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| Title: | Valorisation of low value fish processing waste: Optimisation of phosphorous mineral recovery from fish processing waste |
| Abstract: | <p>Fish skeletal material consists mainly of bone minerals and structural proteins in the form of collagen. It is therefore a potential source of phosphorous, as inorganic phosphorous is found in significant levels in fish bone. Inorganic phosphorous is generally supplemented to animal diets, but current global reserves are constrained and non-renewable (rock phosphate reserves are mined) and alternative sources of this essential nutrient needs to be found. Fish bones originating from fish processing activities can therefore serve as a potential source of inorganic phosphorous, and it can be recovered through solubilisation with different mineral acids. The collagen component of fish bones remaining after mineral recovery serves as a source for high-value, food- and/or feed grade gelatine.</p> <p>The aim of the project is therefore to develop and optimize a process for sequential recovery of phosphate bone minerals and high value gelatine.</p> |
| Lead institution: | Stellenbosch University, Department of Process Engineering |
| Partner institutions: | - |
| Student name: | Jasmin Swart |
| Supervisor name: | Dr. Neill Goosen |
| Degree: | MEng |
| Funded by: | Protein Research Foundation |
| Start date: | January 2015 |
| End date: | December 2016 |
| Feedstock: | Waste originating from fish processing activities |
| Value chain products: | Phosphate minerals and high value gelatine. |
| Geographic source of the feedstock: | Western Cape |