Supporting Information for

Monodisperse melamine-formaldehyde polymer-modified silica core-shell microspheres prepared through a facile microwave-assisted method

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Materials

Melamine, indigo carmine, methylene blue and basic red 5 were all purchased from Tokyo Chemical Industry Co., Ltd. (Tokyo, Japan). Formaldehyde (37% wt), Na_2CO_3 and ethanol were obtained from Wako Chemicals (Tokyo, Japan). Silica (solid, 2 μm) was purchased from UBE EXSYMO CO., Ltd. (Tokyo, Japan). HCl was gotten from Nacalai Tesque (Kyoto, Japan)). Congo red was purchased from Sigma-Aldrich Co. LLC. (USA). All reagents were analytical grade and used without further purification.

Characterization

Silica@MF was prepared under Microwave irradiation in Microwave reactor (Monowave300, Anton Paar USA Inc., USA). The mode of elemental analyzer was Micro Corder JM10, J Science Co., Japan. The thermogravimetric analysis was performed on TGA, TG/DTA6200 (Seiko Instruments Inc., Japan). IR characterization was conducted on DRIFT-IR, FT/IR-4100 (JASCO Corporation, Japan). UV/Vis spectral analysis was conducted on JASCO V-560 spectrophotometer (Japan). TEMs were conducted on field- emission scanning electron microscopy (FE-SEM, SU-8000, Hitachi, Ltd, Japan).

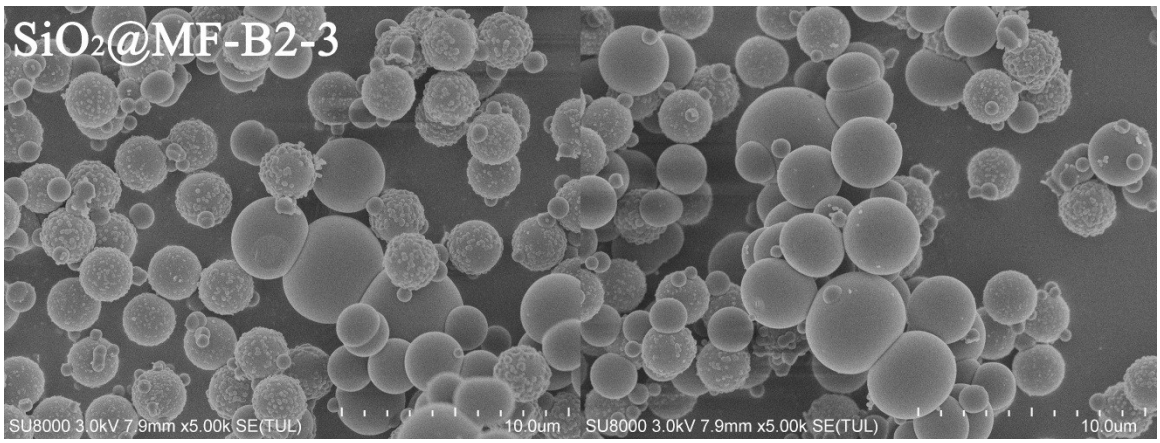

Fig. S1 The TEM result of SiO_2@MF-B2-3.

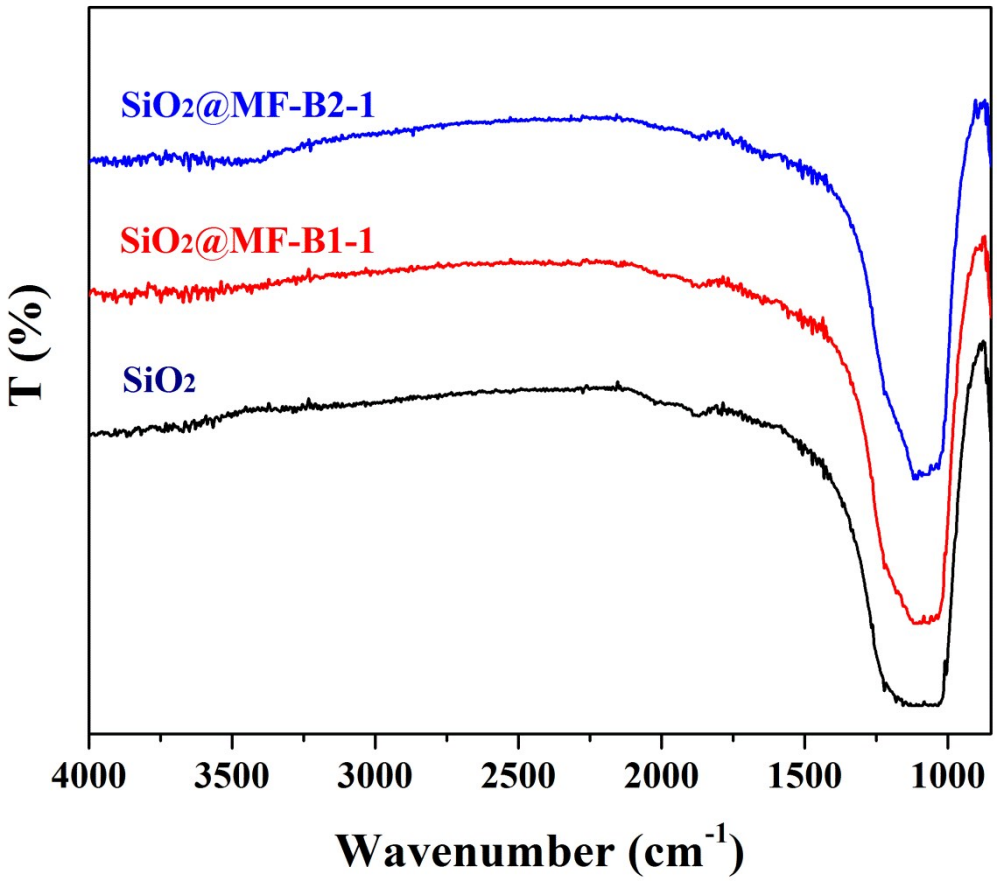

Fig. S2 The IR results of SiO_2@MF-B1-1, SiO_2@MF-B2-1and silica.