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Editorial

We are pleased to release this second issue in the current volume of the **Transactions on Machine Design**.

Engineering ceramics is basically a machining based on grinding technology as *Yang Hongmei* views in their paper on '**Experimental Research on Engineering Ceramics Grinding Assisting with Ultrasonic Vibration**'. In his study he found that in the surface grinding using conventional process, the surface roughness obviously lowered and at the same time the topography improved. He has used 3D topography and other sophisticated tools to study the engineering ceramics.

Landslide dams which are formed by debris and rocks frequently fail and lead to upstream and downstream flooding. Hence *Bai Hua*, and *Wang Shaoyu* proposed an improved model for landslide dam disaster events detection based on Support Vector Machine and Ridge Regression in their paper on '**An improved classification algorithm applied on landslide dam disaster events detection**'. When the authors tested the effectiveness and superiority of the new method found that the boosting approach is more effective than previous methods.

Coalmine gas concentration forecasting is very significant to ensure the safety of mining. *Yang Hongmei* in the paper on '**Short-Term Coalmine Gas Concentration Prediction Based on Wavelet Transform and Extreme Learning Machine**' has proposed a hybrid forecasting model that integrates wavelet transform and extreme learning machine (ELM) termed as WELM (wavelet based ELM). In the experimentation they he found that the proposed model is very promising and can be implemented in a real-time one-step or multi-step ahead prediction.

The three research pieces presented in this work record high level contributions in terms of novelty.

Editors