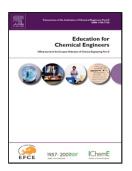
### Accepted Manuscript

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## ACCEPTED MANUSCRIPT

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

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#### 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<sup>®</sup>, to design and assess a biorefinery based on olive-derived biomass. The starting point was

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