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Authors: Xiangguo Li, Wenjuan Miao, Yang Lv, Yingbin

Wang, Changsheng Gao, Dongbing Jiang

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#### ACCEPTED MANUSCRIPT

# TGA-FTIR investigation on the co-combustion characteristics of heavy oil fly ash and municipal sewage sludge

Xiangguo Li<sup>a</sup>, Wenjuan Miao<sup>a</sup>, Yang Lv<sup>a, b\*</sup>, Yingbin Wang<sup>c</sup>, Changsheng Gao<sup>a</sup>, Dongbing Jiang<sup>a</sup>

<sup>a</sup> State Key Laboratory of Silicate Materials for Architectures (Wuhan University of Technology), Wuhan 430070, P. R. China

<sup>b</sup>Magnel Laboratory for Concrete Research, Magnel Laboratory for Concrete Research, Ghent University, Technologiepark-Zwijinaarde 904, 9052 Ghent, Belgium

<sup>c</sup>School of Civil and Architectural Engineering, Hubei University of Technology, Wuhan 430068, PR China

\* Corresponding author:

E-mail address: <a href="mailto:yanglv\_whut@163.com">yanglv\_whut@163.com</a>(Y. Lv)

Tel.: +86-27-87661567; Fax: +86-27-87661567.

#### **Highlights**

- The blends ignite and burn out in advanced.
- The maxima of combustion indices occur at the ratio of 80% HOFA.
- Co-combustion of HOFA and MSS mainly releases CO<sub>2</sub>, CO, and SO<sub>2</sub>.
- SO<sub>2</sub> emission is retained due to the conditioner (CaO) in MSS.

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