

Biodeterioration Assessment of a unique old Pharaonic Kingdom Wooden Statue using Advanced Diagnostic Techniques

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Supplementary materials

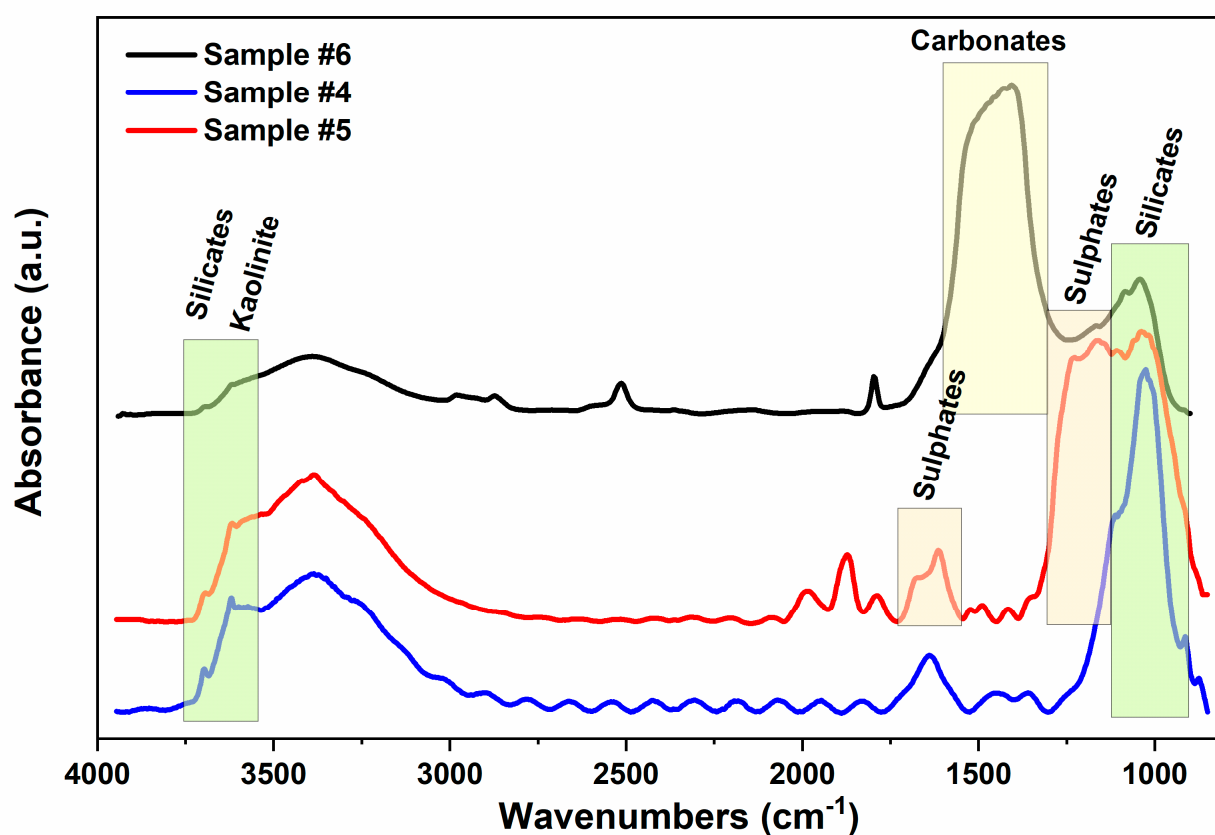


Figure S1. Infrared spectra of the soil samples #4, #5 and #6. The coloured selections highlight the characteristic infrared features of carbonates, sulphates and silicate. Among silicates, the presence of kaolinite can be distinguished by the sharp absorptions in the 3750-3500 cm⁻¹ range.

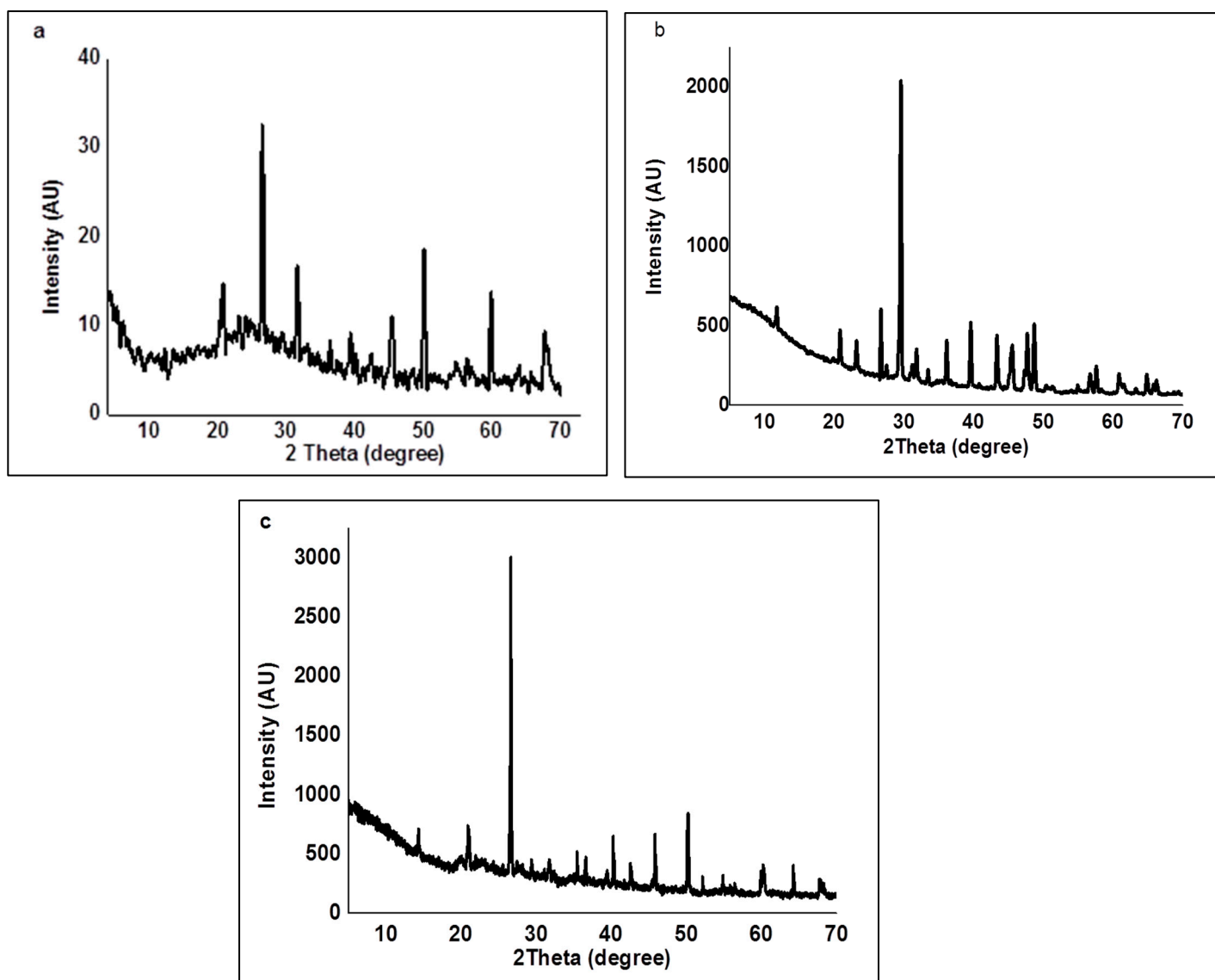


Figure S2. XRD patterns of the soil samples. a, b and c: XRD patterns of soil samples #4 , #5 and #6, respectively.

Table S1. Estimated chemical composition of the soil and wooden samples by X- ray diffraction technique.

Sample	Compound Name	Chemical Formula	Semi Quant %	Ref. code	Peaks Pos.(2 Theta)°		
#1	Quartz low	SiO ₂	55.3	05-0490	26.63	20.84	50.12
	Weddellite	Ca C ₂ O ₄ .2H ₂ O	27.9	17-0541	14.33	32.22	20.09
	Halite	NaCl	16.8	05-0628	31.72	45.46	56.48
#2	Halite	NaCl	100	05-0628	31.72	45.46	56.48
#4	Halite	NaCl	28.5	05-0628	31.72	45.46	56.48
	Quartz low	SiO ₂	34.9	05-0490	26.63	20.84	50.12
	Kaolinite	Al ₂ Si ₂ O ₅	36.6	14-0164	12.20	20.46	24.94
#5	Calcite	CaCO ₃	82.4	05-0586	29.44	48.58	47.58
	Gypsum	CaSo ₄ .2H ₂ O	10.5	06-0047	20.76	11.66	29.14
	Quartz low	SiO ₂	3.9	05-0490	26.63	20.84	50.12
	Halite	NaCl	3.2	05-0628	31.72	45.46	56.48
#6	Silicon Oxide	Si O ₂	54	00-046-1045	266.374	209.122	50.12
	Periclase	MgO	15	96-900-6754	31.734	458.395	425.876
	Calcite	CaCO ₃	9	00-005-0586	29.44	48.58	47.58
	Halite	NaCl	12		31.72	45.46	56.48

96-900-
8679
