

31st May 2017

Dear Sir/Madam,

The following highlights are to be used for the paper entitled “The magnetic structure and recording fidelity of sub-micron greigite ( $\text{Fe}_3\text{S}_4$ )” submitted to the journal *Earth and Planetary Science Letters* with Dr. Lesleis Nagy, Dr. Adrian R. Muxworthy, Prof. Wyn Williams and Dr. Karl Fabian:

- 1. Finite-element micromagnetic model of greigite**
- 2. SD-PSD threshold ~54 nm**
- 3. Continuous PSD-MD transition above ~200 nm**
- 4. SD greigite found to be superparamagnetic**
- 5. Palaeomagnetic recorder above ~70 nm**

Yours sincerely,



Miguel A. Valdez Grijalva