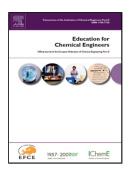
Accepted Manuscript

Title: Learning and researching based on local experience and simulation software for graduate and undergraduate courses in chemical and environmental engineering



Authors: Encarnación Ruiz-Ramos, Juan Miguel Romero-García, Francisco Espínola, Inmaculada Romero, Valentina Hernández, Eulogio Castro

PII:	S1749-7728(17)30008-8
DOI:	http://dx.doi.org/doi:10.1016/j.ece.2017.05.001
Reference:	ECE 139
To appear in:	Education for Chemical Engineers
Received date:	26-1-2017
Revised date:	27-4-2017
Accepted date:	13-5-2017

Please cite this article as: Ruiz-Ramos, Encarnación, Romero-García, Juan Francisco, Romero, Inmaculada, Hernández, Valentina, Miguel, Espínola, Castro. researching Eulogio, Learning and based on local experience simulation courses and software for graduate and undergraduate in chemical and environmental engineering.Education for Chemical Engineers http://dx.doi.org/10.1016/j.ece.2017.05.001

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Learning and researching based on local experience and simulation software for graduate and undergraduate courses in chemical and environmental engineering

Encarnación Ruiz-Ramos, Juan Miguel Romero-García, Francisco Espínola, Inmaculada Romero, Valentina Hernández¹, and Eulogio Castro*

Dpt. Chemical, Environmental and Materials Engineering, Campus de Excelencia Internacional Agroalimentario (ceiA3), Universidad de Jaén, 23071 Jaén, Spain

¹Centro para la Formación Cafetera, Servicio Nacional de Aprendizaje, SENA Regional Caldas, Manizales, Colombia

*Corresponding autor: Eulogio Castro; e-mail: ecastro@ujaen.es

Highlights

- Aspen Plus was used to simulate a biorefinery based on local renewable residues
- The feedstock was selected based on the previous knowledge of students
- Mass and energy balances was the main focus for undergraduate
- Economic evaluation was the main focus for graduate students
- A dedicated survey suggest that students find very useful this learning approach

Abstract

This work deals with the use of a commercial simulation package, ASPEN Plus[®], to design and assess a biorefinery based on olive-derived biomass. The starting point was

Download English Version:

https://daneshyari.com/en/article/6600569

Download Persian Version:

https://daneshyari.com/article/6600569

Daneshyari.com