

*Supplementary Materials***Table S1.** Percent degradation of orange II at different concentration.

Concentration (ppm)	5	10	15	20	25	30	35	40
% Degradation	55.67	69.28	72.31	74.85	78.96	73.11	72.28	71.50

Table S2. Orange II percent degradation at different pH.

pH	1	2	3	4	5	6	7	8	9	10	11	12	13	14
% Degradation	39.06	48.48	50.17	53.47	55.07	57.67	62.09	58.97	56.74	52.40	49.42	46.84	41.98	39.87

Table S3. Percentage degradation at different intervals of time.

Time (Days)	1	2	3	4	5	6	9	12	15	18	21
% Degradation	26.26	34.97	54.49	54.57	54.70	54.90	55	55.10	55.18	55.27	55.38

Table S4. Percentage degradation of Orange II at different range of temperature.

Temperature(°C)	25	30	35	40	45	50
% Degradation	33.14	52.94	63.34	50.14	46.20	43.11

Table S5. Percentage degradation of Orange II dye at glucose concentration.

Concentration(mg/L)	333.33	666.66	1000	1333.33	1666.67
% Degradation	60.57	68.68	71.66	70.83	70.01

Table S6. Percentage degradation of dye (Orange II) at different concentration of urea.

Concentration(mg/L)	333.33	666.66	1000	1333.33	1666.67
% Degradation	66.72	67.17	68.48	68.29	65.79

Table S7. Percent degradation of Orange II at different concentration of sodium chloride.

Concentration(mg/L)	333.33	666.66	1000	1333.33	1666.67
% Degradation	50.48	58.69	39.77	37.68	36.23

Table S8. Percent degradation of Orange II by *B. subtilis* using different Redox mediators.

Concentration (66 mg/L)	Uric Acid	Sodium Benzoate	Hydroquinone	EDTA
% Degradation	28.53	59.55	60.93	58.58