

Dimitri Sverjensky

**STATEMENT OF WORK:**

The consultant will conduct numerical modeling of water-rock-gas interactions in the near field of the proposed YM high-level waste repository and will participate in the interpretation of the results of the calculations. More specifically, the consultant will collaborate with CNWRA staff in developing new models for a set of local chemical environments within the near field. Coupled reactions with cement phases will be of particular importance. The work will include interpretation of phase relations, estimation of thermodynamic parameters, and evaluation of important reactions.