Supplementary Material

Supplementary Table 1. Obtained coefficients for the linear regression of the VVDP output depending on the simulated treatment time. The coefficient of determination of the regression (R^2) and the Lin's concordance correlation coefficient (c.c.c.) between f_{corr} vs. f^{VVDP}_{corr} are also shown.

Treatment time t_d=200 minutes

Variable	Reg. coeff.	SE	β weights	p. value
UF/DW	-5.133207	0.001058	-0.989	p<0.01
Kd	-0.000401	0.000001	-0.075	p<0.01
Kc	-0.000277	0.000001	-0.052	p<0.01
α	-0.000667	0.000006	-0.023	p<0.01
Constant	1.061603	0.000230	-	p<0.01

R^2=0.987.
c.c.c.=0.993

Treatment time t_d=240 minutes

Variable	Reg. coeff.	SE	β weights	p. value
UF/DW	-5.224580	0.001223	-0.985	p<0.01
Kd	-0.000463	0.000001	-0.085	p<0.01
Kc	-0.000353	0.000001	-0.065	p<0.01
α	-0.000678	0.000007	-0.023	p<0.01
Constant	1.070673	0.000266	-	p<0.01

R^2=0.983
c.c.c.=0.991

Treatment time t_d=290 minutes

Variable	Reg. coeff.	SE	β weights	p. value
UF/DW	-5.325150	0.001421	-0.981	p<0.01
Kd	-0.000535	0.000001	-0.096	p<0.01
Kc	-0.000430	0.000001	-0.077	p<0.01
α	-0.000708	0.000007	-0.024	p<0.01
Constant	1.079622	0.000309	-	p<0.01

R^2=0.978
c.c.c=0.989

Treatment time t_d=480 minutes

Variable	Reg. coeff.	SE	β weights	p. value
UF/DW	-5.597224	0.002084	-0.965	p<0.01
Kd	-0.000752	0.000002	-0.126	p<0.01
Kc	-0.000626	0.000002	-0.105	p<0.01
α	-0.000875	0.000012	-0.027	p<0.01
Constant	1.097864	0.000452	-	p<0.01

R^2=0.958
c.c.c=0.979