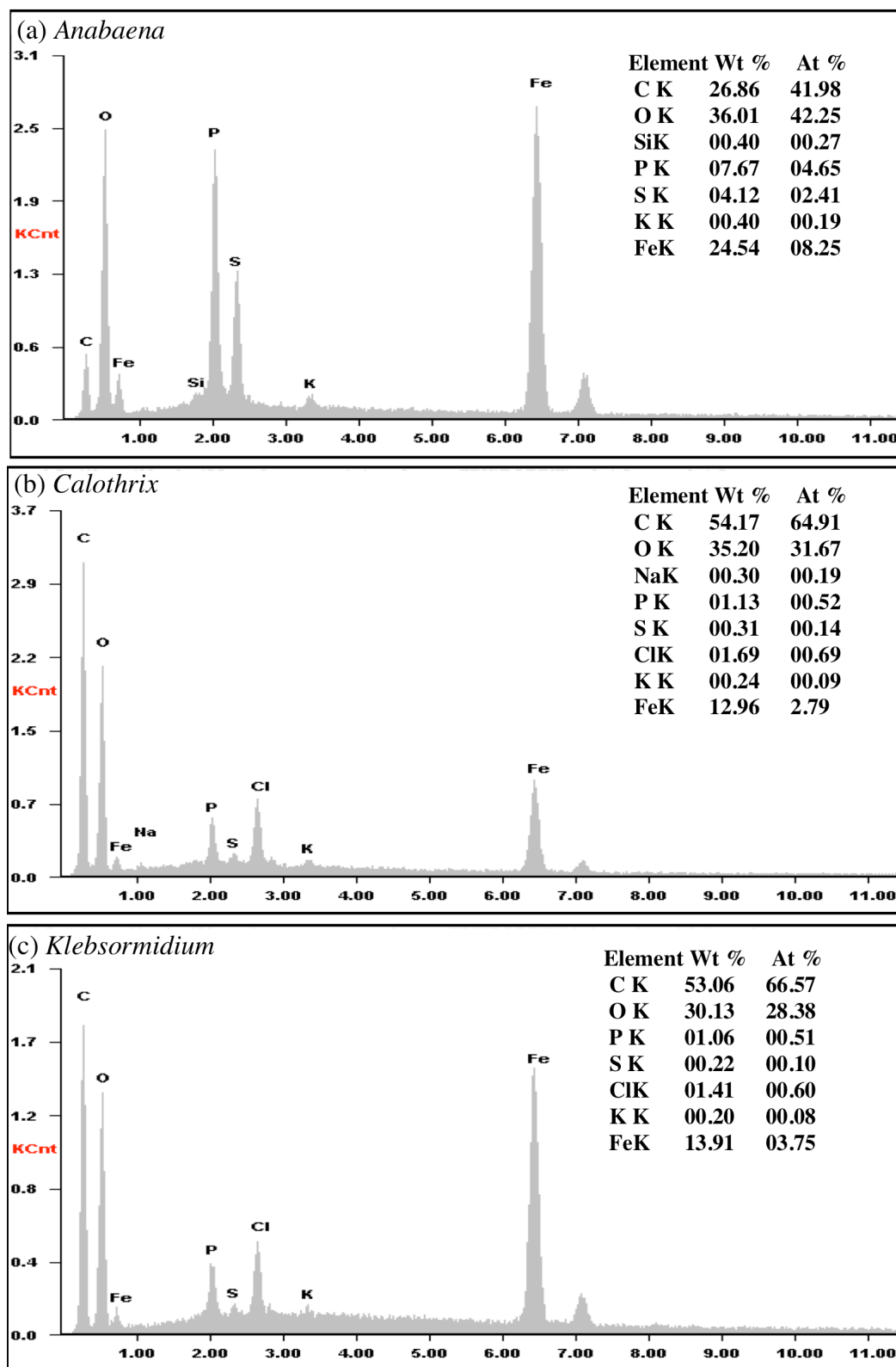
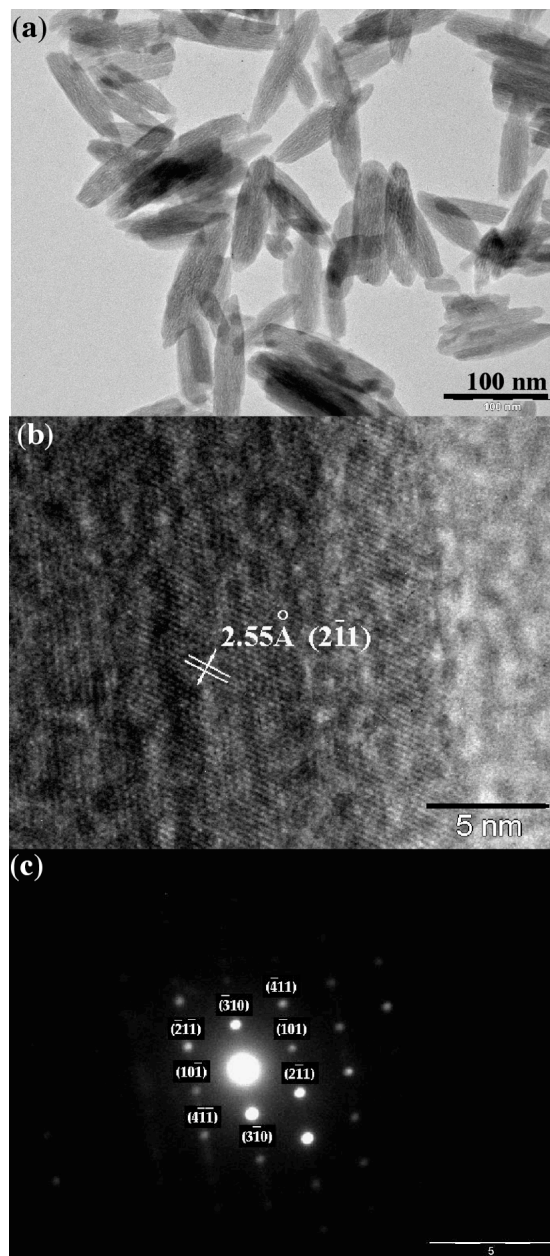


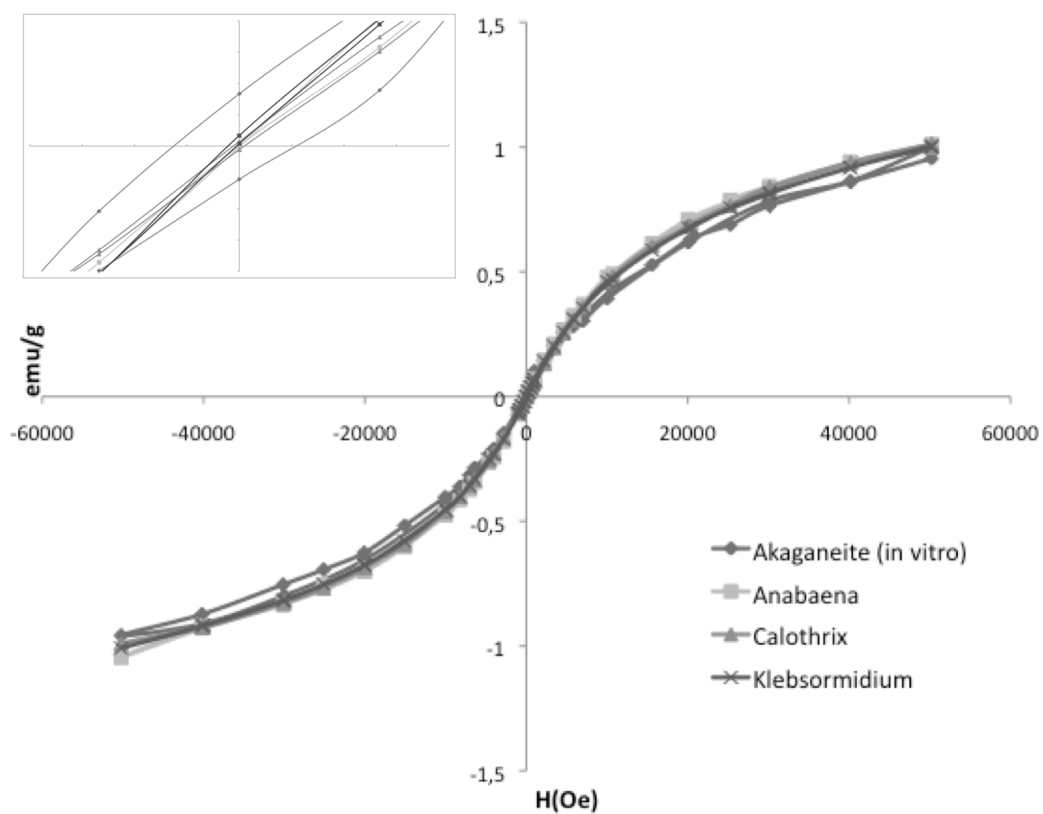
Supplementary Information (SI)



SI-1. EDS analysis of (a) *Anabaena*, (b) *Calothrix* and (c) *Klebsormidium* micro-algae after iron salts addition.



SI-2. *In vitro* synthesized β -FeOOH nanorods as seen from (a) TEM, (b) HRTEM. The corresponding selected area diffraction (SAED) pattern could be indexed as the [131] zone axis of the tetragonal β -FeOOH structure (c).



SI-3. (a) hysteresis curve recorded at 4.5 K for *in vitro* and *in vivo* β -FeOOH. Insert : enlargement at low field.

