

INTERNATIONAL WORKSHOP ADVANCES IN CLEANER PRODUCTION



## Influence of thermodynamic parameters on a cooling absorption cycle using biomass energy

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## Abstract

Absorption cycle is one of the several available ways to obtain low temperature conditions for food storing. This technique operates from a hot source and is able to reach low temperatures close to -20°C. This article analyses the influence of two thermodynamic parameters (evaporation temperature and condensation pressure) on the coefficient of cooperation performance (COP) of an absorption cycle which uses biomass as energy source. The software Engineering Equation Solver is used to support mathematical modeling, and the fish storage is considered as study case.

Keywords: cooling systems; fish conservation; absorption cycle.