REVIEW

INVITED CENTENNIAL ARTICLE

Mineralogy, materials science, energy, and environment: A 2015 perspective

ALEXANDRA NAVROTSKY^{1,*}

¹Peter A. Rock Thermochemistry Laboratory and NEAT ORU, University of California Davis, Davis, California 95616, U.S.A.

ABSTRACT



Mineralogy is both a basic and applied discipline, basic in understanding, on the atomic scale, the structure, properties, and reactivity of minerals and applied in its relevance to geology, planetary processes, environmental issues, and materials in the broader sense. This article is a 2015 snapshot of the interrelations and opportunities linking mineralogy and such other fields. The emphasis is on showing how relevant, indeed essential, mineralogy is to the stewardship of our planet in the broadest sense.

Keywords: Mineralogy, nuclear fuel cycle, perovskites, nanophase, confinement, critical materials, techniques, Review, Invited Centennial article