hybrid approaches and rely on refined information and quality data. The break points include: 1) emphasize the initiation time to landslide events and locate it precisely; 2) define Taiwan mudstone failures and promote it to be internationally recognized; 3) leverage experimental tools via innovative ideas and new applications. To expand the scope of the work, development and advancement of disaster prevention technologies will also part of the achievements. It is hoped that the work may shed new lights internationally and solve geohazard challenges faced in Taiwan.

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