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Erratum

Erratum to "Photo-assisted Fenton type processes for the degradation of phenol: A kinetic study" [J. Hazard. Mater. B 136 (2006) 632–644]

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The publisher regrets that errors where introduced during the typesetting of Tables 1 and 2 of the above-mentioned article. The corrected tables are reproduced here.

Table 1
The reactions, rate constants and quantum yields used for the kinetic modeling

#	Reaction	Reference	k (M^{-1} s^{-1})	
			Literature	Used
1	$Fe^{2+} + H_2O_2 \rightarrow Fe^{3+} + OH^{\bullet}$	[15,16,19–23]	63–76	76
2	$Fe^{3+} + H_2O_2 \rightarrow Fe^{2+} + H^+ + HO_2^{\bullet}$	[15,16,19–23]	0.01–0.02	0.02
3	$Fe^{2+} + OH^{\bullet} \rightarrow Fe^{3+} + OH^-$	[15,16,19–22]	$(3.0–4.3) \times 10^8$	3.2×10^8
4	$Fe^{3+} + HO_2^{\bullet} \rightarrow Fe^{2+} + O_2 + H^+$	[15,16,20–22]	$(0.1–3.1) \times 10^5$	3.1×10^5
5	$Fe^{2+} + HO_2^{\bullet} \rightarrow Fe^{3+} + HO_2^-$	[15,16,20–22]	1.2×10^6	1.2×10^6
6	$Fe^{3+} + O_2^{\bullet -} \rightarrow Fe^{2+} + O_2$	[15,16,19–22]	$(0.5–1.5) \times 10^8$	5.0×10^7
7	$Fe^{2+} + O_2^{\bullet -} \rightarrow Fe^{3+} + H_2O_2$	[15,16,19–22]	1.0×10^7	1.0×10^7
8	$OH^{\bullet} + H_2O_2 \rightarrow HO_2^{\bullet} + H_2O$	[15,16,19–22]	$(1.2–4.5) \times 10^7$	4.5×10^7
9	$2OH^{\bullet} \rightarrow H_2O_2$	[16,19–22]	$(4.2–5.3) \times 10^9$	5.3×10^9
10	$HO_2^{\bullet} + OH^{\bullet} \rightarrow H_2O + O_2$	[16,19–23]	6.6×10^{11}	6.6×10^{11}
11	$2HO_2^{\bullet} \rightarrow H_2O_2 + O_2$	[15,16,19–22]	8.3×10^5	8.3×10^5
12	$O_2^{\bullet -} + HO_2^{\bullet} \rightarrow HO_2^- + O_2$	[15,16,19–22]	9.7×10^7	9.7×10^7
13	$O_2^{\bullet -} + HO^{\bullet} \rightarrow HO^- + O_2$	[16,20–22]	1.0×10^{10}	1×10^{10}
14	$HO_2^{\bullet} \rightarrow O_2^{\bullet -} + 2H^+$	[15,16,19–22]	$(1.58–7.9) \times 10^5$ s^{-1}	1.58×10^5 s^{-1}
15	$O_2^{\bullet -} + 2H^+ \rightarrow HO_2^{\bullet}$	[15,16,20–22]	1.0×10^{10}	1.0×10^{10}
16	$OH^{\bullet} + H_2O_2 \rightarrow O_2^{\bullet -} + H_2O$	[16,21,22]	2.7×10^7	2.7×10^7
17	$Fe^0 + H_2O_2 \rightarrow Fe^{2+}$-surface			3.83×10^{-2}
18	Fe^{2+}-surface $+ H_2O_2 \rightarrow Fe^{3+} + OH^{\bullet}$			6×10^{-2}
19	$Fe^0 + H_2O_2 \rightarrow Fe^{2+} + OH^-$	[23]	0.44–0.23 (pH dep)	1×10^{-2}
20	$H_2O_2 + h\nu \rightarrow 2OH^{\bullet}$	[15,24,25]		4.13×10^{-5} s^{-1}
21	$OH^{\bullet} + HO_2^- \rightarrow HO_2^{\bullet} + OH^-$	[21,22,24]	7.5×10^9	7.5×10^{-9}
22	$HO_2^{\bullet} + H_2O_2 \rightarrow H_2O + HO^{\bullet} + O_2$	[24]	3.0	3.0
23	$O_2^{\bullet -} + H_2O_2 \rightarrow OH^- + HO^{\bullet} + O_2$	[24]	0.13	0.13
24	$Fe^{3+} + H_2O + h\nu \rightarrow Fe^{2+} + OH^{\bullet} + H^+$	[11–13,15,26]		3.33×10^{-6}
25	$PH + OH^{\bullet} \rightarrow DIHCHD^{\bullet}$	[15,21,22]	*o*: 7.3×10^9	7.3×10^9
26	$DHCD^{\bullet} + H^+ \rightarrow PH^{\bullet} + H_2O$	[15,21,22]	5×10^8	5×10^8

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Table 1 (*Continued*)

#	Reaction	Reference	k ($M^{-1}\,s^{-1}$)	
			Literature	Used
27	$DHCD^{\bullet} + O_2 \rightarrow CC + HO_2^{\bullet}$	[15,21,22]	1.5×10^9	1.5×10^9
28	$DHCD^{\bullet} + O_2 \rightarrow HQ + HO_2^{\bullet}$	[15,21,22]	5.0×10^8	5.0×10^8
29	$DHCD^{\bullet} + O_2 \rightarrow BQ + HO_2^{\bullet}$	[15,21,22]	5.0×10^8	5.0×10^8
30	$DHCD^{\bullet} + BQ \rightarrow PH^{\bullet} + CC + HQ$	[15,21,22]	3.7×10^9	3.7×10^9
31	$2DHCD^{\bullet} \rightarrow PH + CC + HC$	[15,21,22]	5.0×10^8	5.0×10^8
32	$2DHCD^{\bullet} \rightarrow$ products	[15,21,22]	5.0×10^8	5.0×10^8
33	$DHCD^{\bullet} + PH^{\bullet} \rightarrow$ products	[15,21,22]	5.0×10^8	5.0×10^8
34	$DHCD^{\bullet} + PH^{\bullet} \rightarrow PH + CC + HQ$	[15,21,22]	5.0×10^8	5.0×10^8
35	$PH^{\bullet} + PH^{\bullet} \rightarrow$ products	[15,21,22]	1.0×10^9	1.0×10^9
36	$BQ + O_2^{\bullet -} \rightarrow HPH^{\bullet} + O_2$	[15,21,22]	1.0×10^9	1.0×10^9
37	$CC + OH^{\bullet} \rightarrow$ products	[21,22]	1.1×10^{10}	1.1×10^{10}
38	$HQ + OH^{\bullet} \rightarrow$ products	[21,22]	5.0×10^9	5.0×10^9
39	$BQ + OH^{\bullet} \rightarrow$ products	[21,22]	1.2×10^9	1.2×10^9
40	$PH^{\bullet} + Fe^{2+} \rightarrow PH + Fe^{3+}$	[15,21,22]	1.0×10^5	1.0×10^5
41	$PH + Fe^{3+} \rightarrow HPH^{\bullet} + Fe^{2+}$	[15,21,22]	4.4×10^2	4.4×10^2
42	$HPH^{\bullet} + Fe^{2+} \rightarrow PH + Fe^{3+}$	[15,21,22]	1.1×10^3	1.1×10^3
43	$HPH^{\bullet} + Fe^{3+} \rightarrow BQ + Fe^{2+}$	[15,21,22]	4.4×10^4	4.4×10^4
44	$BQ + Fe^{2+} \rightarrow HPH^{\bullet} + Fe^{3+}$	[15,21,22]	1.2×10^{-3}	1.2×10^{-3}
45	$PH + h\nu \Leftrightarrow PH^{*} \rightarrow CC$			$\Phi = 2.5$ mmol Einstein^{-1}
46	$PH + h\nu \Leftrightarrow PH^{*} \rightarrow$ products	[25–27]	$\Phi = 11$–18 mmol Ein^{-1}	$\Phi = 17$ mmol Einstein^{-1}
47	$(1-\alpha)OC + OH^{\bullet} \rightarrow IP$			2.33×10^8
48	$Fe^{3+} + \alpha\ OC \rightarrow Fe^{3+}$-complexes	[16]	1.0	1.0
49	Fe^{3+}-complexes $+ h\nu \rightarrow Fe^{3+} + \alpha\ OC$			$1 \times 10^{-3}\ s^{-1}$
50	$OC + h\nu \Leftrightarrow OC^{*} \rightarrow IP$			$\Phi = 17$ mmol Einstein^{-1}

PH: phenol, $DHCD^{\bullet}$: dihydroxycyclohexacienyl radical, $PH^{\bullet}$: phenyl radical, $HPH^{\bullet}$: hydroxyphenyl radical, CC: catechol, HQ: hydroquinone, BQ: benzoquinone, OC: organic content, IP: inorganic products, and α: fraction of organic content that takes part in Fe scavenging.

* Excited state.

Table 2
The list of developed AOP models concerning source of experimental data and used reactions

Model #	AOP	Exp. data source	Reaction # (Table 1)
1	Fe^{2+}/H_2O_2 & Fe^{3+}/H_2O_2	HPLC	1–16, 25–44
2	Fe^{2+}/H_2O_2 & Fe^{3+}/H_2O_2	TOC	1–16, 47, 48
3	Fe^0/H_2O_2	HPLC	1–19, 25–44
4	Fe^0/H_2O_2	TOC	1–19, 47, 48
5	UV	HPLC	45, 46
6	UV	TOC	50
7	UV/Fe^{3+}	HPLC	1–16, 24–46
8	UV/Fe^{3+}	TOC	1–16, 24, 47–50
9	UV/H_2O_2	HPLC	8–16, 20–23, 25–46
10	UV/H_2O_2	TOC	8–16, 20–23, 47, 50
11	$UV/Fe^{2+}/H_2O_2$ & $UV/Fe^{3+}/H_2O_2$	HPLC	1–16, 20–46
12	$UV/Fe^{2+}/H_2O_2$ & $UV/Fe^{3+}/H_2O_2$	TOC	1–16, 20–24, 47–50
13	$UV/Fe^0/H_2O_2$	HPLC	1–46
14	$UV/Fe^0/H_2O_2$	TOC	1–24, 47–50