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Article

Valorization of Vine Prunings by Slow Pyrolysis in a Fixed-Bed Reactor

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Supplementary materials

Table S1. Results of multiple regression analysis for y_1 expressed by Eq. (12).

Regressor	k	β_{k1}	SE_{k1}	t_{k1}	p_{k1}
Intercept	1	**0.3095**	0.0009	340.68	6E-08
x_1	2	0.0000	0.0011	0.0000	1.0000
x_2	3	**0.0093**	0.0011	8.6845	0.0032
x_3	4	**-0.0078**	0.0011	-7.2762	0.0054
x_1x_2	5	0.0013	0.0011	1.1736	0.3253
x_1x_3	6	-0.0008	0.0011	-0.7041	0.5321
x_2x_3	7	0.0008	0.0011	0.7041	0.5321
$x_1x_2x_3$	8	0.0008	0.0011	0.7041	0.5321
R^2	0.979				
R^2_{adj}	0.930				
RSE	0.003				
F	20.08				
p (significance F)	0.016				

Table S2. Results of multiple regression analysis for y_2 expressed by Eq. (13).

Regressor	k	β_{k2}	SE_{k2}	t_{k2}	p_{k2}
Intercept	1	**0.3111**	0.0010	300.32	8E-08
x_1	2	0.0000	0.0012	0.0000	1.0000
x_2	3	-0.0018	0.0012	-1.4407	0.2453
x_3	4	**0.0082**	0.0012	6.7921	0.0065
x_1x_2	5	**-0.0052**	0.0012	-4.3222	0.0228
x_1x_3	6	**-0.0133**	0.0012	-10.909	0.0016
x_2x_3	7	-0.0018	0.0012	-1.4407	0.2453
$x_1x_2x_3$	8	**-0.0143**	0.0012	-11.732	0.0013
R^2	0.995				
R^2_{adj}	0.984				
RSE	0.003				
F	88.20				
p (significance F)	0.002				

Table S3. Results of multiple regression analysis for y_3 expressed by Eq. (14).

Regressor	k	β_{k3}	SE_{k3}	t_{k3}	p_{k3}
Intercept	1	**441.36**	0.7123	619.67	9.E-09
x_1	2	0.0000	0.8352	0.0000	1.0000
x_2	3	**-7.2218**	0.8352	-8.6469	0.0033
x_3	4	**3.5258**	0.8352	4.2215	0.0243
x_1 x_2	5	-0.7164	0.8352	-0.8578	0.4541
x_1 x_3	6	**7.1628**	0.8352	8.5763	0.0033
x_2 x_3	7	**5.2413**	0.8352	6.2756	0.0082
$x_1x_2x_3$	8	-0.9845	0.8352	-1.1788	0.3234
R^2	0.998				
R^2_{adj}	0.994				
RSE	2.362				
F	225.5				
p (significance *F*)	4.5E-04				

Table S4. Results of multiple regression analysis for y_1 expressed by Eq. (15).

Regressor	k	β_{k1}	SE_{k1}	t_{k1}	p_{k1}
Intercept	1	**0.3095**	0.0013	247.36	8.E-17
x_2	3	**0.0093**	0.0015	6.3055	0.0002
x_3	4	**-0.0078**	0.0015	-5.2830	0.0007
R^2	0.894				
R^2_{adj}	0.868				
RSE	0.004				
F	33.83				
p (significance *F*)	1.2E-04				