

## Accepted Manuscript

Title: Electric Arc Furnace Dust as an Alternative Low-Cost Oxygen Carrier for Chemical Looping Combustion

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PII: S0304-3894(17)30616-7  
DOI: <http://dx.doi.org/doi:10.1016/j.jhazmat.2017.08.024>  
Reference: HAZMAT 18789

To appear in: *Journal of Hazardous Materials*

Received date: 8-3-2017  
Revised date: 8-8-2017  
Accepted date: 9-8-2017

Please cite this article as: Yu-Lin Kuo, Wei-Chen Huang, Yao-Hsuan Tseng, Shu-Huai Chang, Young Ku, Hao-Yeh Lee, Electric Arc Furnace Dust as an Alternative Low-Cost Oxygen Carrier for Chemical Looping Combustion, *Journal of Hazardous Materials* <http://dx.doi.org/10.1016/j.jhazmat.2017.08.024>

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## Electric Arc Furnace Dust as an Alternative Low-Cost Oxygen Carrier for

### Chemical Looping Combustion

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### Highlight

- Feasibility evaluation on the reuse of EAFD as oxygen carrier was performed.
- EAFD coupling with Al<sub>2</sub>O<sub>3</sub> has been established to suppress the zinc vapor.
- EAFD/Al<sub>2</sub>O<sub>3</sub> system showed a stable gas yield 0.98 in semi-fluidized bed reactor.

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