

## Supporting Information

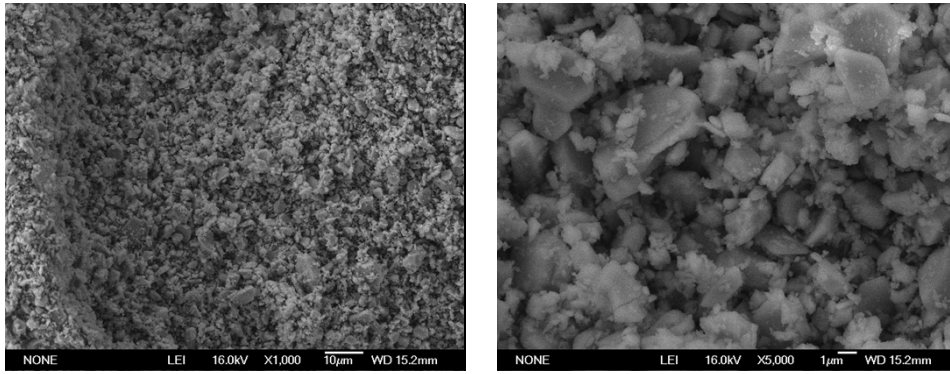
Increasing the apparent shear viscosity of polymer composites by uptake of a small amount of water

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### **2.1. Materials**

Polyamide 6 (PA6) and polyamide 6,10 (PA6,10) powders were obtained commercially from Nanjing Hongrui Plastic Products Co., Ltd. (China) and Shandong Dongchen Engineering Plastic Co. Ltd. (China). The number-average molecular weights of PA6 and PA6,10 were 27.5 and 29.5 kg/mol, respectively. The ferrite particles with density of 5.1 g/cm<sup>3</sup> were obtained from BGRIMM Magnetic Materials & Technology Co., Ltd. (China). Hydroxyl groups are attached on the surface of rough ferrite particles. The silane coupling agent, (Aminoethyl)- $\gamma$ -aminopropyltrimethoxysilane, was purchased from Nanjing Xiangfei Chemical Research Institute (China) and used as received.



**Figure S1** The SEM picture of rough ferrite particles with magnification of 1000× (left) and 5000× (right).