Systematic synthesis and analysis of change in morphology, electronic structure and photoluminescence properties of 2, 2'-Dipyridyl intercalated MoO$_3$ hybrid nanostructures and investigation of their photocatalytic activity

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**Fig. S1** Relationship between ln ($A_0/A_t$) and time during the decomposition of Procion Red MX-5B in the presence of MoO$_3$ nanostructures. (D) Dipyridyl intercalated MoO$_3$ + Procion dye, and (E) Dipyridyl deintercalated MoO$_3$ + Procion dye.