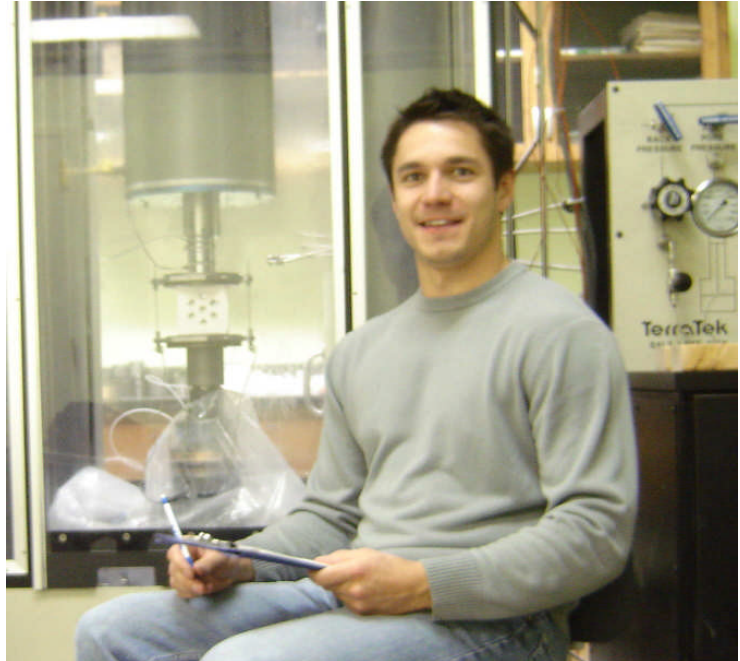


Unconfined Compressive Strength of a Rock-like Material

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Abstract:

Research has been undertaken to determine how the distribution of void spaces in a rock like material will affect its unconfined compressive strength (UCS). This has involved the construction of approximately 45 specimens with 8 different configurations of porosity distributions along with a set of solid samples. The resulting UCS values will be compared to those determined by numerical modeling software such as Fast Lagrangian Analysis of Continua (FLAC) and Phase2. If the numerical models can accurately predict the UCS of the lab specimens it may open up possibilities of decreasing the amount of timely and costly lab testing needed to determine the characteristics of rock properties and replace this process by numerical modeling methods.

Biography:

I was born and raised in Edmonton, Alberta, which is where I first became interested in Geological Engineering. I received a diploma in Geological Technology from Nait, after which I worked in diamond exploration and the diamond mining industry for a little over a year. It was at this time when I decided to enroll at Montana Tech to obtain a degree in Geological Engineering. I am graduating in December, 2007 and plan on working for a few years and then possibly pursuing a Master's Degree in a related field.