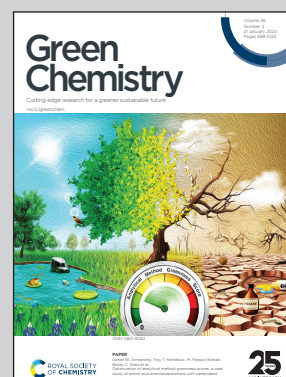


**Showcasing research from Professor Jose V. Ros-Lis' laboratory, University of Valencia, Valencia, Spain.**

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

Here we introduce innovative batch and flow methodologies for the synthesis and functionalization of substantial quantities of UVM-7, a silica mesoporous material. The synthesis combines the atrane route with microwaves generated with a solid-state source. The scaled-up procedures need less than 15 minutes. Within an hour, as-made material for more than 150 g of calcined UVM-7 could be synthesized, and 60 g can be functionalized. Life Cycle Assessment indicates that the scaled-up synthesis offers a substantial reduction in environmental impact.

**As featured in:**



See Jose Vicente Ros-Lis *et al.*,  
*Green Chem.*, 2024, **26**, 785.