

Fig. 1. Peak P2S of XPS spectrum from metal oxides incubated over night in cell culture medium. The highest levels of phosphate are seen on MnO and ZnO. The analysis of Ti and Mg surfaces has been published previously (Nygren et al Biointerphases 2017)

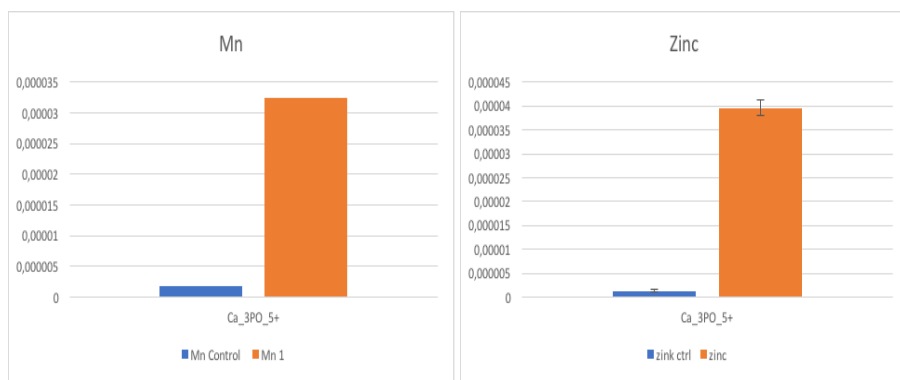


Fig.2. Intensity of peak representing HA in a ToF-SIMS spectrum from metal oxides incubated in cell culture medium.

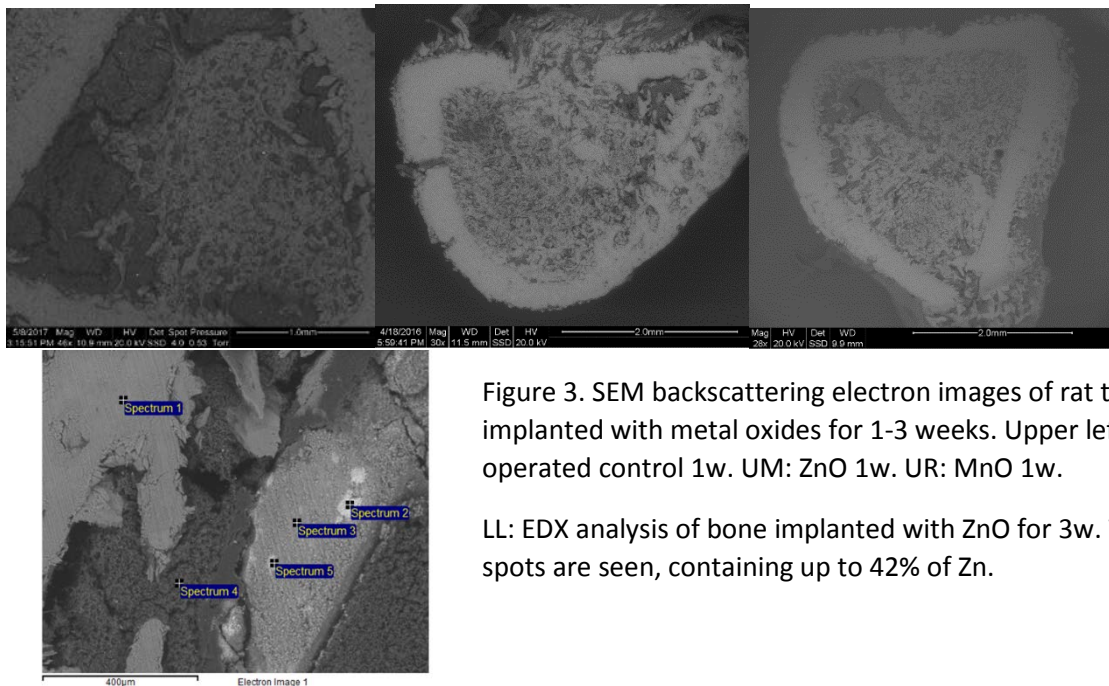


Figure 3. SEM backscattering electron images of rat tibia implanted with metal oxides for 1-3 weeks. Upper left: Sham-operated control 1w. UM: ZnO 1w. UR: MnO 1w.

LL: EDX analysis of bone implanted with ZnO for 3w. White spots are seen, containing up to 42% of Zn.