

Electronic Supplementary Information

Scaled-up microwave assisted batch and flow synthesis, and life cycle assessment of a silica mesoporous material: UVM-7

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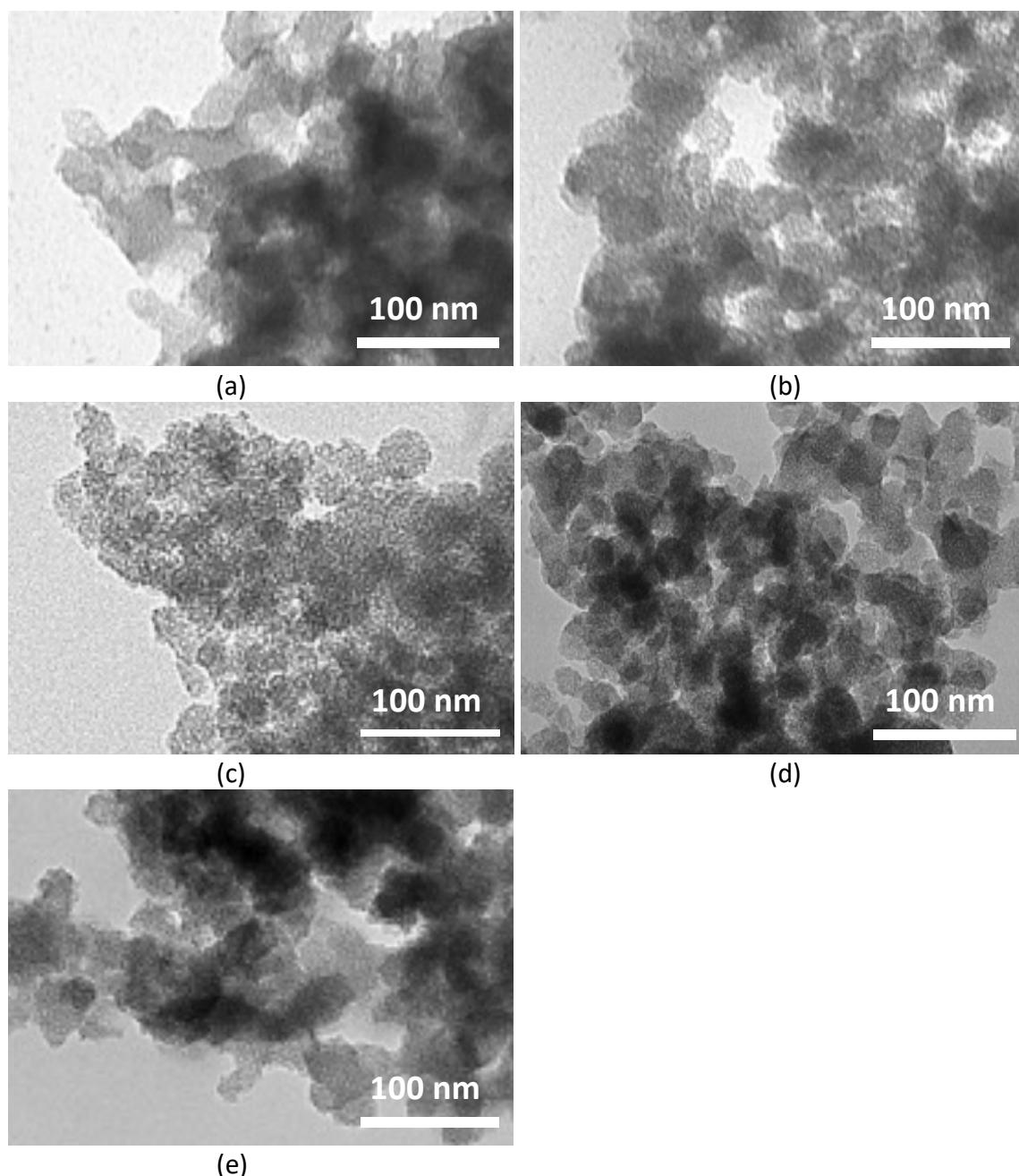


Figure S1: Representative TEM images of a) BS800c, b) BS800s, c) BS400, d) BF-4, and e) FF.

Table S1: Cost of reagents, solvents and energy used in the cost analysis.

Inventory element	€ per kg or kWh
TEOS	125.4
TEAH	90.8
CTABr	336.0
DIW	3.0
Ethanol	9.8
APTES	505.3
Acetonitrile	78.8
Energy	0.25

Table S2: Summary of the cost analysis for the diverse procedures.

	Euros per g of calcined and/or functionalised UVM-7			
	MW escalated batch	MW escalated flow	MW non- escalated	Conventional
Per step				
• Synthesis	2.0	2.0	3.6	2.6
• Calcinacion	0.1	0.1	0.2	0.5
• Funcionalization	5.6	5.0	31.7	4.8
Per component				
• Reagents	2.3	2.3	2.3	2.9
• Solvents	5.3	4.7	32.9	4.4
• Energy	0.1	0.1	0.3	0.5
Total	7.7	7.1	35.5	7.9