



## 2<sup>nd</sup> International Conference and Exhibition on Materials Science & Engineering

October 07-09, 2013 Hampton Inn Tropicana, Las Vegas, NV, USA

### Strategic metals in the United States civil war

**Charles D. Ross**  
Longwood University, USA

During the United States Civil War, certain materials assumed heightened importance. In addition to industrial chemicals like sulfuric acid and sodium chloride, metals like lead and copper were crucial to a successful war effort. The challenge of procuring and processing these metals was exacerbated in the Confederacy where the industrial base was small and the Union blockade hindered foreign shipments. This paper examines the military need for copper and lead and the creative ways in which the Confederacy procured and processed them.

#### Biography

Charles D. Ross is Professor of Physics and Dean of the Cook-Cole College of Arts and Sciences at Longwood University. He has published three books on the role of science and technology in the U.S. Civil War and has appeared on *The History Channel*, *The National Geographic Channel*, *PBS* and *NPR* as well as many other media outlets.

[rosscd@longwood.edu](mailto:rosscd@longwood.edu)