

**Assembly of metal-anion arrays within layered perovskite hosts.** Kodenkandath, Thomas A.; Lalena, John N.; Viciu, Marilena L.; Xu, Lianbin; Zhou, Weillie L.; Carpenter, Everett E.; O'Connor, Charles J.; Wiley, John B. Department of Chemistry and the Advanced Materials Research Institute, University of New Orleans, New Orleans, LA, USA. Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000 (2000), INOR-440. Publisher: American Chemical Society, Washington, D. C CODEN: 69CLAC Conference; Meeting Abstract written in English. AN 2000:331216 CAPLUS (Copyright 2000 ACS)

#### **Abstract**

The ability to routinely construct metal-anion arrays within receptive host compds. offers an important method for the prepn. of new materials. Currently we are working to develop such chem. through the co-exchange of both cations and anions. Initial successes have involved the construction of copper-halide layers within Dion-Jacobson perovskite hosts. Compds. such as  $(\text{CuX})\text{LaNb}_2\text{O}_7$  ( $\text{X}=\text{Cl}, \text{Br}$ ) have been prepd. by ion exchange of the metal-halide at low temps. ( $<500^\circ\text{C}$ ). The structural, magnetic and electronic properties of these compds. will be presented and the extension of these methods to other metal-anion-host combinations will be discussed.