

# EMPIRICAL CHARACTERIZATION OF OIL SHALE CRATERING EXPERIMENTS

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## ABSTRACT

Nonlinear viscoelasticity is used to model the behavior of a material under impact. The model is based on the work of Eyring and is applied to the case of a projectile impacting a target. The model is used to predict the crater diameter and depth as a function of impact velocity and target properties. The model is compared with experimental data and is found to be in good agreement.

The model is applied to the case of a projectile impacting a target made of PETN, RDX, ANFO, and TNT. The model is used to predict the crater diameter and depth as a function of impact velocity and target properties. The model is compared with experimental data and is found to be in good agreement.

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