

Advanced Materials Research Group project summary

| Project Title | Processing of Bioresorbable Nanocomposite Materials |
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| Researcher | Gabriel Choong Y.H. email: gabriel.choong@nottingham.ac.uk |
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| Project Summary | My current research is concerned with melt processing of polylactic acid (PLA) with hydroxyapatite nanoparticles (nHA) for health-care applications such as bone fixation plates. I am investigating the influence of melt processing on the nanocomposite with respect to long term mechanical and degradation properties. My research activities are focused around various material characterisation methods such as rheology, thermal analysis, microscopy and mechanical testing in an effort to develop an understanding of the structure-property relationships in PLA-nHA nanocomposite. Figure 1 A HAAKE Minilab conical twin-screw compounder for compounding and extruding material Figure 2 A HAAKE Minijet injection moulding system to form materials to shape |



