 Highlights and Breakthroughs  

Alunite on Mars  

KATHELEON C. BENISON\textsuperscript{1,*}  

\textsuperscript{1}Department of Geology and Geography, West Virginia University, Morgantown, West Virginia 26506, U.S.A.  

Abstract: Identification of minerals on the surface of Mars is critical to understanding the geological history of our neighbor planet. In this issue of \textit{American Mineralogist}, Ehlmann et al. report their discovery of alunite $[\text{KAl}_3(\text{SO}_4)_2(\text{OH})_6]$ in Cross Crater on Mars. Because terrestrial alunite forms from Al-rich acid sulfate waters, these results strongly suggest the past presence of Al-rich acid saline martian waters. \textbf{Keywords:} Alunite, Mars, acid, brines, CRISM