

${\bf Stellenbosch\ University, Department\ of\ Process\ Engineering}$

Stellenbosch, South Africa http://processengineering.sun.ac.za/

Title:	Development of high-value, organic fertilizers through enzymatic protein hydrolysis of fish processing waste
Abstract:	Low value fish processing waste is a promising feedstock for the production of natural free amino acids employed in organic fertilizers. Production of specialist organic fertilizers is an emerging market with potentially high market volumes and global relevance. Enzymatic protein hydrolysis can be employed at relatively mild processing conditions to produce free amino acids suitable for formulation of organic fertilizers, but process conditions need to be optimized in order to economically produce sufficient amounts of free amino acids. The aim of the project is therefore to develop and optimize an enzymatic protein hydrolysis process to produce hydrolysed proteins from South African fish processing waste aimed at the large organic fertilizer market.
Lead institution:	Stellenbosch University, Department of Process Engineering
Partner institutions:	-
Student name:	Witness Ndlovu
Supervisor name:	Dr. Neill Goosen
Degree:	MEng
Funded by:	Industry
Start date:	July 2015
End date:	June 2017
Feedstock:	Waste originating from fish processing activities
Value chain products:	Specialist hydrolysed fish proteins for high-value fertilizers
Geographic source of the feedstock:	Western Cape