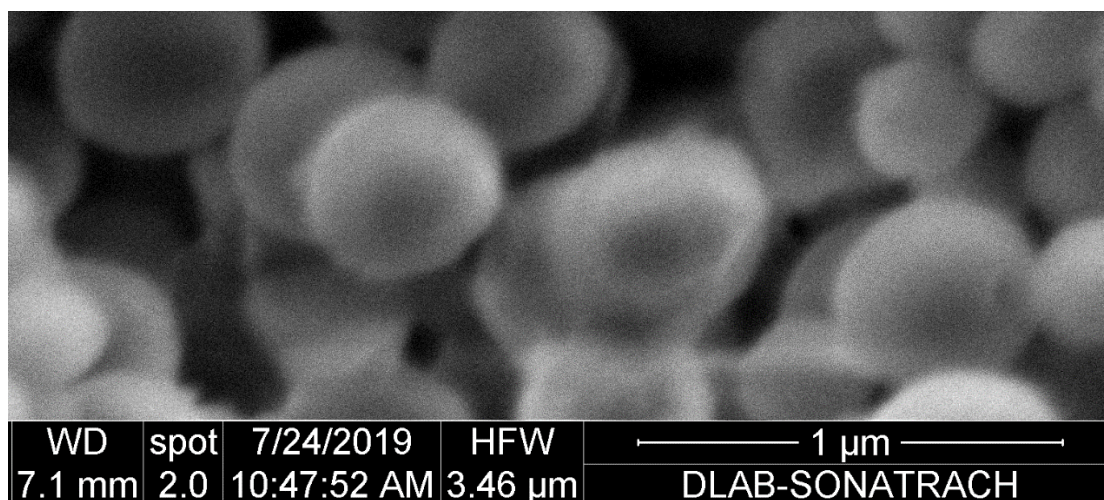**Supplementary Materials:**

Hydrothermal Synthesis of Hematite Nanoparticles Decorated on Carbon Mesospheres and Their Synergetic Action on the Thermal Decomposition of Nitrocellulose

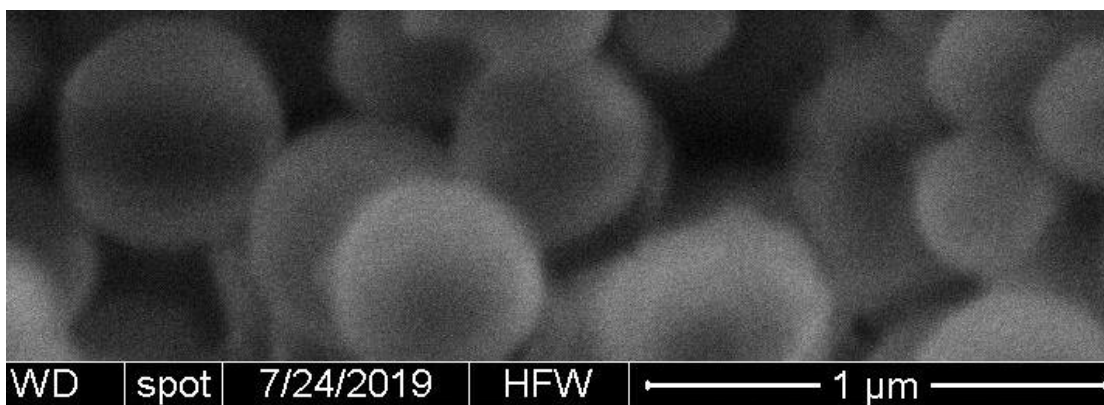**Abdenacer Benhammada [1,2], Djalal Trache [1,*], Mohamed Kesraoui [1] and Salim Chelouche [1]**

[1] UER Procédés Energétiques, Ecole Militaire Polytechnique, BP 17, Bordj El-Bahri, Algiers 16046, Algeria; nbenhammada@yahoo.fr (A.B.); kesraoui.mohamed@gmail.com (M.K.); salim.chelouche@gmail.com (S.C.)

[2] Ecole Nationale Préparatoire Aux Etudes d'Ingénieur Badji Mokhtar, ENPEI, BP 5, Rouiba, Algiers 16013, Algeria
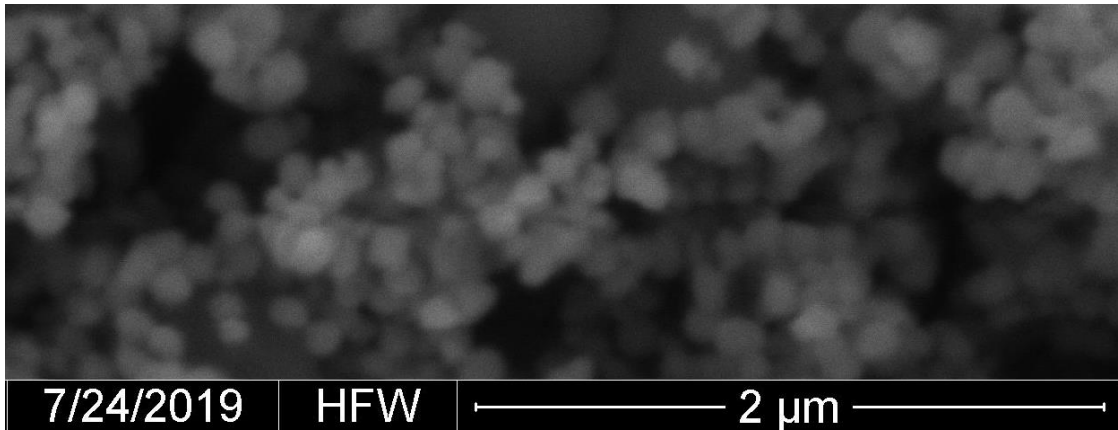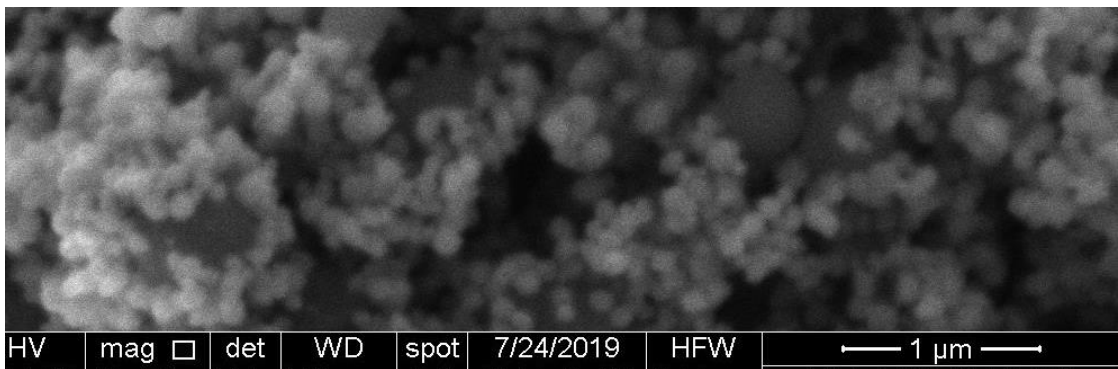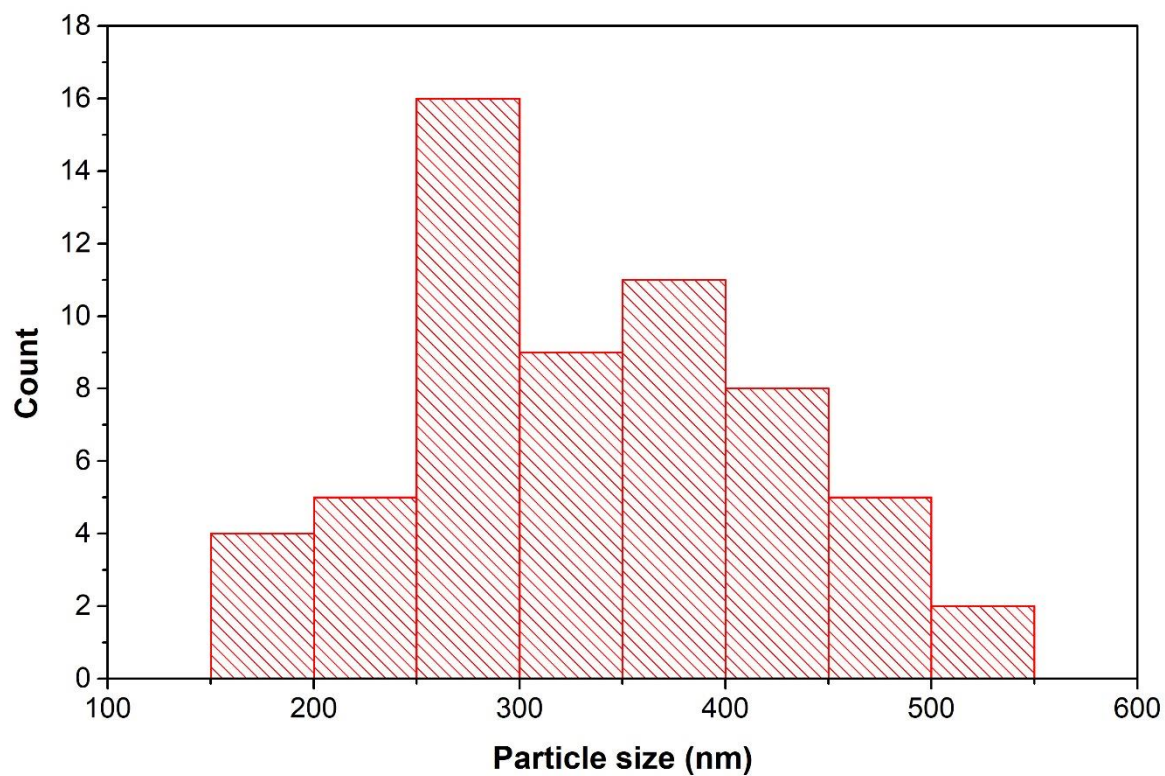
* Correspondence: djalaltrache@gmail.com

a

b

7/24/2019 | HFW | 2 µm

c

HV | mag □ | det | WD | spot | 7/24/2019 | HFW | 1 µm

d

Figure S1. SEM images treated with ImageJ (**a**, **b**) CMS, (**c**, **d**) CMS-Fe$_2$O$_3$.

Figure S2. Particle size distribution using ImageJ software for MCS.

Table S1. Statistics on columns of particle size distribution for MCS.

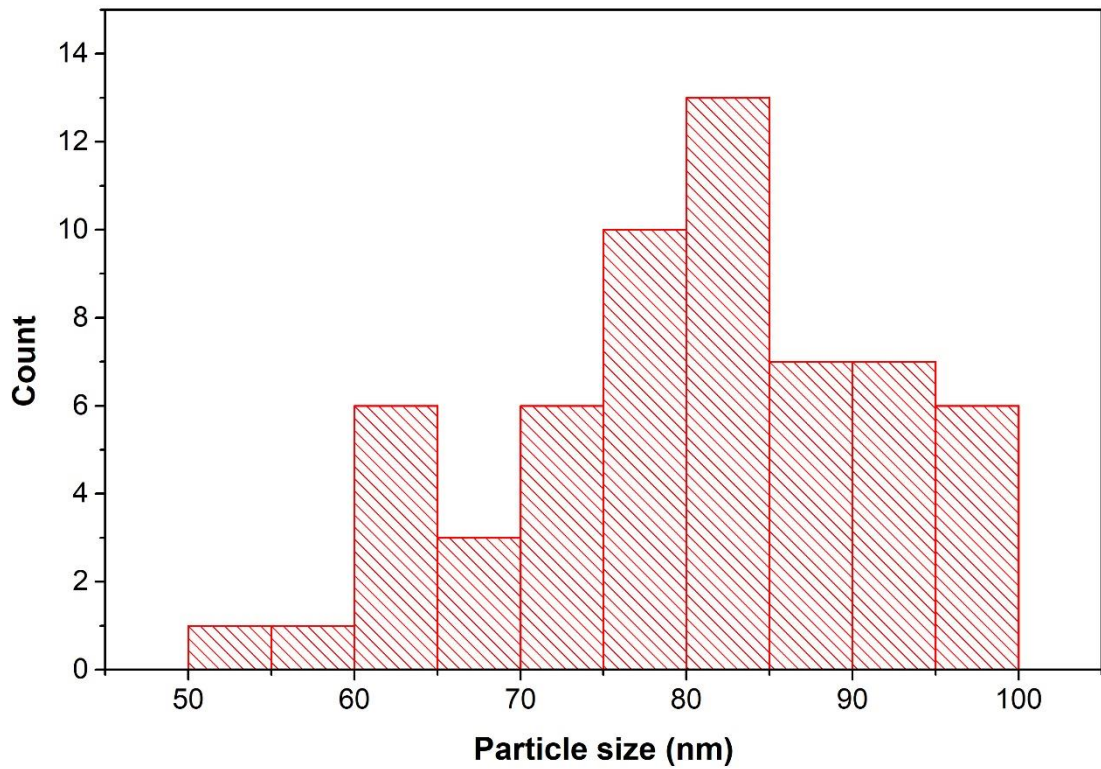| Total number of the treated particles	Mean (nm)	Standard Deviation	Sum	Minimum (nm)	Median (nm)	Maximum (nm)
60	334.5	86.9	20071	156	319.5	513

Figure S3. Particle size distribution using ImageJ software for Fe$_2$O$_3$-MCS.

Table S2. Statistics on columns of particle size distribution for Fe$_2$O$_3$-MCS.

Total number of the treated particles	Mean (nm)	Standard Deviation	Sum	Minimum (nm)	Median (nm)	Maximum (nm)
60	80.0	11.0	4801.8	54.5	81.1	98.0