Supplementary Materials

Improving Combustion Technology for Cooking Activities for Pollutant Emission Reduction and Carbon Neutrality

Juan Qi [1,2], Lianxin Liu [1] and Jianjun Wu [2,*]

[1] School of Chemical Engineering and Technology, Department of Basic Courses, Xuzhou College of Industrial Technology, Xuzhou 221140, China; qij@mail.xzcit.cn (J.Q.); liulianxin@mail.xzcit.cn (L.L.)
[2] National Engineering Research Center of Coal Preparation and Purification, School of Chemical Engineering and Technology, China University of Mining and Technology, Xuzhou 221116, China
* Correspondence: wujj@cumt.edu.cn

Table S1. TSP, $PM_{2.5}$, and $PM_{1.0}$ EFs of tested samples in this study.

Advanced			Received Mass-Based Emissions			Delivered Energy-Based Emissions		
			TSP (mg/g)	$PM_{2.5}$ (mg/g)	$PM_{1.0}$ (mg/g)	TSP (mg/kJ)	$PM_{2.5}$ (mg/kJ)	$PM_{1.0}$ (mg/kJ)
Raw	Maize straw	Adv.	15.52±2.41	10.52±2.10	9.76±1.24	21.64±4.67	14.58±3.06	13.59±2.60
		Trad.	97.00±0.20	71.50±0.60	57.80±4.20	348.50±13.20	256.70±11.20	208.00±22.00
	Wheat straw	Adv.	15.07±2.40	9.88±3.23	9.03±2.60	23.22±7.54	14.67±3.89	14.02±5.83
		Trad.	76.00±0.60	61.40±0.90	48.30±8.40	291.80±2.10	235.80±3.70	185.90±32.40
	Rice straw	Adv.	35.80±20.00	11.95±5.73	11.42±1.63	39.78±18.39	13.68±6.43	13.06±1.22
		Trad.	37.70±1.10	29.80±1.90	28.50±0.20	139.00±4.00	109.72±7.00	104.81±0.70
Briquette	Maize straw	Adv.	5.37±0.35	4.33±1.74	3.42±0.12	3.91±0.19	3.17±1.33	2.49±0.04
		Trad.	26.20±4.40	17.20±1.73	11.60±0.33	42.60±7.07	28.00±2.81	18.90±0.54
	Wheat straw	Adv.	10.38±1.61	5.30±0.57	5.02±1.06	6.86±0.96	3.51±0.43	3.31±0.65
		Trad.	29.20±0.76	22.20±2.59	13.30±0.68	48.70±1.26	37.00±4.33	22.30±1.14
	Rice straw	Adv.	8.35±0.47	5.72±0.92	5.02±0.16	5.30±0.38	3.63±0.64	3.18±0.06
		Trad.	33.20±0.13	27.10±2.07	22.0±5.03	71.70±0.28	58.57±4.48	47.30±10.9
Pellet	Saw-dust	Adv.	6.28±0.36	5.34±0.28	4.96±0.45	3.81±0.09	3.24±0.28	3.01±0.37
		Trad.	28.20±0.21	13.20±3.40	11.80±3.30	52.77±3.06	20.46±3.54	32.80±2.16

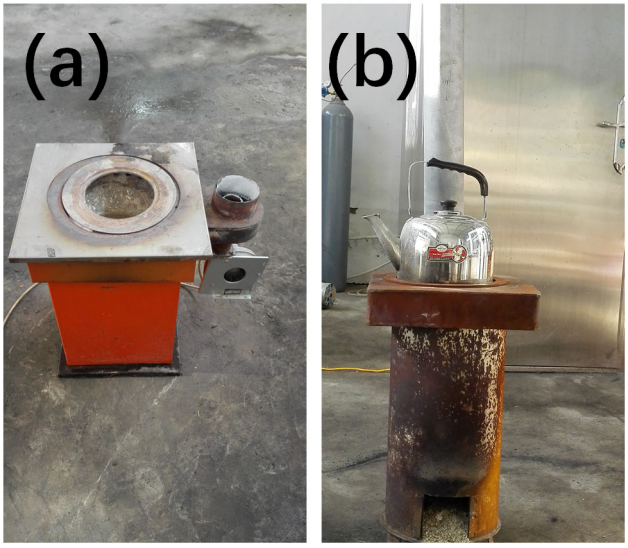

Figure S1. Photos of the tested residential cooking stove: (a) the advanced gasifier cooking stove and (b) the traditional chimney stove.