Electronic Supporting Information

CPMV induced synthesis of Hollow-porous SiO$_2$
Nanocapsules with excellent performance in Drug delivery

Koushi Kumar$^1$, Pradip Paik$^{1,*}$

$^1$School of Engineering Sciences and Technology, University of Hyderabad- 500046, India.

Corresponding Author

*Email: ppse@uohyd.ernet.in, paik@uohyd.ac.in, pradip.paik@gmail.com,
**Figure 1S.** (a), (b) TEM images and (c), (d) SEM images of Control SiO$_2$ (samples without CPMV) and (e), (f) TEM images of negatively stained CPMV.
Figure 2S: AFM images on CPMV dispersed on mica sheet (with different scan area) at different magnifications. (a) and (c) Topography image at low and high magnification, respectively, (b) and (d) 3D view of (a) and (c), respectively.
Figure 3S: Particle size distribution of CPMV-hollow silica nanocapsules measured by dynamic light scattering (DLS) after segregation.

Table S1(a): DLS for hollow silica nanocapsules.

<table>
<thead>
<tr>
<th></th>
<th>Diam. (nm)</th>
<th>% Intensity</th>
<th>Width (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>peak 1</td>
<td>195.7</td>
<td>95.5</td>
<td>148</td>
</tr>
</tbody>
</table>
Figure 4S. TEM images of CPMV SiO$_2$ with changes in molar ratio of TEOS and APTES, (a), (b) lower and higher magnification of samples with molar ratio of 95:05, (c),(d) lower and higher magnification of samples with molar ratio of 80:20.
Figure 5S. X-ray diffractogram of Control Silica nanoparticles (without CPMV), SiO$_2$ nanoparticles and hollow SiO$_2$ nanocapsules

Figure 6S. Selected area electron diffraction pattern of CPMV hollow silica nanocapsules.