

Supplementary materials

Green Synthesis of Nano Zinc Oxide/Nanohydroxyapatite Composites Using Date Palm Pits Extract and Eggshells: Adsorption and Photocatalytic Degradation of Methylene Blue

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Table S1. GC-MS differentiation of the compounds detected in the date palm seeds extract

Peak	RT	Name	Formula	Area	Area Sum %
1	13.337	Octadecane, 6-methyl-	C ₁₉ H ₄₀	3113268.1	0.64
2	13.767	Decane, 2,3,5,8-tetramethyl-	C ₁₄ H ₃₀	4090752.6	0.83
3	14.083	Butylated Hydroxytoluene	C ₁₅ H ₂₄ O	13840947	2.82
4	14.43	Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, ethyl ester	C ₁₇ H ₂₆ O ₃	7696635	1.57
5	15.575	Dodecanoic acid, trimethylsilyl ester	C ₁₅ H ₃₂ O ₂ Si	41436959	8.46
6	16.185	Tetradecane, 2,6,10-trimethyl-	C ₁₇ H ₃₆	3266406.7	0.67
7	17.384	9-Octadecenoic acid (Z)-	C ₁₈ H ₃₄ O ₂	6094113.9	1.24
8	17.625	Myristic acid, TMS derivative	C ₁₇ H ₃₆ O ₂ Si	31837903	6.5
9	18.363	Tetradecane, 2,6,10-trimethyl-	C ₁₇ H ₃₆	5402844.2	1.1
10	19.516	Palmitic Acid, TMS derivative	C ₁₉ H ₄₀ O ₂ Si	79002808	16.12
11	21.001	9,12-Octadecadienoic acid (Z,Z)-, TMS derivative	C ₂₁ H ₄₀ O ₂ Si	26696317	5.45
12	21.046	9-Octadecenoic acid, (E)-, TMS derivative	C ₂₁ H ₄₂ O ₂ Si	116682823	23.81
13	21.754	9,12,15-Octadecatrienoic acid, 2-(acetyloxy)-1-[(acetyloxy)methyl]ethyl ester, (C ₂₅ H ₄₀ O ₆	3102104.6	0.63
14	22.553	9,12,15-Octadecatrienoic acid, 2-[[trimethylsilyl]oxy]-1-[[trimethylsilyl]oxy]m	C ₂₇ H ₅₂ O ₄ Si ₂	5160684.2	1.05
15	23.728	Di-n-octyl phthalate	C ₂₄ H ₃₈ O ₄	17280429	3.53
16	24.022	1-Monopalmitin, 2TMS derivative	C ₂₅ H ₅₄ O ₄ Si ₂	9580733.8	1.96
17	25.243	1-Monooleoylglycerol, 2TMS derivative	C ₂₇ H ₅₆ O ₄ Si ₂	14977367	3.06
18	27.383	13-Heptadecyn-1-ol	C ₁₇ H ₃₂ O	2030498.9	0.41
19	27.873	E-9-Tetradecenoic acid	C ₁₄ H ₂₆ O ₂	4554852.5	0.93
20	28.174	Dodecanoic acid, 3-hydroxy-	C ₁₂ H ₂₄ O ₃	10979353	2.24
21	30.706	Ergosta-5,22-dien-3-ol, acetate, (3.β.,22E)-	C ₃₀ H ₄₈ O ₂	3338742.6	0.68
22	36.267	9,12-Octadecadienoyl chloride, (Z,Z)-	C ₁₈ H ₃₁ ClO	21144347	4.32
23	37.187	trans-13-Octadecenoic acid	C ₁₈ H ₃₄ O ₂	42737800	8.72
24	43.117	8,11,14-Eicosatrienoic acid, (Z,Z,Z)-	C ₂₀ H ₃₄ O ₂	15966377	3.26

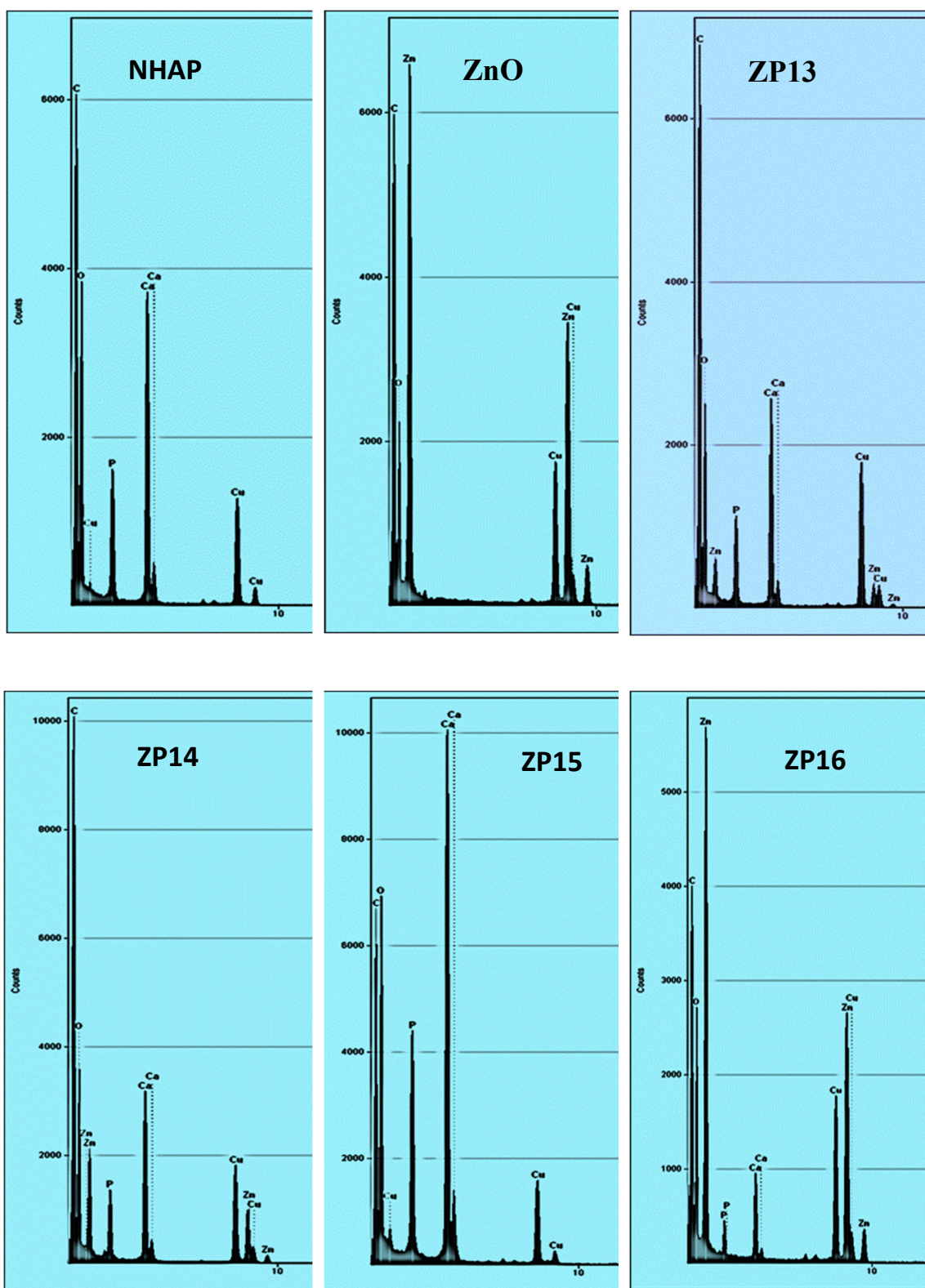


Figure S1. EDX elemental microanalysis of NHAP, ZnO and composite nano samples