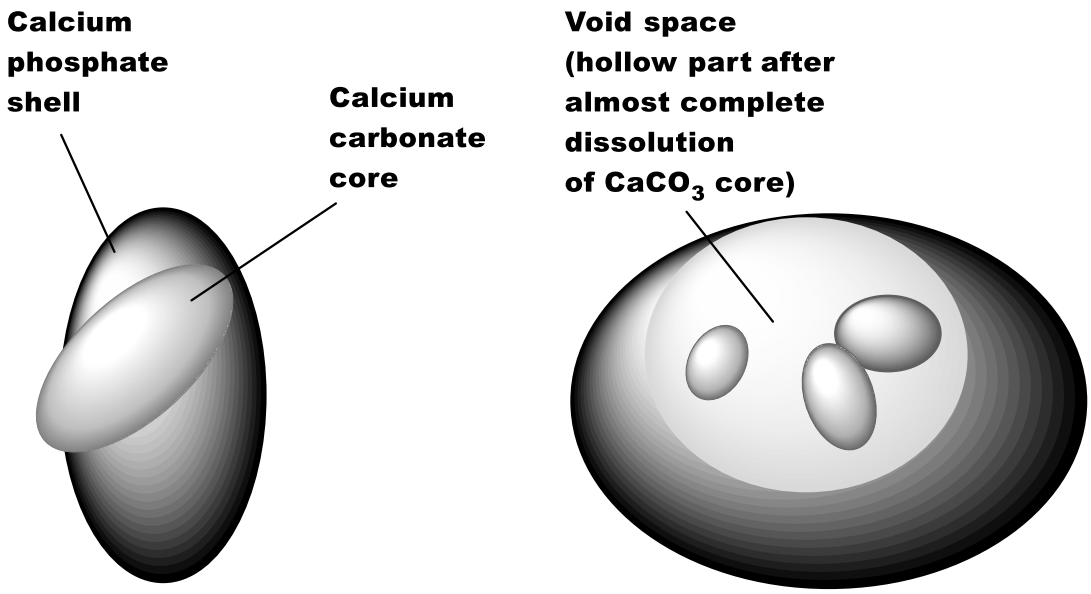

Calcium phosphate shell
Calcium carbonate core
Void space (hollow part after almost complete dissolution of $CaCO_3$ core)

Figure 1.

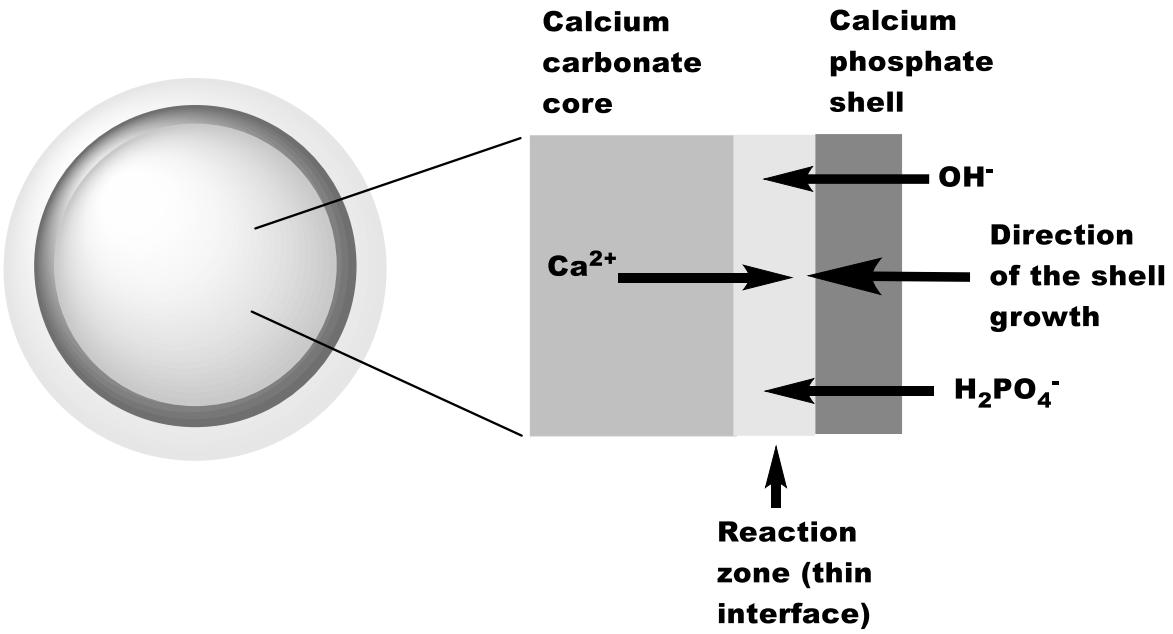

Calcium carbonate core
Calcium phosphate shell
OH-
Ca2+
Direction of the shell growth
H2PO4-
Reaction zone (thin interface)

Figure 2.

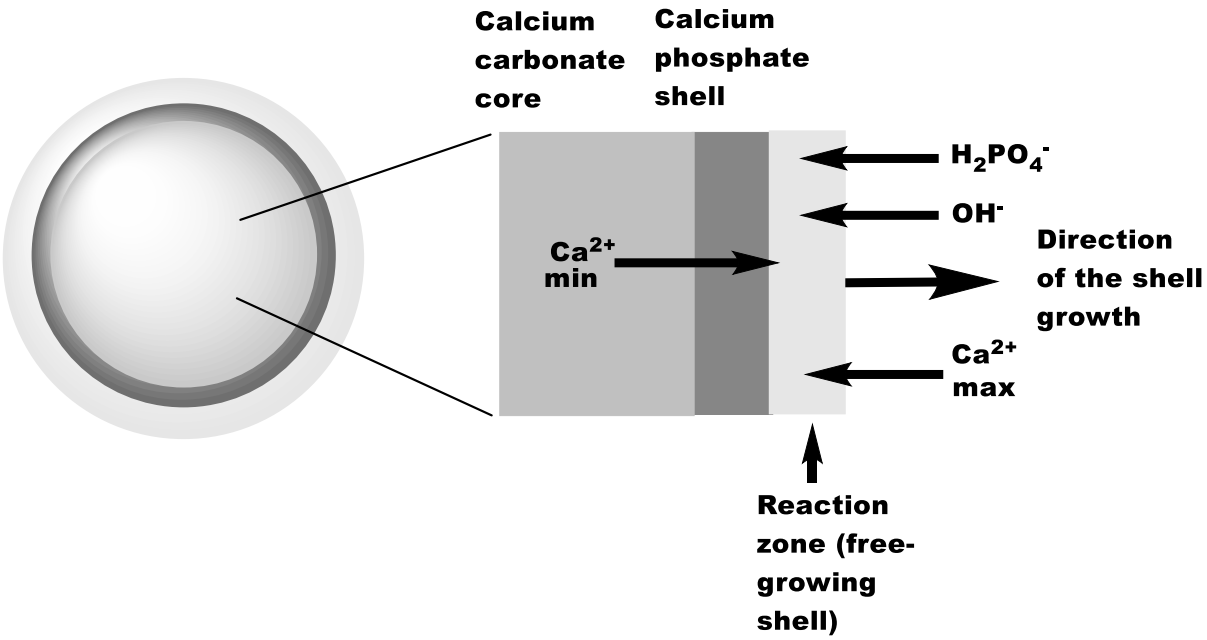

Calcium carbonate core
Calcium phosphate shell
$H_2PO_4^-$
OH^-
Ca^{2+} min
Direction of the shell growth
Ca^{2+} max
Reaction zone (free-growing shell)

Figure 3.

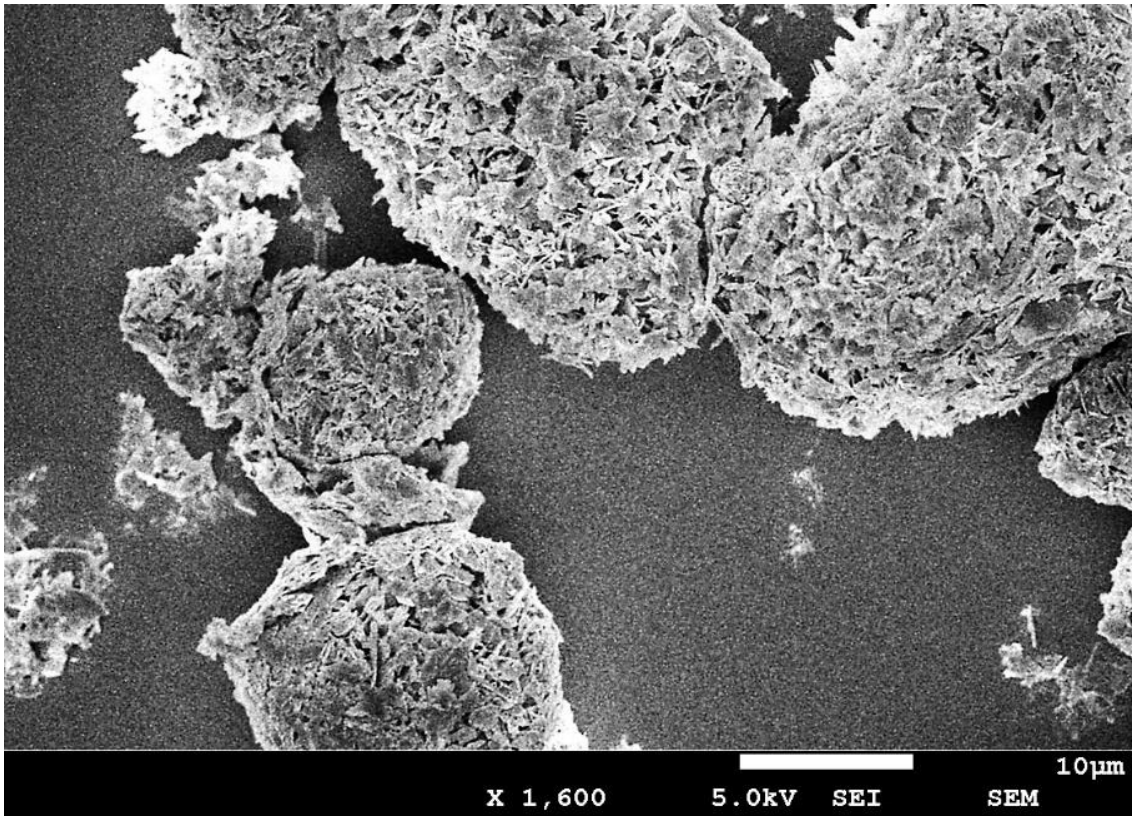


Figure 4.

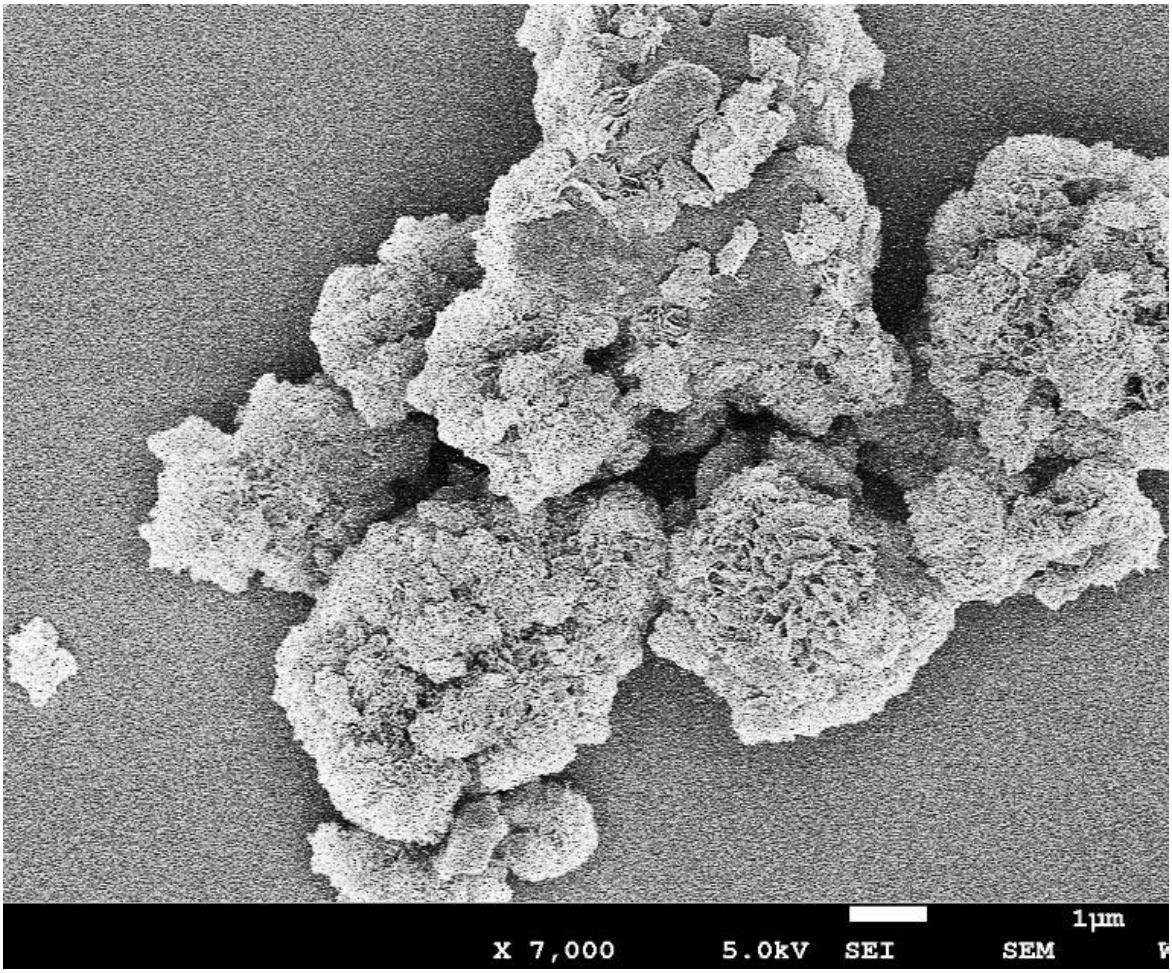


Figure 5.

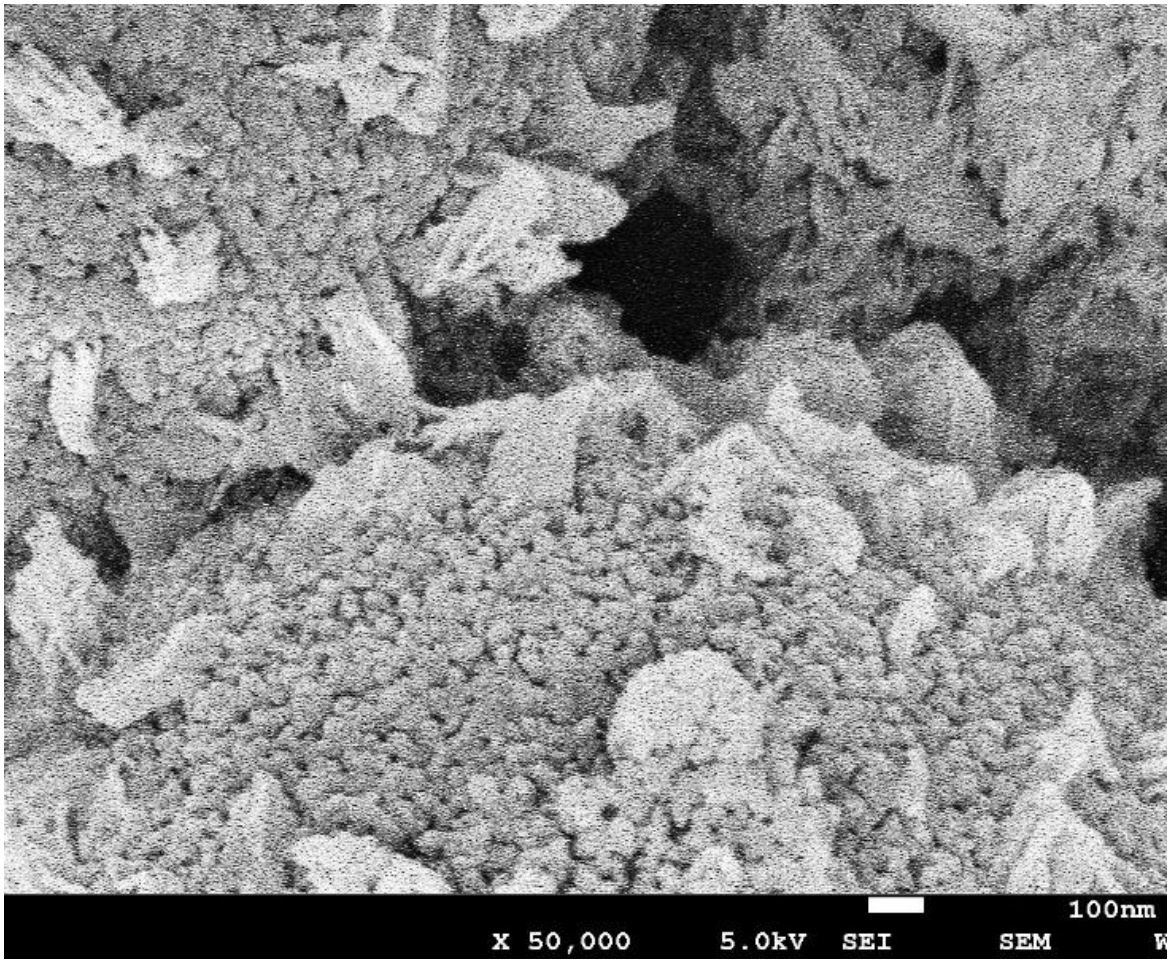


Figure 6.

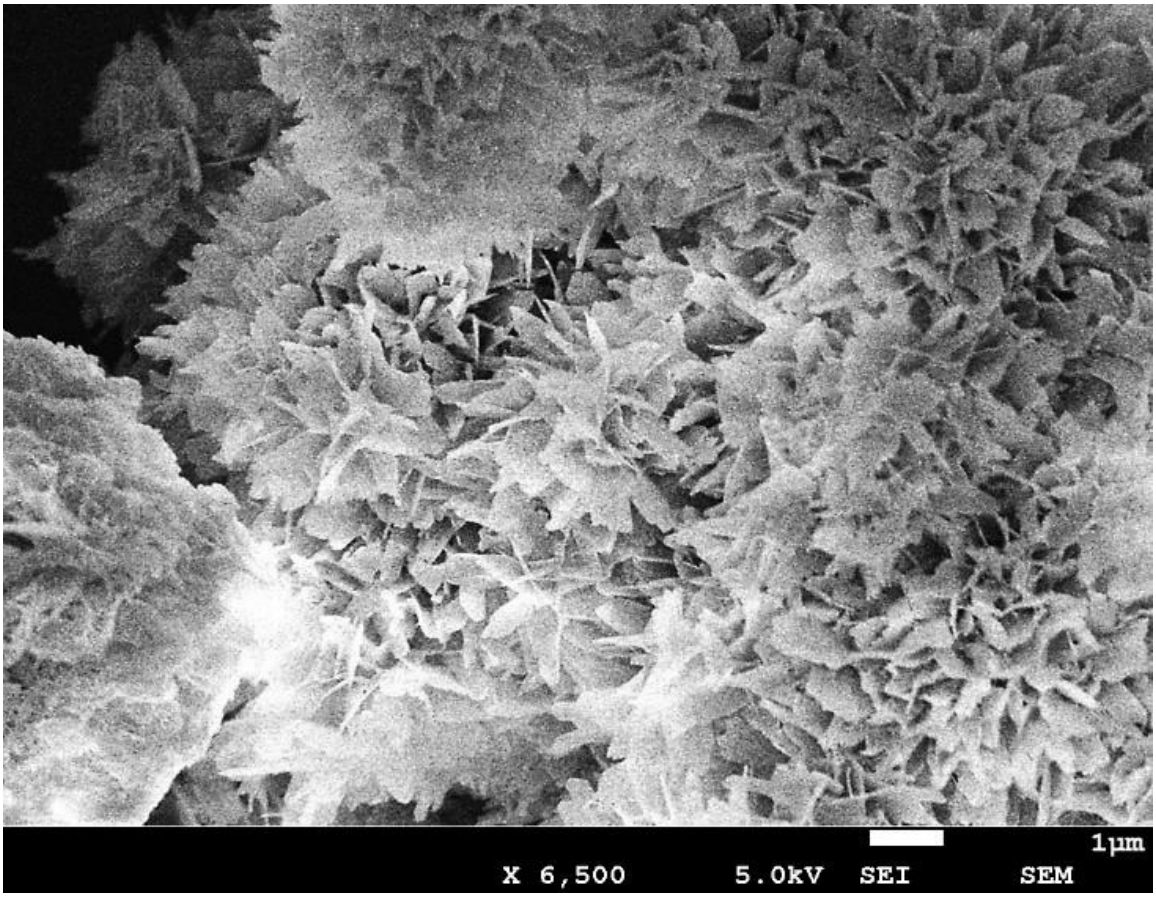


Figure 7.

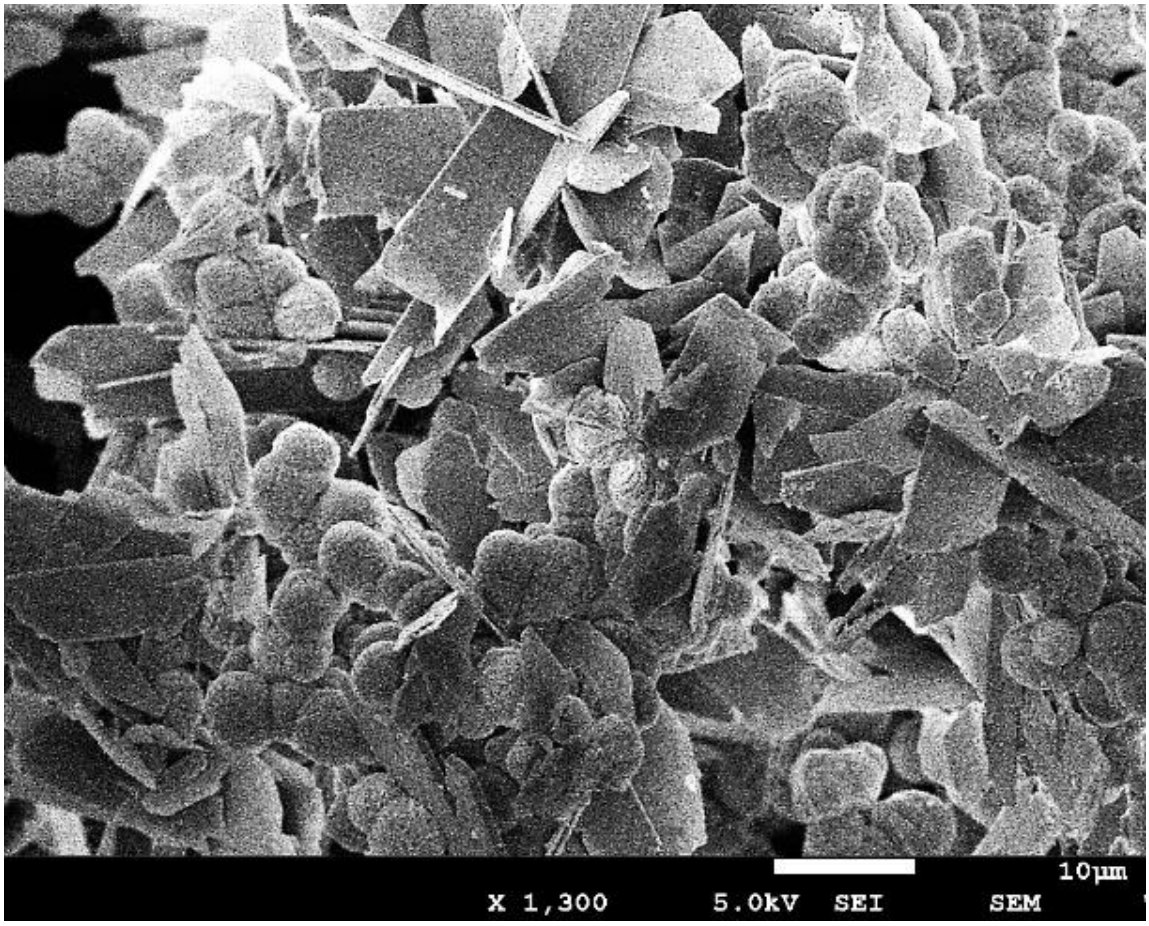


Figure 8.

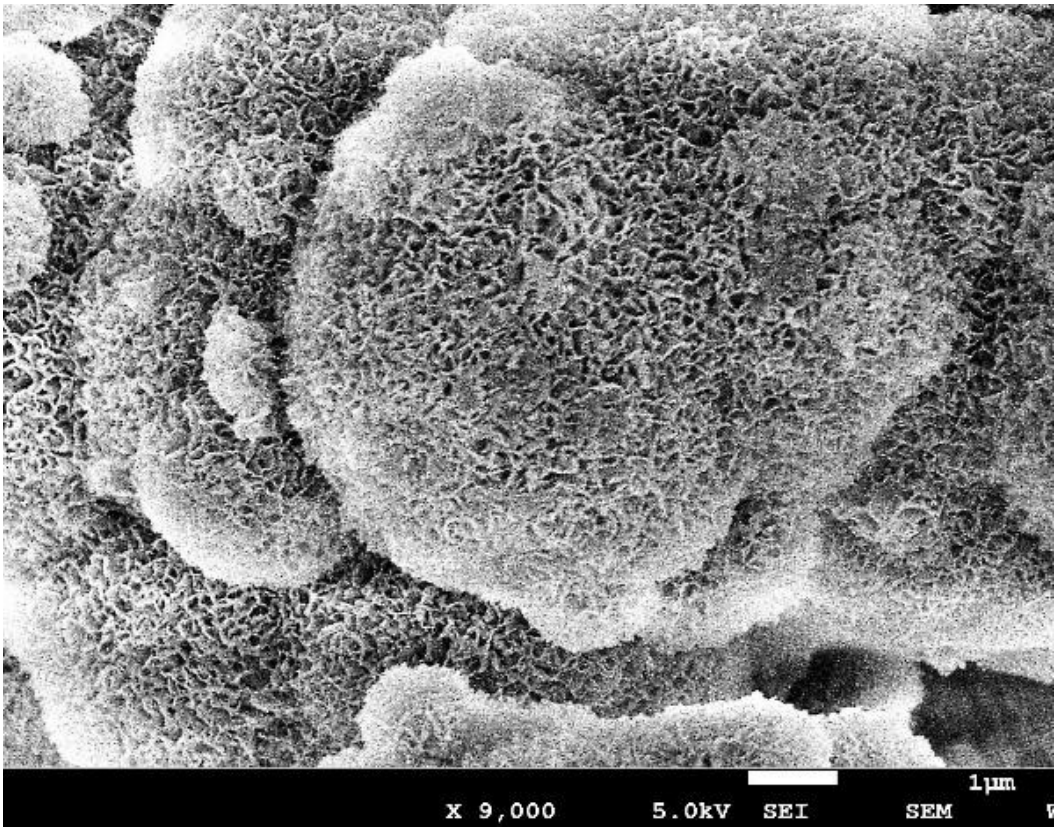


Figure 9.

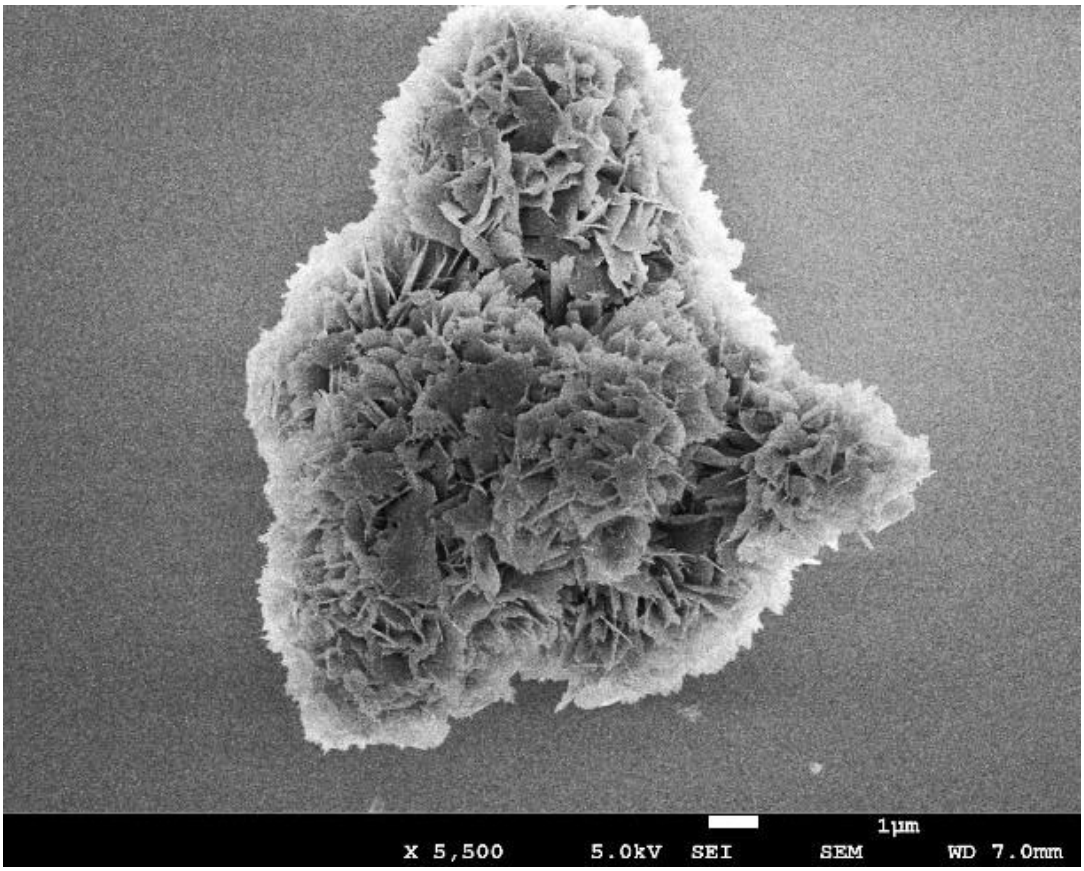


Figure 10.

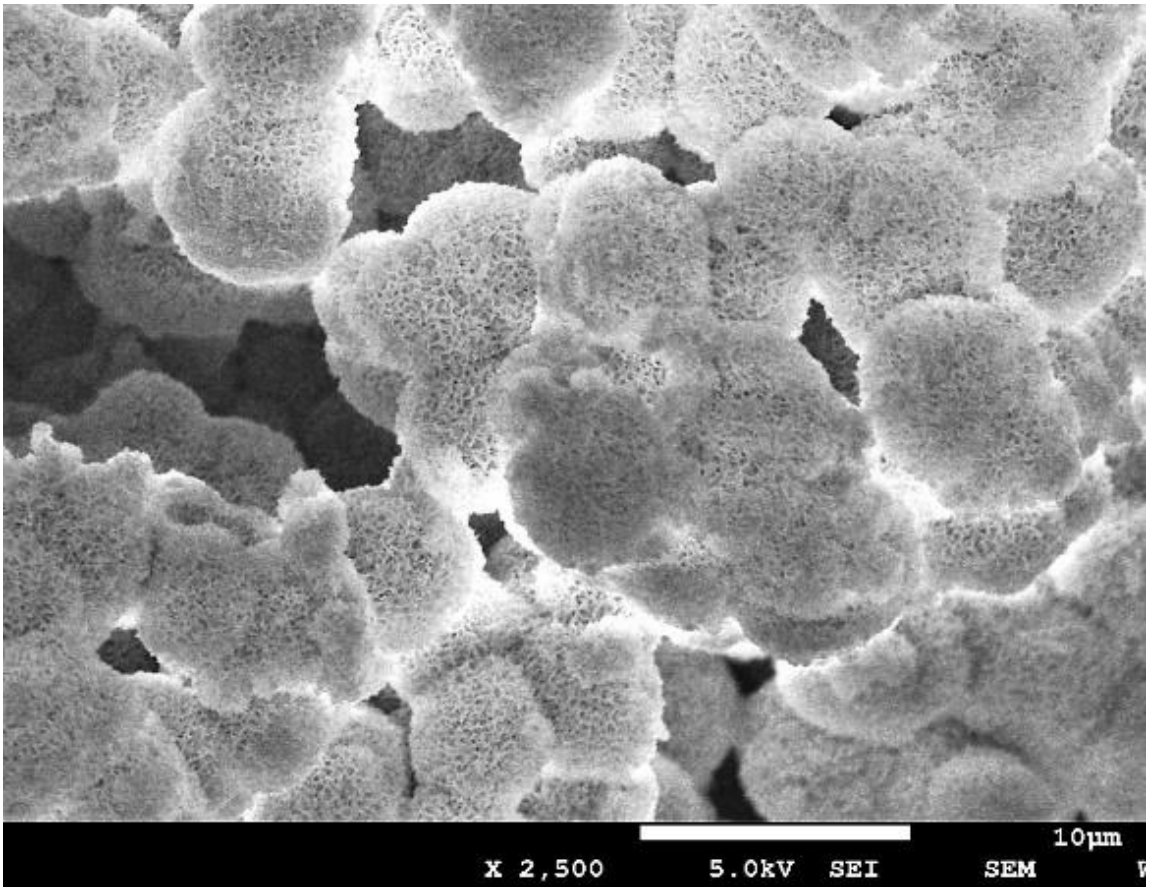


Figure 11.