Supplemental electronic Material

<u>to</u>

Heterogeneous ozonation kinetics of 4-phenoxyphenol in presence of photosensitizer

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Figure captions (1S to 9S):

Figure 1S: Representative maleic acid formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \star): 1ppm, \bullet): 3ppm, \bullet): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \diamondsuit): 500ppb, \bullet): 1ppm, \bigcirc): 3ppm and \bullet): 6ppm

Figure 2S: Representative fumaric acid formed during ozonolysis of 4-PP under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration♦): 500ppb, ♦): 1ppm, ○): 3ppm, ●): 6ppm

Figure 3S: Representative hydroquinone formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \star): 250ppm, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm, \bullet): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \clubsuit): 60ppm, \star): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \bullet): 6ppm

Figure 4S: Representative catechol formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \star): 250ppm, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm, \bullet): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \Leftrightarrow): 60ppm, \star): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \bullet): 6ppm

Figure 5S: Representative benzoic acid formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm, \spadesuit): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \oiint): 60ppm, \bigstar): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \spadesuit): 6ppm

Figure 6S: Representative 4-hydroxybenzoic acid formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration○): 3ppm, ●): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at

ozone concentration $\stackrel{*}{\triangleright}$): 60ppm, $\stackrel{*}{\blacktriangleright}$): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \bullet): 6ppm

Figure 7S: Representative 4,4'-dioxyphenol formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \star): 250ppb, \diamondsuit): 500ppb, \diamondsuit): 1ppm, \bigcirc): 3ppm, \bullet): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \updownarrow): 60ppm, \star): 250ppb, \diamondsuit): 500ppb, \diamondsuit): 1ppm, \bigcirc): 3ppm and \bullet): 6ppm

Figure 8S: Representative 2-(4-Phenoxyphenoxy)-4-phenoxyphenol formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration★): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm, \blacksquare): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \oiint): 60ppm, \bigstar): 250ppb, \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \blacksquare): 6ppm

Figure 9S: Representative 4-[4-(4-Phenoxyphenoxy)phenoxy]phenol formed during ozonolysis of 4-PP. A) under dark condition in function of time at ozone concentration \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm, \spadesuit): 6ppm and B) under solar light illumination of the silica surface in presence of 4-CB in function of time at ozone concentration \diamondsuit): 500ppb, \spadesuit): 1ppm, \bigcirc): 3ppm and \spadesuit): 6ppm

2-(4-Phenoxyphenoxy)-4-phenoxyphenol or 4-[4-(4-Phenoxyphenoxy)phenoxy]phenol

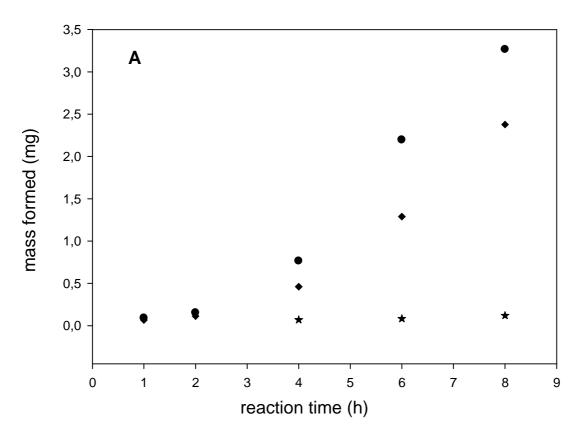


Figure 1S Net et al., 2009

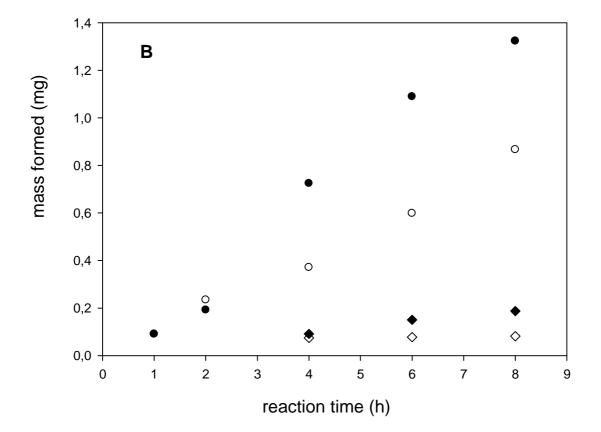


Figure 1S Net et al., 2009

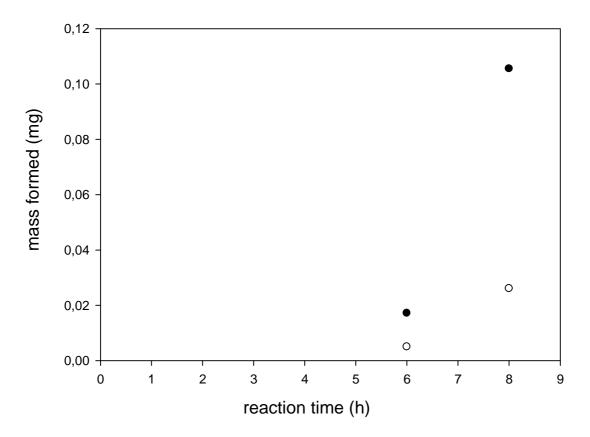


Figure 2S Net et al., 2009

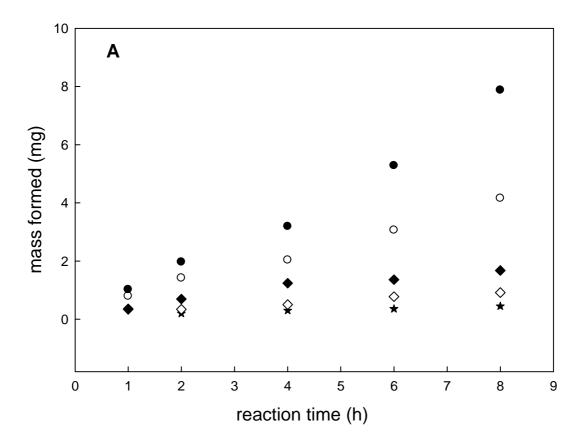


Figure 3S Net et al., 2009

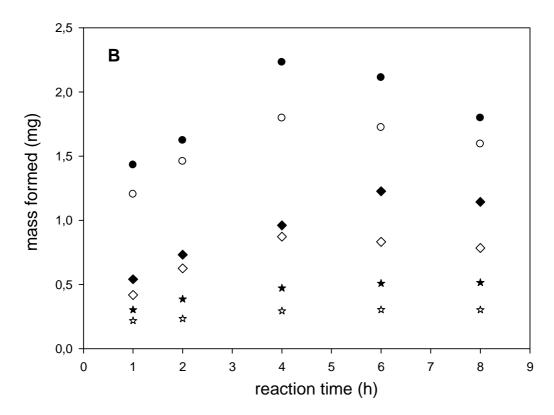


Figure 3S Net et al., 2009

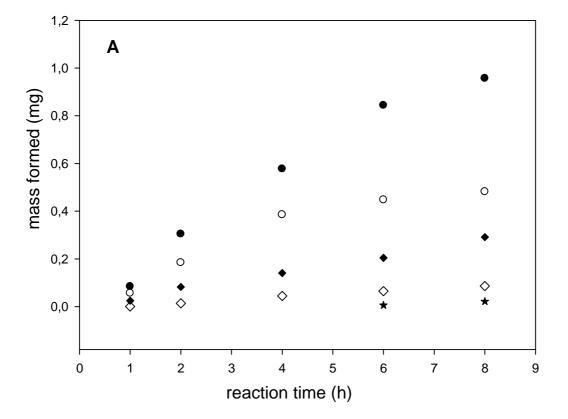


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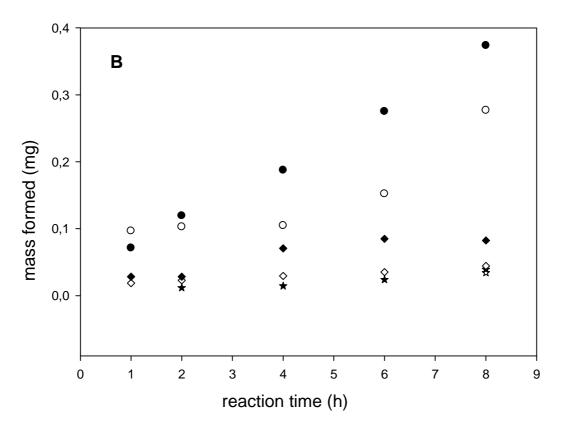


Figure 4S Net et al., 2009

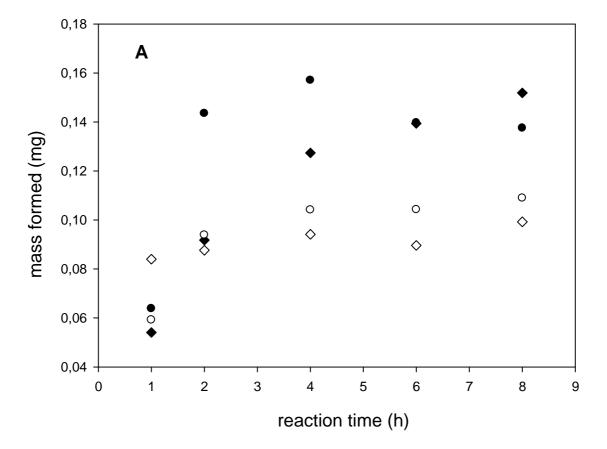


Figure 5S Net et al., 2009

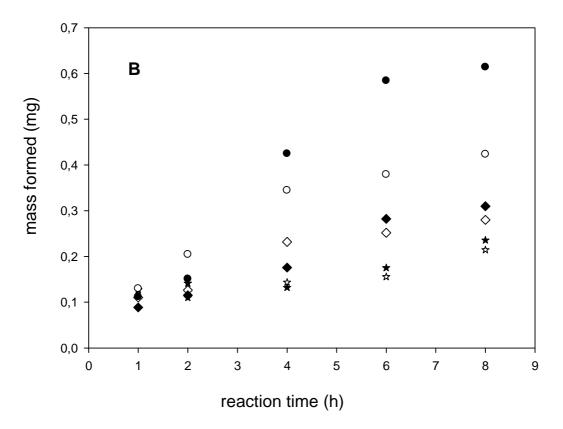


Figure 5S Net et al., 2009

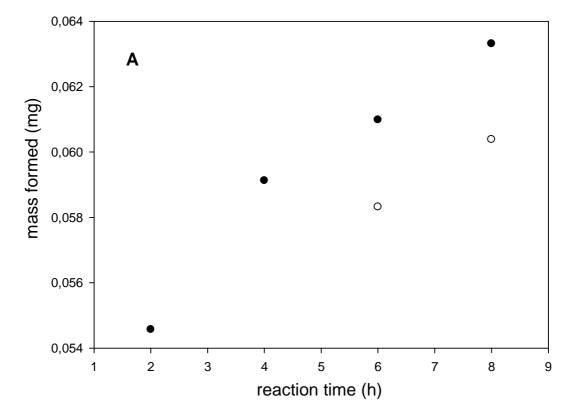


Figure 6S Net et al., 2009

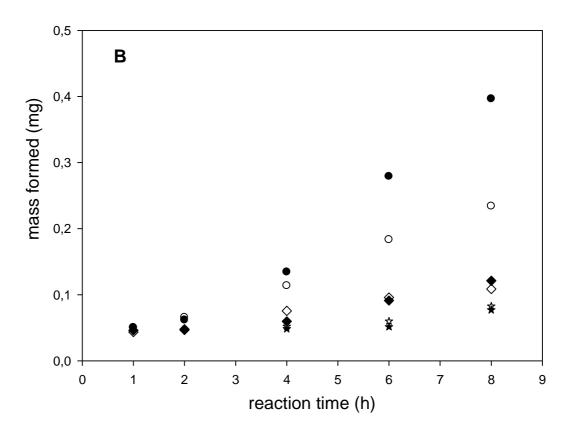


Figure 6S Net et al., 2009

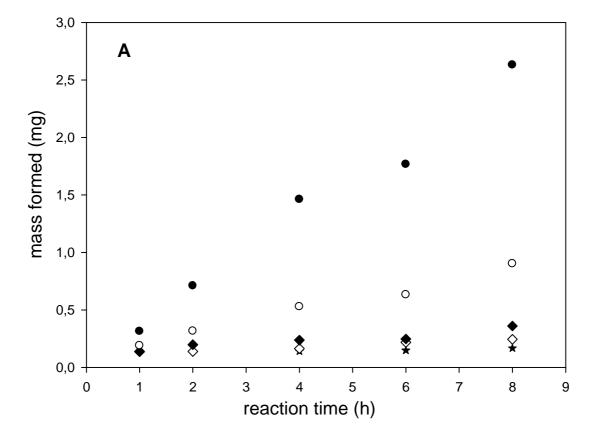


Figure 7S Net et al., 2009

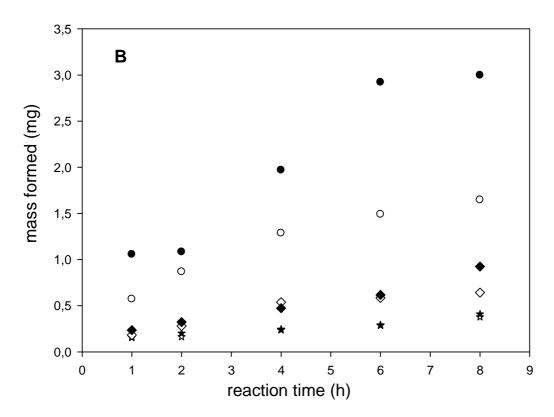


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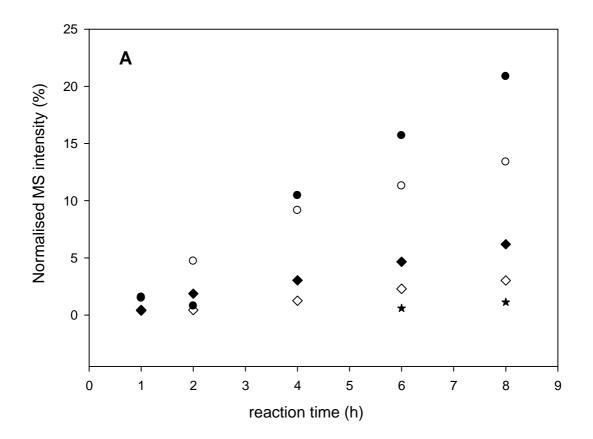


Figure 8S Net et al., 2009

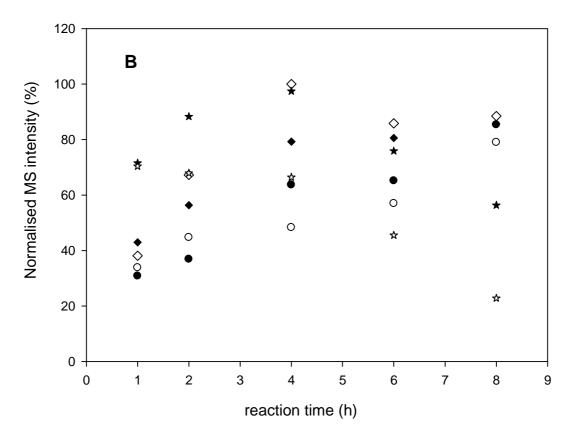


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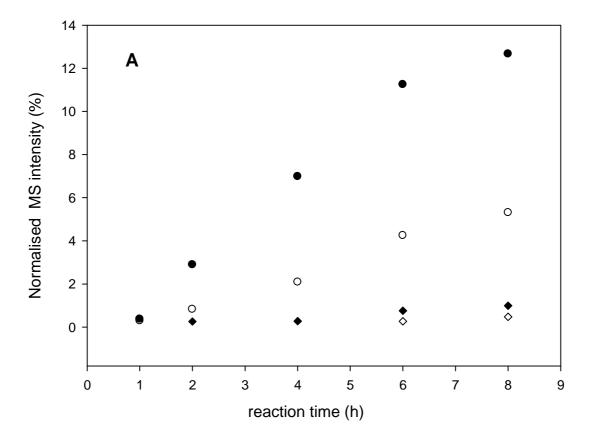


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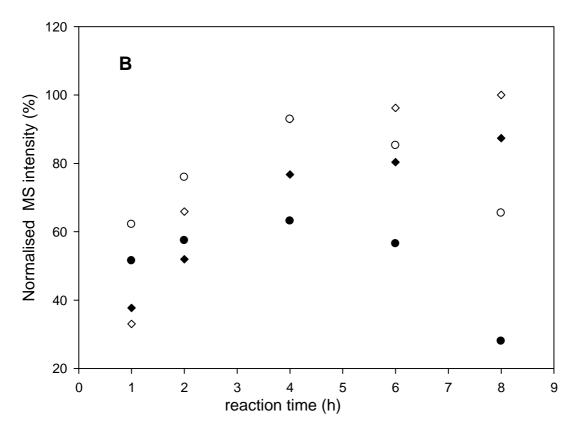


Figure 9S Net et al., 2009