

## **Supplementary Information**

**ESI, Figure 1:** The a) conductivity of the PVA/HP $\beta$ CD electrospinning solutions and b) average fiber diameter of fibers produced as a function of HP $\beta$ CD% (w/w total solute) of neat and ketoprofen loaded fibers.



**ESI, Figure 2:** The conductivity of neat (a) HP $\beta$ CD and (b) PVA in aqueous solutions as a funct ion of concentration. Conductivity decreases with increasing HP $\beta$ CD content, but increases with increasing PVA content.



t = 0.207s

ESI, Figure 3: The evolution of the dissolution of ketoprofen loaded HPβCD fibers with respect to time.

Blend	Viscosity (cP)		Surface Tension (dynes/cm)	
(HPBCD/PVA)	without drug	ketoprofen loaded	without drug	ketoprofen loaded
0/100	$185 \pm 7$	$192 \pm 8$	$52.7\pm0.7$	$51.0 \pm 0.6$
30/70	$195 \pm 9$	$212\pm11$	$53.5\pm0.5$	$51.7 \pm 0.7$
50/50	$344\pm10$	$325\pm11$	$54.2\pm0.9$	$52.3 \pm 0.6$
70/30	$554\pm16$	$524 \pm 12$	$54.5 \pm 0.9$	$53.7 \pm 0.9$
90/10	$213\pm12$	$221\pm12$	$58.6 \pm 0.7$	$58.6 \pm 0.5$
100/0	$3250\pm45$	$3451\pm34$	$58.0\pm0.9$	$57.2 \pm 0.8$

**ESI, Table 1**: Solution parameters for aqueous electrospinning solutions containing HP $\beta$ CD/PV A blends with and without ketoprofen.