

# Can we form mesoporous zeolites by steam assisted crystallization of MCM-41?

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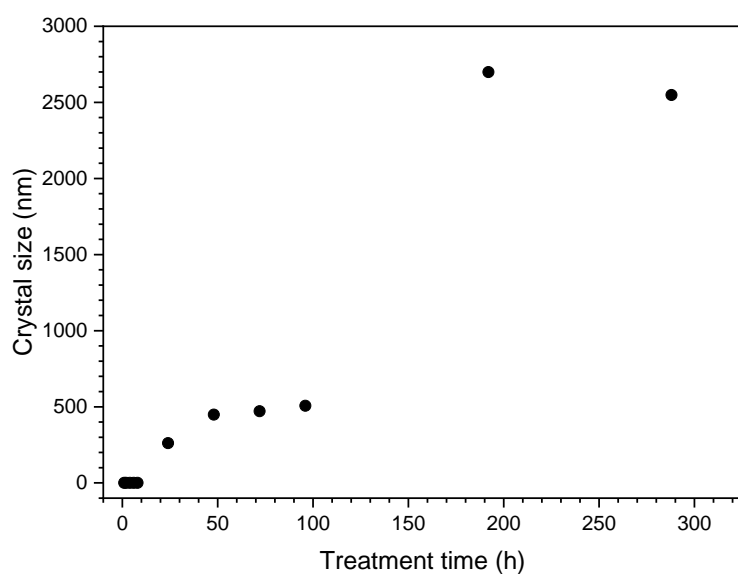
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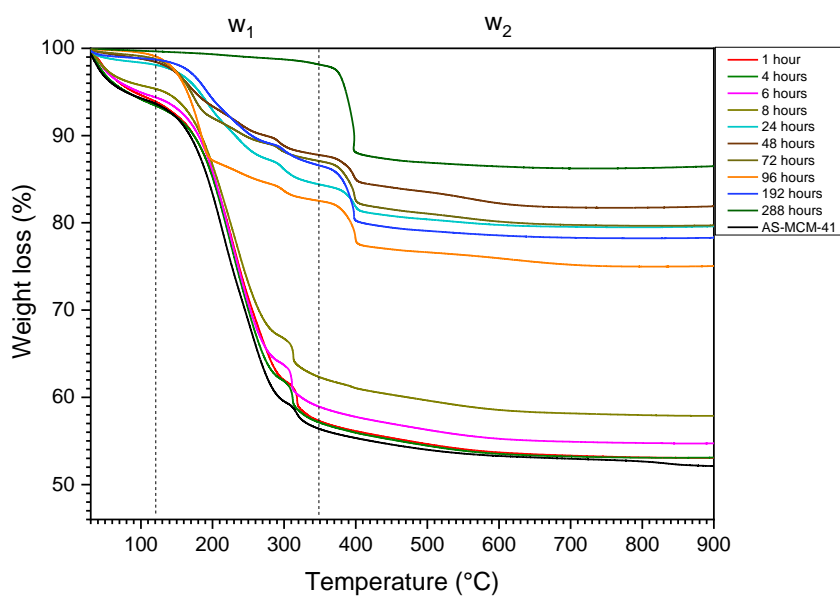
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**Table S1.** Textural properties of parent calcined MCM-41 and of materials after different SAC treatment times.

| Sample    | $S_{\text{BET}}$<br>(m <sup>2</sup> /g) | $S_{\text{micro}}$<br>(m <sup>2</sup> /g) | t-plot external<br>surface (m <sup>2</sup> /g) | $V_{\text{TP}}$<br>(cm <sup>3</sup> /g) | $V_{\mu}$ (cm <sup>3</sup> /g) | Pore width (Å) |
|-----------|---|---|--|---|--------------------------------|----------------|
| MCM-41    | 1090                                    | 0   | 1000   | 0.90                                    | 0                              | 38             |
| 1 hour    | 980                                     | 0   | 965  | 0.78                                    | 0                              | 37             |
| 4 hours   | 930                                     | 0   | 964  | 0.99                                    | 0                              | 45             |
| 6 hours   | 800                                     | 0   | 750  | 0.97                                    | 0                              | 53             |
| 8 hours   | 700                                     | 0   | 650  | 0.90                                    | 0                              | 53             |
| 24 hours  | 290                                     | 45  | 237  | 0.45                                    | 0.02                           | 8              |
| 48 hours  | 215                                     | 70  | 140  | 0.31                                    | 0.03                           | 8              |
| 72 hours  | 225                                     | 115                                       | 110  | 0.34                                    | 0.05                           | 8              |
| 96 hours  | 290                                     | 185                                       | 105  | 0.31                                    | 0.07                           | 8              |
| 192 hours | 420                                     | 250                                       | 170  | 0.35                                    | 0.09                           | 8              |
| 288 hours | 440                                     | 345                                       | 95   | 0.31                                    | 0.12                           | 8              |



**Figure S1.** Evolution of the crystal size estimated by the Scherrer equation as a function of the SAC treatment time.



**Figure S2.** Thermogravimetric analysis under synthetic air for samples achieved after different SAC treatment times.