

# Accepted Manuscript

Removal of Boron Species by Layered Double Hydroxides: A Review

Frederick L. Theiss, Godwin A. Ayoko, Ray L. Frost

PII: S0021-9797(13)00309-3

DOI: <http://dx.doi.org/10.1016/j.jcis.2013.03.051>

Reference: YJCIS 18711

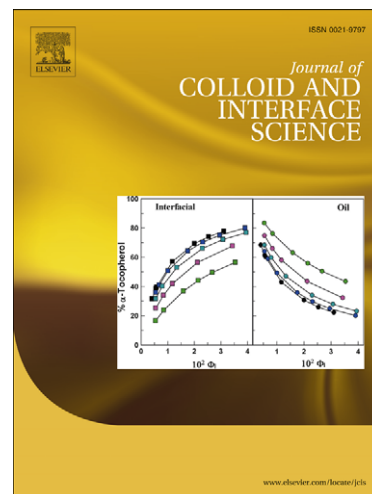
To appear in: *Journal of Colloid and Interface Science*

Received Date: 20 February 2013

Accepted Date: 28 March 2013

Please cite this article as: F.L. Theiss, G.A. Ayoko, R.L. Frost, Removal of Boron Species by Layered Double Hydroxides: A Review, *Journal of Colloid and Interface Science* (2013), doi: <http://dx.doi.org/10.1016/j.jcis.2013.03.051>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



# Removal of Boron Species by Layered Double Hydroxides: A

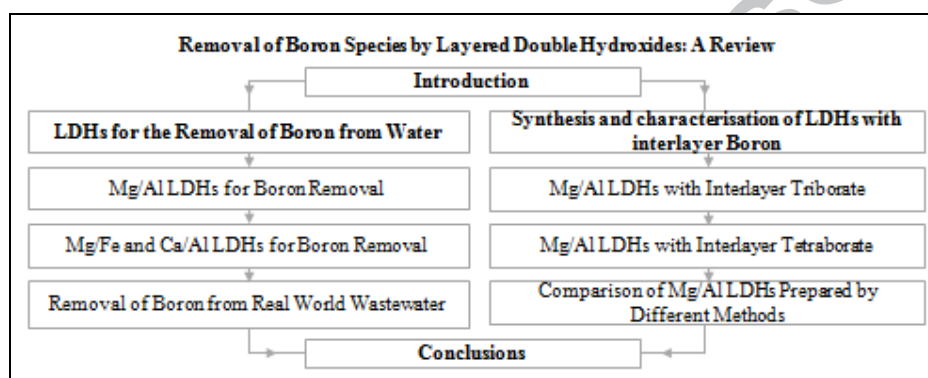
## Review

Frederick L. Theiss, Godwin A. Ayoko, and Ray L. Frost\*

*School of Chemistry, Physics and Mechanical Engineering, Science and Engineering*

*Faculty, Queensland University of Technology, Brisbane Queensland 4001, Australia.*

### Graphical Abstract



### Highlights

- Removal of boron from solutions by layered double hydroxides has been reviewed
- Characterisation of layered double hydroxides with interlayer boron is reviewed
- Mechanisms of boron uptake were anion exchange, reformation, direct precipitation
- Layered double hydroxides have shown good boron uptake in small scale experiments
- There is still considerable scope for future work on this topic

\* Author to whom correspondence should be addressed (r.frost@qut.edu.au)

Download English Version:

<https://daneshyari.com/en/article/6999615>

Download Persian Version:

<https://daneshyari.com/article/6999615>

[Daneshyari.com](https://daneshyari.com)