Supplementary Materials

Toward an Accurate Spectrophotometric Evaluation of the Efficiencies of Photocatalysts in Processes Involving Their Separation Using Nylon Membranes

Halema Al-Kandari [1,*], Peter Kasak [2], Ahmed M. Mohamed [3], Shekhah Al-Kandari [3], Dusan Chorvat, Jr. [4] and Aboubakr M. Abdullah [2,*]

[1] Department of Health Environment, College of Health Sciences, PAAET, P.O. Box 1428, Faiha 72853, Kuwait
[2] Center for Advanced Materials, Qatar University, Doha 2713, Qatar; peter.kasak@qu.edu.qa
[3] Chemistry Department, Kuwait University, P.O. Box 5969, Safat 13060, Kuwait; ahmed.mohamed@ku.edu.kw (A.M.M.); shekhah.alkandari@ku.edu.kw (S.A.-K.)
[4] Department of Biophotonics, International Laser Center, Ilkovicova 3, 84104 Bratislava, Slovakia; chorvat@ilc.sk
* Correspondence: ha1.alkandari@paaet.edu.kw or halecatalysis@yahoo.com (H.A.-K.); bakr@qu.edu.qa or abubakr_2@yahoo.com (A.M.A.); Tel. +965-248-1837 (H.A.-K.); +974-4403-5672 (A.M.A.); Fax: +965-248-1837 (H.A.-K.); +974-4403-388 (A.M.A.)

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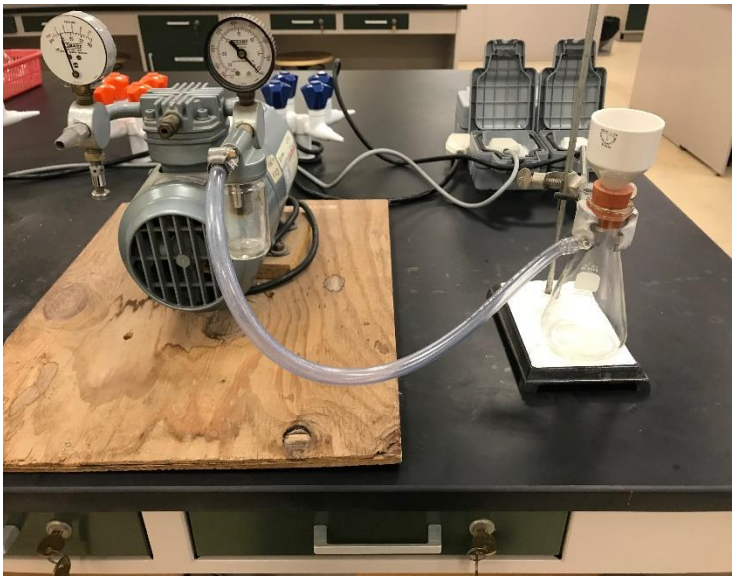

Figure S1: photograph of the filtration setup

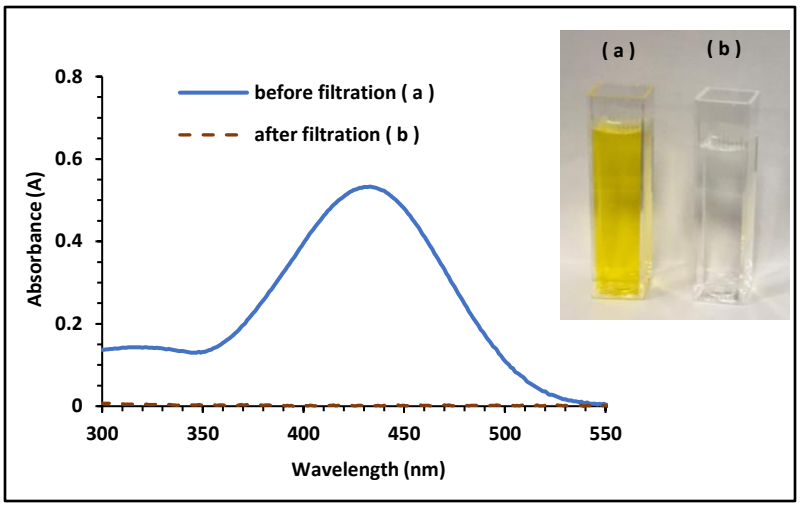

Figure S2: Absorbance spectra of 30 ppm phenol red (a) before and (b) after filtration using three membranes

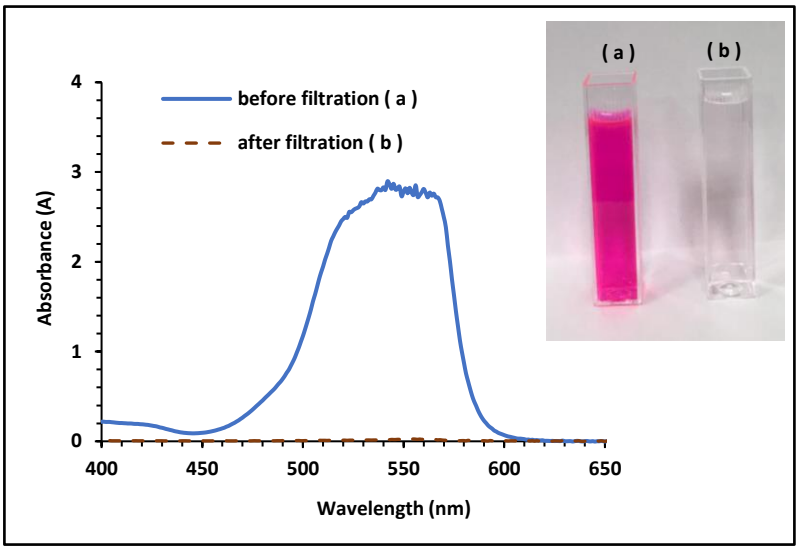

Figure S3: Absorbance spectra of 30 ppm rhodamine B (a) before and (b) after filtration using three membranes.

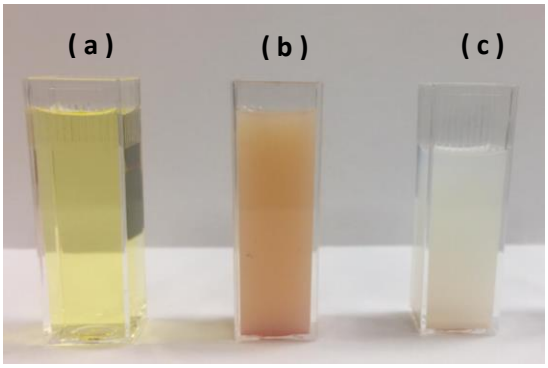

Figure S4: (a) Color of 10 ppm phenol red, (b) color of phenol red + 0.1 g TiO_2 after 30 min stirring in dark room, (c) color of phenol red + TiO_2 after 5 min irradiation with Xe lamp as irradiation source.

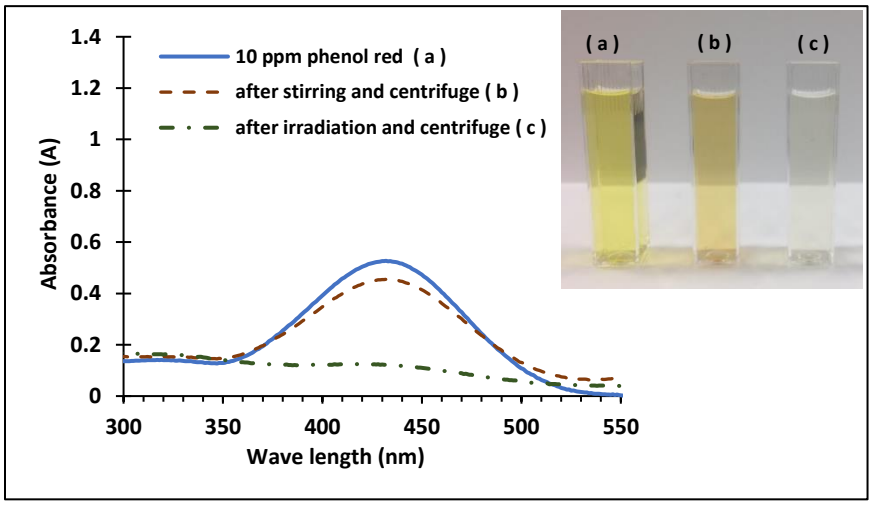

Figure S5: Absorbance spectra region of phenol red (a) as prepared, (b) after centrifuge of solution containing 10 ppm phenol red + 0.1 g TiO_2 min stirred in dark room for 30 min ; i.e. before illumination and (c) after centrifuge of irradiated solution containing 10 ppm phenol red + 0.1 g TiO_2 min for 5 min using Xe lamp as irradiation source

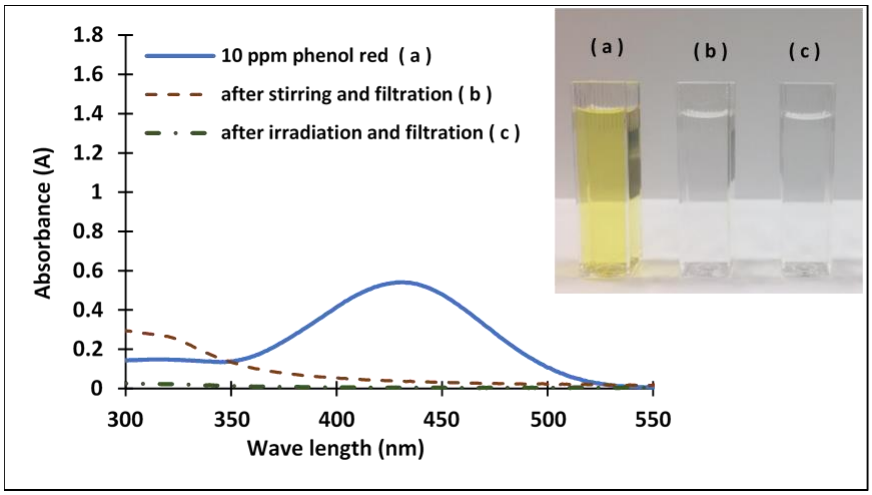

Figure S6: Absorbance spectra region of phenol red (a) as prepared, (b) after filtration of solution containing 10 ppm phenol red + 0.1 g TiO_2 min stirred in dark room for 30 min ; i.e. before illumination and (c) after filtration of irradiated solution containing 10 ppm phenol red + 0.1 g TiO_2 min for 5 min using Xe lamp as irradiation source

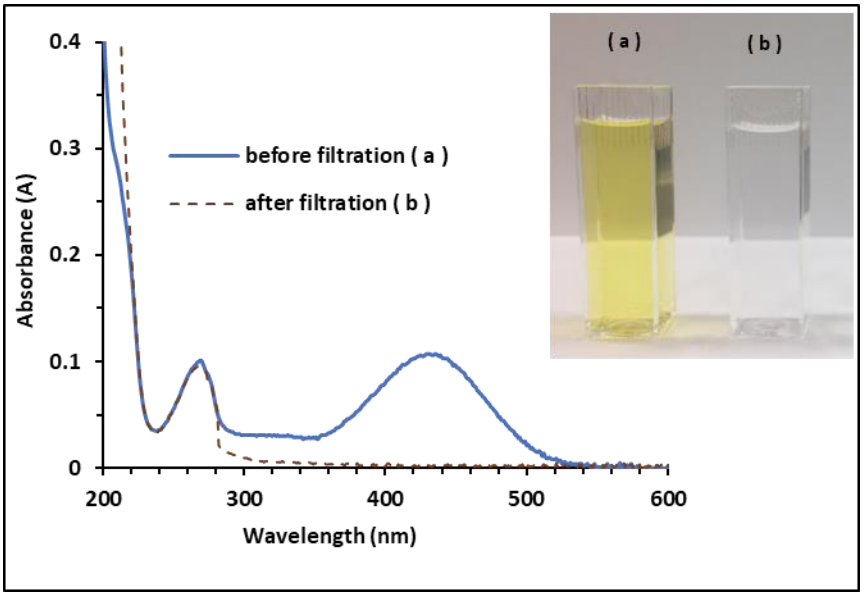

Figure S7: absorption spectra of 5 mL mixture of phenol red and phenol each 10 ppm (a) before filtration (b) after filtration using nylon filter

Table S1: removal percentage of phenol red from a 5 ml of 10 ppm phenol red solution using the same nylon filter membrane for 10 times, followed by 2 more runs after a washing cycle with distilled water under high vacuum.

Run	% removal of phenol red
1	98.3
2	98.2
3	98.0
4	97.9
5	92.2
6	89.5
7	86.3
8	80.0
9	77.2
10	64.3
After washing the filter	
1	88.3
2	88.2