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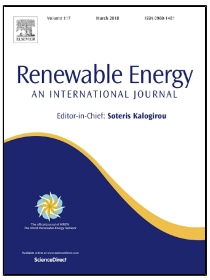

Gasification of various biomasses including microalgae using CO_2 – A thermodynamic study

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- A new integrated CO_2 gasification has been developed in the Aspen Plus.
- Prospect of microalgae (*N. oculta*) as a renewable energy source has been studied.
- The rice husk and the palm frond are used as the feedstocks for benchmarking
- The gasification of the microalgae exhibits the best performance in term of H_2/CO ratio
- CGE as compared to the gasification of other biomasses (palm frond and rice husk).