

PUBLICATIONS LIST

A. Peer Reviewed Journals:

28. Croteau MN, Dybowska A, Luoma SN, **Misra SK**, Valsami-Jones E. Isotopically modified silver nanoparticles to assess nanosilver bioavailability and toxicity at environmentally relevant exposures. *Environmental Chemistry*. Article in Press
27. **Misra SK**, Nuseibeh S, Dybowska A, Berhanu D, Tetley TD, Valsami-Jones E. Comparative study using spheres, rods and spindle-shaped nanoplatelets on dispersion stability, dissolution and toxicity of CuO nanomaterials. *Nanotoxicology* 2014, 8; 422-32
26. García-Alonso J, Rodríguez-Sánchez N, **Misra SK**, Valsami-Jones E, Croteau MN, Luoma SN, Rainbow PS. Toxicity and accumulation of silver nanoparticles during development of the marine polychaete *Platynereis dumerilii*. *Science of the Total Environment* 2014, 476; 688-95
25. Pang C, Selck H, Banta GT, **Misra SK**, Berhanu D, Dybowska A, Valsami-Jones E, Forbes VE. Bioaccumulation, toxicokinetics, and effects of copper from sediment spiked with aqueous Cu, nano-CuO, or micro-CuO in the deposit-feeding snail, *Potamopyrgus antipodarum*. *Environmental Toxicology and Chemistry* 2013, 32; 1561-73
24. Bucchianico SD, Fabbri MR, **Misra SK**, Valsami-Jones E, Berhanu D, Reip P, Bergamaschi E, Migliore L. Multiple cytotoxic and genotoxic effects induced in vitro by differently shaped copper oxide nanomaterials. *Mutagenesis* 2013, 28; 287-99
23. **Misra SK**, Dybowska A, Berhanu D, Luoma SN, Valsami-Jones E. The complexity of nanoparticle dissolution and its importance in nanotoxicological studies. *Science of the Total Environment* 2012, 438; 225-32
22. Khan FR, **Misra SK**, García-Alonso J, Smith BD, Strekopytov S, Rainbow PS, Luoma SN, Valsami-Jones E. Bioaccumulation dynamics and modeling in an estuarine invertebrate following aqueous exposure to nanosized and dissolved silver. *Environmental Science & Technology* 2012, 46; 7621-28
21. Pang C, Selck H, **Misra SK**, Berhanu D, Dybowska A, Valsami-Jones E, Forbes VE. Effects of sediment-associated copper to the deposit-feeding snail, *Potamopyrgus antipodarum*: A comparison of Cu added in aqueous form or as nano-and micro-CuO particles. *Aquatic Toxicology* 2012, 106; 114-22

20. **Misra SK**, Dybowska A, Berhanu D, Croteau MN, Luoma SN, Boccaccini AR, Valsami-Jones E. Isotopically modified nanoparticles for enhanced detection in bioaccumulation studies. *Environmental Science & Technology* 2011, 46; 1216-22
19. Croteau MN, **Misra SK**, Luoma SN, Valsami-Jones E. Silver bioaccumulation dynamics in a freshwater invertebrate after aqueous and dietary exposures to nanosized and ionic Ag. *Environmental Science & Technology* 2011, 45; 6600-7
18. García-Alonso J, Khan FR, **Misra SK**, Turmaine M, Smith BD, Rainbow PS, Luoma SN, Valsami-Jones E. Cellular internalization of silver nanoparticles in gut epithelia of the estuarine polychaete *Nereis diversicolor*. *Environmental Science & Technology* 2011, 45; 4630-36
17. Dybowska A, Croteau MN, **Misra SK**, Berhanu D, Luoma SN, Christian P, O'Brien P, Valsami-Jones E. Synthesis of isotopically modified ZnO nanoparticles and their potential as nanotoxicity tracers. *Environmental Pollution* 2011, 159; 266-73
16. **Misra SK**, Ansari TI, Valappil SP, Mohn D, Philip SE, Stark WJ, Roy I, Knowles JC, Salih V, Boccaccini AR. Poly (3-hydroxybutyrate) multifunctional composite scaffolds for tissue engineering applications. *Biomaterials* 2010, 31; 2806-15
15. **Misra SK**, Ohashi F, Valappil SP, Knowles JC, Roy I, Silva SRP, Salih V, Boccaccini AR. Characterization of carbon nanotube (MWCNT) containing P (3HB)/bioactive glass composites for tissue engineering applications. *Acta Biomaterialia* 2010, 6; 735-42
14. **Misra SK**, Ansari TI, Mohn D, Valappil SP, Brunner TJ, Stark WJ, Roy I, Knowles JC, Sibbons PD, Valsami Jones E, Boccaccini AR, Salih V. Effect of nanoparticulate bioactive glass particles on bioactivity and cytocompatibility of poly (3-hydroxybutyrate) composites. *Journal of the Royal Society Interface* 2010, 7; 453-65
13. Berhanu D, Dybowska A, **Misra SK**, Stanley CJ, Ruenraroengsak P, Boccaccini AR, Tetley TD, Luoma SN, Valsami-Jones E. Characterisation of carbon nanotubes in the context of toxicity studies. *Environmental Health* 2009, 8; S3
12. Bretcanu O, **Misra SK**, Yunos DM, Boccaccini AR, Roy I, Kowalczyk T, Blonski S, Kowalewski TA. Electrospun nanofibrous biodegradable polyester coatings on Bioglass based glass-ceramics for tissue engineering. *Materials Chemistry and Physics* 2009, 118; 420-26

11. **Misra SK**, Philip SE, Chrzanowski W, Nazhat SN, Roy I, Knowles JC, Salih V, Boccaccini AR. Incorporation of vitamin E in poly (3hydroxybutyrate)/Bioglass composite films: effect on surface properties and cell attachment. *Journal of the Royal Society Interface* 2009, 6; 401-9
10. Bretcanu O, **Misra SK**, Roy I, Renghini C, Fiori F, Boccaccini AR, Salih V. In vitro biocompatibility of 45S5 Bioglass®-derived glass–ceramic scaffolds coated with poly (3-hydroxybutyrate). *Journal of Tissue Engineering and Regenerative Medicine* 2009, 3; 139-48
9. **Misra SK**, Mohn D, Brunner TJ, Stark WJ, Philip SE, Roy I, Salih V, Knowles JC, Boccaccini AR. Comparison of nanoscale and microscale bioactive glass on the properties of P (3HB)/Bioglass composites. *Biomaterials* 2008, 29; 1750-61.
8. Valsami-Jones E, Berhanu D, Dybowska A, **Misra SK**, Boccaccini AR, Tetley TD. Nanomaterial synthesis and characterization for toxicological studies: TiO₂ case study. *Mineralogical Magazine* 2008, 72; 515-9
7. Valappil SP, **Misra SK**, Boccaccini AR, Keshavarz T, Bucke C, Roy I. Large-scale production and efficient recovery of PHB with desirable material properties, from the newly characterised *Bacillus cereus* SPV. *Journal of biotechnology* 2007, 132; 251-8
6. Bretcanu O, Chen Q, **Misra SK**, Boccaccini AR, Roy I, Verne I, Brovarone CV. Biodegradable polymer coated 45S5 Bioglass-derived glass-ceramic scaffolds for bone tissue engineering. *Glass Technology-European Journal of Glass Science and Technology Part A* 2007, 48; 227-34
5. **Misra SK**, Nazhat SN, Valappil SP, Torbati MM, Wood RJK, Roy I, Boccaccini AR. Fabrication and characterization of biodegradable poly (3-hydroxybutyrate) composite containing bioglass. *Biomacromolecules* 2007, 8; 2112-9
4. **Misra SK**, Watts PCP, Valappil SP, Silva SRP, Roy I, Boccaccini AR. Poly (3-hydroxybutyrate)/Bioglass® composite films containing carbon nanotubes. *Nanotechnology* 2007, 18; 075701
3. Boccaccini AR, Peters C, Roether JA, Eifler D, **Misra SK**, Minay EJ. Electrophoretic deposition of polyetheretherketone (PEEK) and PEEK/Bioglass® coatings on NiTi shape memory alloy wires. *Journal of Materials Science* 2006, 41; 8152-9

2. Valappil SP, **Misra SK**, Boccaccini AR, Roy I. Biomedical applications of polyhydroxyalkanoates, an overview of animal testing and in vivo responses. *Expert Review of Medical Devices* 2006, 3; 853-68

1. **Misra SK**, Valappil SP, Roy I, Boccaccini AR. Polyhydroxyalkanoate (PHA)/inorganic phase composites for tissue engineering applications. *Biomacromolecules* 2006, 7; 2249-58

B. Book chapters:

4. Miguez-Pacheco V, **Misra SK**, Boccaccini AR. Biodegradable and bioactive polymer/inorganic phase nanocomposites for bone tissue engineering. Woodhead Publishing, Cambridge. 2014.

3. Dybowska A, **Misra SK**, Valsami-Jones E. Labelling nanoparticles with non-radioactive isotopes. 2014. Pan Stanford Publishing Ltd.

2. **Misra SK**, Boccaccini AR. Biodegradable and bioactive polymer/ceramic composite scaffolds. In: *Tissue Engineering Using Ceramics and Polymers*. Woodhead Publishing, Cambridge. 2008. Page 72. ISBN 978-1-84569-176-9.

1. **Misra SK**, Valsami-Jones E. Engineered nanomaterials In: *Pollutants, Human Health and the Environment: A Risk Based Approach*. John Wiley & Sons, UK. 2012, Page 287. ISBN: 978-0-470-74260-0.