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3D printed PCU/UHMWPE polymeric blend for artificial knee meniscus

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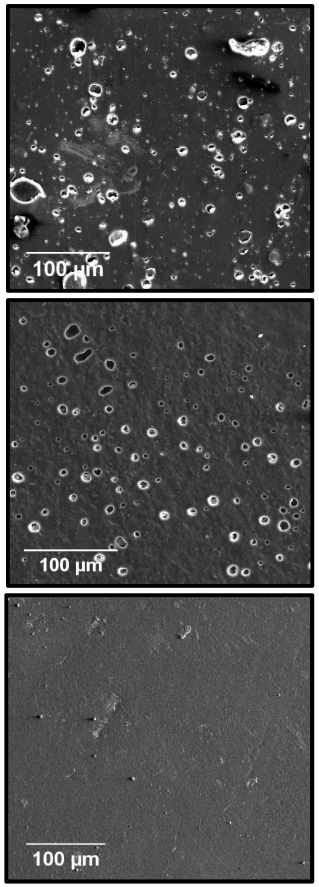
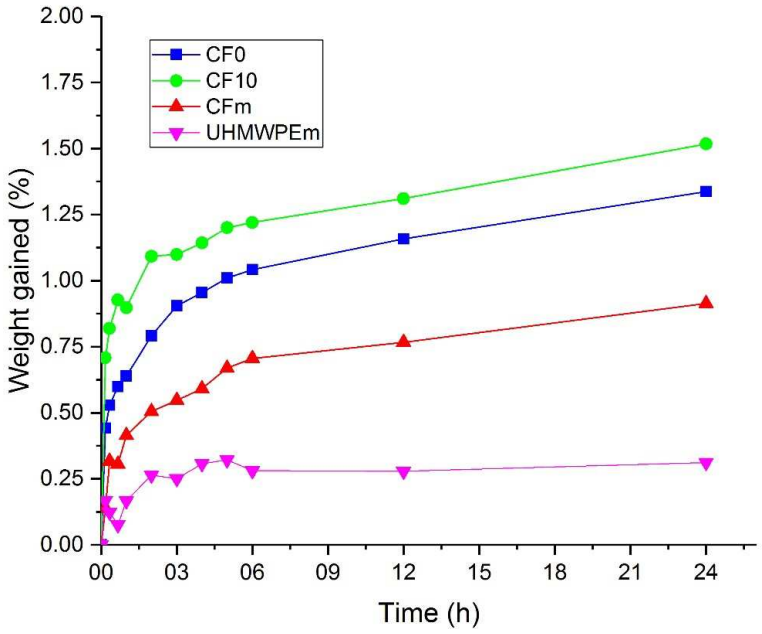
3D printed
10% wt. UHMWPE in PCU
(CF10)

3D printed PCU
(CF0)

Molded PCU
(CFm)



SEM micrographs show higher porosity in 3D printed samples, agreeing with their greater absorption rates.



Porous structure and high absorption capability support “weeping” lubrication mechanism and enhance wear resistance of 3D printed samples.