

Supplementary

Microwave-assisted fabrication of mesoporous silica-calcium phosphate composites for dental application

Adrian Szewczyk ¹, Adrianna Skwira ¹, Marta Ginter ^{1,2}, Donata Tajer ^{1,2} and Magdalena Prokopowicz ^{1,*}

¹ Department of Physical Chemistry, Faculty of Pharmacy, Medical University of Gdańsk, Hallera 107, 80-416 Gdańsk, Poland

² Scientific Circle of Students

* Correspondence: magdalena.prokopowicz@gumed.edu.pl

Supplementary Information

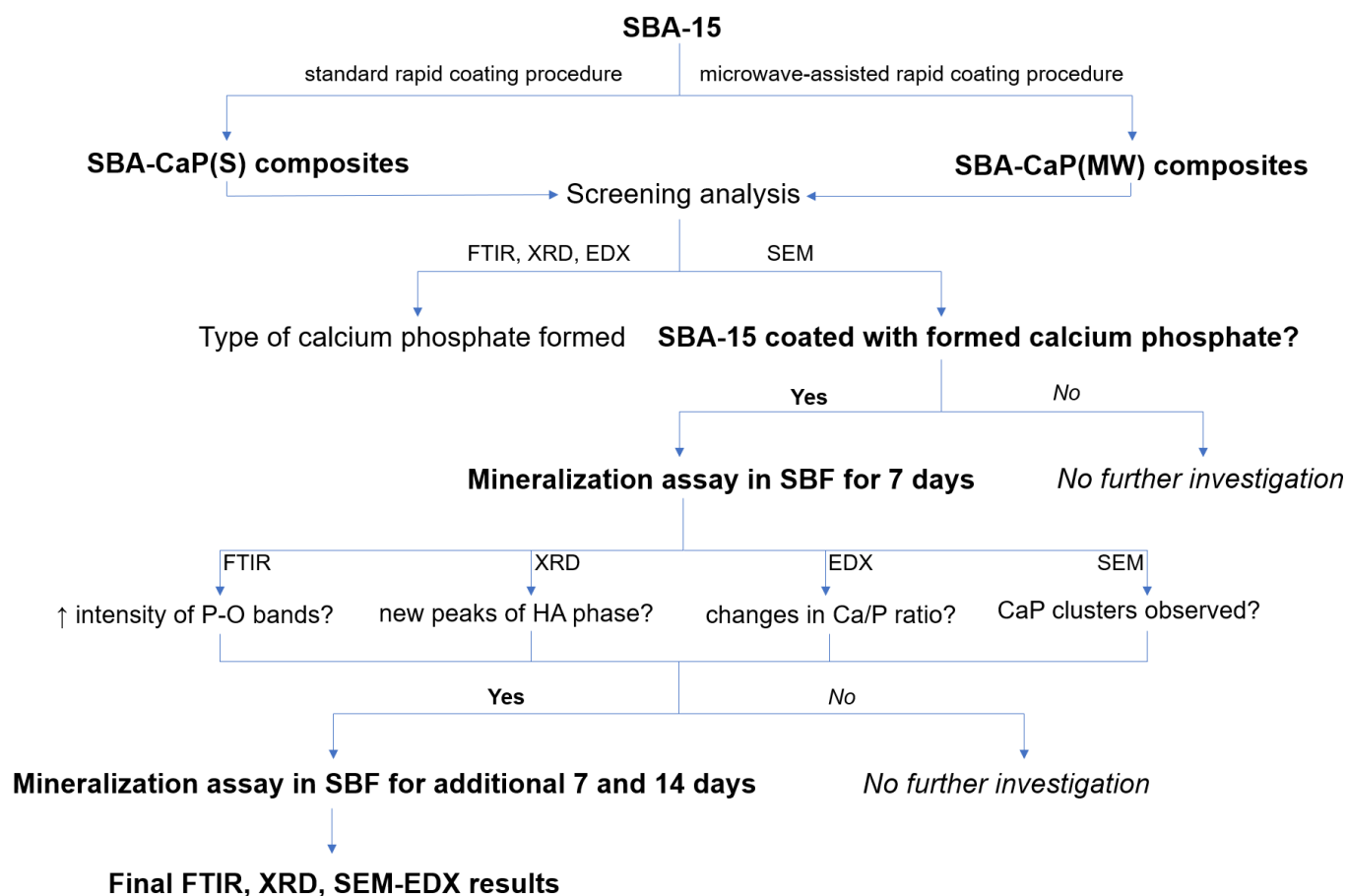


Figure S1. The flowchart of the study design: SBA-15-calcium phosphate composites synthesis and mineralization properties investigation.

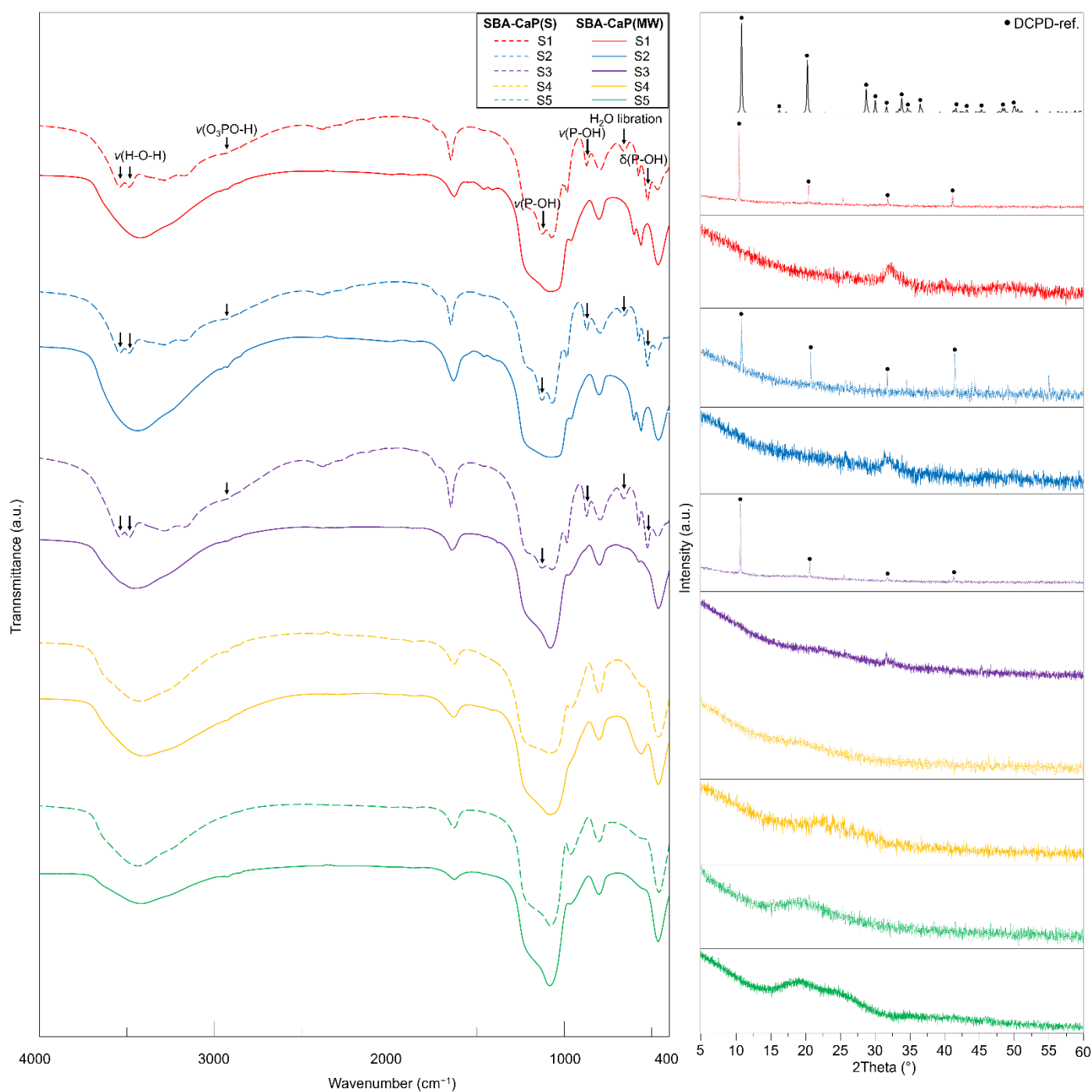


Figure S2. FTIR (left) and XRD (right) results of obtained SBA-CaP composites using standard (dashes) and microwave-assisted (straight lines) rapid coating procedures (types of vibration: ν —stretching, δ —bending). Arrows correspond to the vibrational modes characteristic for dicalcium phosphate dihydrate (DCPD).

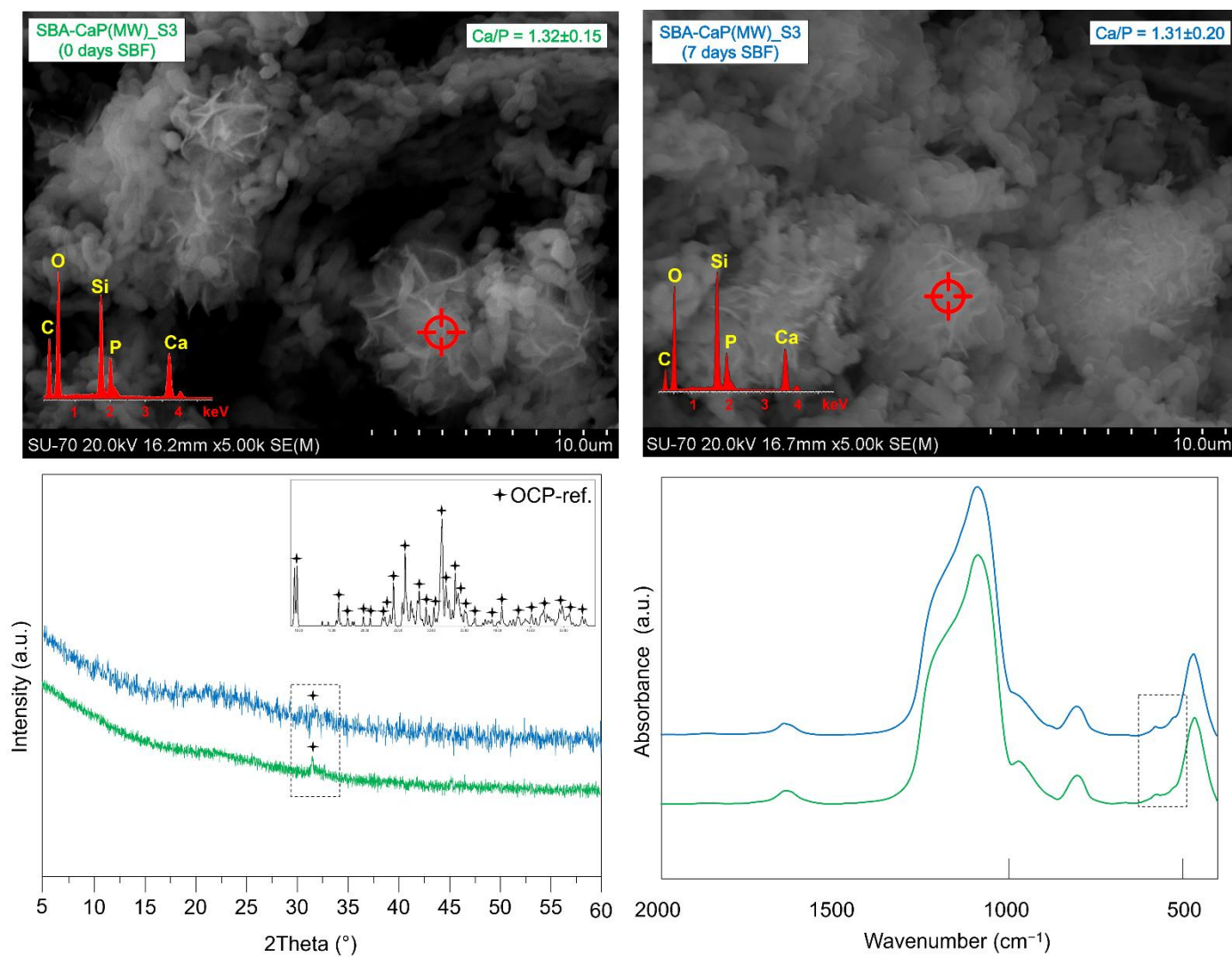


Figure S3. SEM-EDX, FTIR, and XRD results of SBA-CaP(MW)_S3 composite before (green) and after (blue) 7 days of incubation in simulated body fluid with marked areas confirming the poor mineralization potential of obtained composite.