Further Reading List for London Lecture: Mineral Solutions to Global Problems

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Wednesday 20 January

The reading list can also be found at http://www.geolsoc.org.uk/MineralSolutions16

Popular Articles and Resources

1. Background Information and Resources

    a. Geoscientist Magazine – Growth of the soil

    https://www.geolsoc.org.uk/Geoscientist/Archive/January-2009/Growth-of-the-soil

    b. Elements magazine – April 2008 - Phosphates and Global Sustainability

    http://www.elementsmagazine.org/archives/

2. Soils as Carbon Sinks

    a. What are carbon sinks?

    http://www.livescience.com/32354-what-is-a-carbon-sink.html

    b. Carbon brief - World's plants and soils to switch from carbon sink to source by 2100

    http://www.carbonbrief.org/worlds-plants-and-soils-to-switch-from-carbon-sink-to-source-by-2100-study-shows

    c. Documentary – The Soil Solution to Climate Change by Sustainable World Media.

    http://sustainableworldmedia.com/the-soil-solution/

3. Minerals , Soil and Food Security

    a. A rock and a hard place: Peak phosphorus and the threat to our food security - Soil Association

    http://www.soilassociation.org/LinkClick.aspx?fileticket=eeGPQJORrkw%3D

    b. Global Food Security - The importance of soils for ensuring food security

    http://www.foodsecurity.ac.uk/assets/pdfs/1309-gfs-insight-importance-of-soils.pdf

c. United Nations Food and Agriculture Organisation – Healthy soils are the foundation of food production

   http://www.fao.org/news/story/en/item/284152/icode/

d. Sci Dev Net – Soil Erosion may threaten global food security

   http://www.scidev.net/global/farming/news/soil-erosion-threatens-global-food-security.html

e. Reuters – Peak soil threatens future global food security

   http://www.reuters.com/article/us-peaksoil-agriculture-idUSKBN0FM1HC20140717

Journal Articles and Books

4. Washbourne, C-L., Lopez-Capel, E., Renforth, P., Ascough, P. L. and Manning, D.A.C. (2015) Rapid removal of atmospheric CO2 by urban soils. Environmental Science and Technology, 49, 5434-5440, DOI 10.1021/es505476d (open access).

5. Manning, D. A. C. (2015) How minerals will feed the world in 2050. Proceedings of the Geologists' Association, 126, 14-17.

6. Ciceri, D, Manning, D. A. C. and Allanore, A. (2015) Historical and technical developments of potassium resources. Science of the Total Environment, 502, 590–601.

7. Manning, D.A.C., Renforth, P., Lopez-Capel, E., Robertson, S. and Ghazireh, N. (2013) Carbonate precipitation in artificial soils produced from basaltic quarry fines and composts: an opportunity for passive carbon sequestration. International Journal of Greenhouse Gas Control, 17, 309-317 (open access).

8. Manning, D. A. C. (2014) Rates and Mechanisms of Functional Mineral Reactions in Soils. In: Geotherapy: Innovative Methods of Soil Fertility Restoration, Carbon Sequestration, and Reversing CO2 Increase (eds. T. J. Goreau, R. W. Larson, J. Campe), CRC Press, 121-132.

9. Manning, D. A. C. (2012) Plant Nutrients. in: Soil Quality and Food Security (eds. R M Harrison, R E Hester) Issues in Environmental Science and Technology 35, Royal Society of Chemistry, London, 183 – 197.

10. Manning, D. A. C. (2012) Minerals and Soil Development. In: Environmental Mineralogy (eds. D. J. Vaughan and R. Wogelius), Mineralogical Society, London, 489pp.