

## Curriculum Vitae

**Name** Yu Jia  
**Position** Scientist  
**Contact Info** T: +299 36 12 06; E: yuji@natur.gl  
**Education** Ph.D University of Oslo 2006  
 M.Sc. Aalborg University 2002

### Professional experiences

Period	Employer	Title
2014-	Grønlands Naturinstitut	Scientist
2011-2014	Luleå University of Technology	Postdoc
2006-2011	Multiconsult	Environmental Geologist

**Profile** Ph.D Degree in environmental engineering. Jia's expertise covers mine waste remediation (including both biotic and abiotic methods); soil and groundwater contamination and remediation (using mineralogical, geochemical and environmental microbiological methods); geochemical and hydrogeological modeling (including processes of seepage, groundwater flow and pollutants transport). Jia's research interests include environmental chemistry, biodegradation and hydrogeology.

- Selected Projects**
- Biodegradability of digested sewage sludge for mine tailings remediation.
  - Feasibility of using alkaline paper mill residues in covering of mine tailings.
  - Environmental investigation on industrial and domestic sites.
  - Calculation of flow in dry dock, groundwater flow affected by excavation stages and pollutant transport in groundwater.
  - Environmental impact of triazoles to soil and groundwater.

### Publications

#### Peer-reviewed

**Jia, Y.,** Maurice, C., Öhlander, B. (2014) Effect of the Alkaline Industrial Residues Fly ash, Green Liquor Dregs, and Lime Mud on Mine Tailings Oxidation When Used as Covering Material. *Environmental Earth Sciences* 72:319–334.

<http://dx.doi.org/10.1007/s12665-013-2953-3>

**Jia, Y.,** Nason, P., Alakangas, L., Maurice, C., Öhlander, B. (2014) Degradability of Digested Sewage Sludge Under Anaerobic Conditions for Mine Tailings Remediation. *Environmental Earth Sciences* 72:3643–3654. <http://dx.doi.org/10.1007/s12665-014-3275-9>

**Jia, Y.,** Maurice, C., Öhlander, B. (2014) Metal Mobilization in Tailings Covered with Alkaline Residue Products: Results from a Leaching Study Using Fly Ash, Green Liquor Dregs, and Lime Mud. *Mine Water and the Environment*. Accepted.

Makitalo, M., Maurice, C., **Jia, Y.,** Öhlander, B. (2014) Characterization of Green Liquor Dregs, Potentially Useful for Prevention of the Formation of Acid Rock Drainage. *Minerals* 4, 330-344. <http://dx.doi.org/10.3390/min4020330>

**Jia, Y.,** Stenman, D. Mäkitalo, M., Maurice, C. Öhlander, B. (2013) Use of Amended Tailings as Mine Waste Cover. *Waste and Biomass Valorization* 4:709-718. <http://dx.doi.org/10.1007/s12649-013-9232-0>

Lu, J., Alakangas, L., **Jia, Y.,** Gotthardsson, J. (2013) Evaluation of the Application of Dry Covers Carbonate-rich Sulphide. *Journal of Hazardous Materials* 244-245:180-194. <http://dx.doi.org/10.1016/j.jhazmat.2012.11.030>

**Jia, Y.,** Aagaard, P., Breedveld, G.D. (2007) Column Studies on Transport of Benzotriazole in a Sandy Aquifer, and a Zerovalent Iron Barrier. *Chemosphere* 69:1409-1418.  
<http://dx.doi.org/10.1016/j.chemosphere.2007.04.074>

**Jia, Y.,** Breedveld, G.D., Aagaard, P. (2007) Sorption of Benzotriazole to Soil and Iron Minerals. *Chemosphere* 67:250-258.  
<http://dx.doi.org/10.1016/j.chemosphere.2006.10.021>

**Jia, Y.,** Molstad, L., Frostegård, Å., Aagaard, P., Breedveld, G.D., Bakken, L. (2007) Kinetics of Microbial Growth and Degradation of Organic Substrates in Subsoil as Affected by an Inhibitor, Benzotriazole: Model Based Analyses of Experimental Results. *Soil Biology & Biochemistry* 39:1597-1608.  
<http://dx.doi.org/10.1016/j.soilbio.2007.01.011>

**Jia, Y.,** Bakken, L.R., Breedveld, G.D., Aagaard, P., Frostegård, Å.  
Organic Compounds That Reach Subsoil May Threaten Groundwater Quality; Effect of Benzotriazole on Degradation Kinetics and Microbial Community Composition. *Soil Biology & Biochemistry* 38:2543-2556.  
<http://dx.doi.org/10.1016/j.soilbio.2006.03.010>

**Conference  
Proceedings**

**Jia, Y.,** Stenman, D. Mäkitalo, M., Maurice, C. Öhlander, B. (2012)  
Use of Rest Products As Additive in Tailings Paste for the Mitigation of ARD: Effect of Green Liquor dregs and Fly Ash addition on Geotechnical Stabilization of Tailings. Proceedings of the 8<sup>th</sup> International of Construction with Alternative Materials. WASCON 2012 Conference Proceedings. Gothenburg, Sweden. 8p.  
<http://www.swedgeo.se/wascon2012>

**Jia, Y.,** Aagaard, P., Breedveld, G.D. (2007)  
Triazoles-adsorption Characteristics to Fe<sup>0</sup> and Strategies for Remediation of Contaminated Groundwater. International Conference on Water Pollution in Natural Porous Media at Different Scales-Assessment of Fate, Impact and Indicators. WAPO<sup>2</sup>, April 11-13, Barcelona, Spain.  
<http://www.proyctosh2o.upc.es/WAPO/WAPO2.pdf>

Bakken, L.R., **Jia, Y.** (2006)  
Benzotriazole Effects on Microbial Growth and Mineralization of Organic Substances in Subsoils, Experimental Data and Model Based Analyses. Conference Lecture and Academic Presentation. University of Helsinki. Oct. 23–24. Helsinki.

**Jia, Y.,** Aagaard, P., Breedveld, G.D. (2006)  
Transport of De-icing Additive Benzotriazole in a Sandy Aquifer, and a Zerovalent Iron Barrier. Oral Presentation in 5th International Conference Contaminants in Freezing Ground, Oslo, Norway.

**Jia, Y.,** Bakken, L.R., Frostegård, Å., Breedveld, G.D., Aagaard, P. (2004)  
Benzotriazole in Subsoil: Effects on Microbial Activities, Growth and Community Composition. Oral presentation in Third NorFA Workshop on Microbial Ecology and Bioremediation in Cold Climate (MECBIO), Copenhagen, Denmark.