Supporting Information

Functionalizing fullerene soot nanoparticles with energetic groups using copper-catalyzed oxidative deboration of nitrophenylboronic acid

Fatemeh Sadat Hosseini, Mehdi Zamani*

School of Chemistry, Damghan University, Damghan 36716-41167, Iran

* Corresponding author: M. Zamani (E-mail: m.zamani@du.ac.ir; ORCiD: 0000-0001-5501-191X)

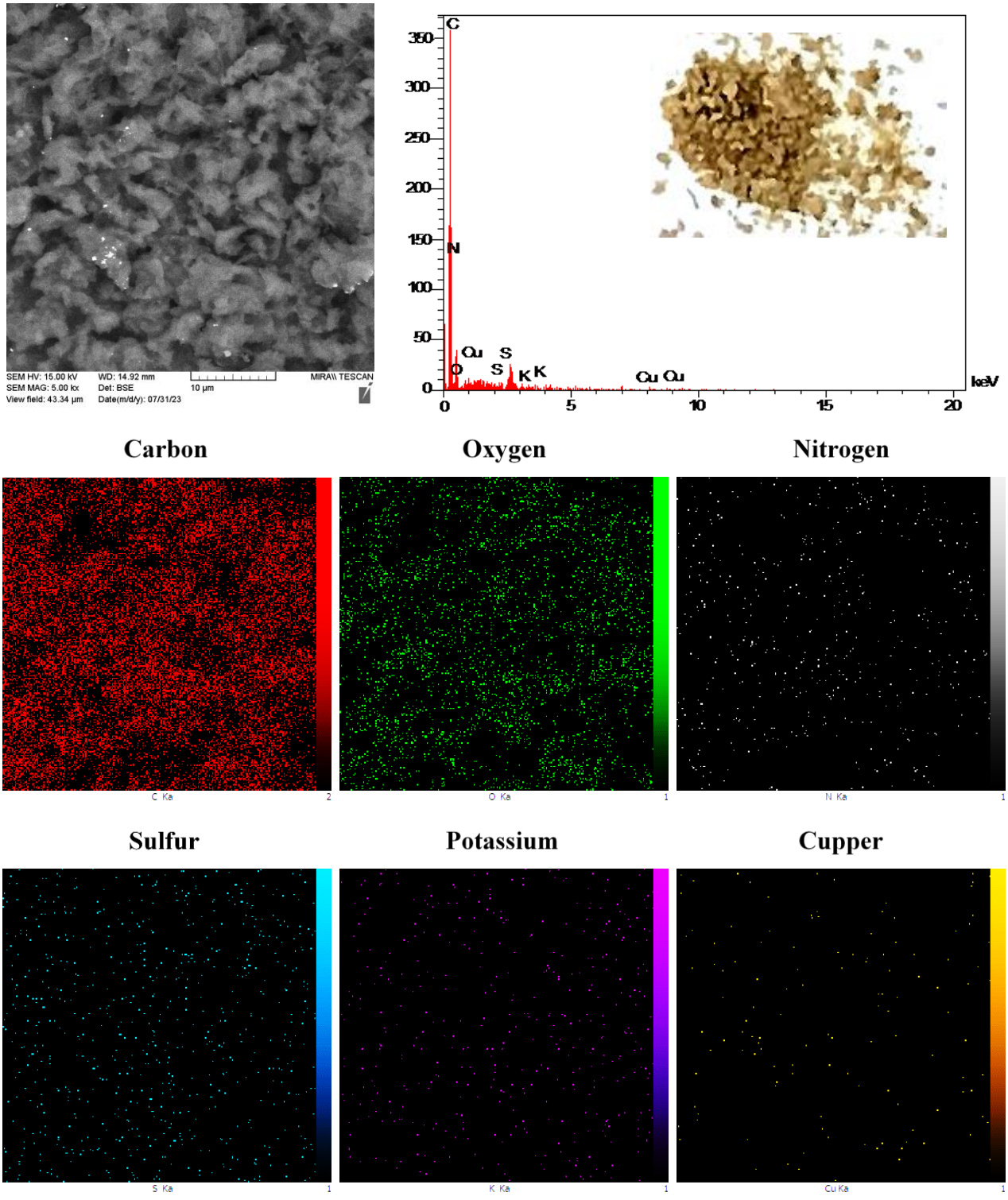

Figure S1. SEM-EDX elemental maps of sample 1 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 3 equiv. of $K_2S_2O_8$ as oxidant and 0.2 equiv. of $CuSO_4$ as catalyst in autoclave at 120 °C for 6 h, in the absence of fullerene soot).

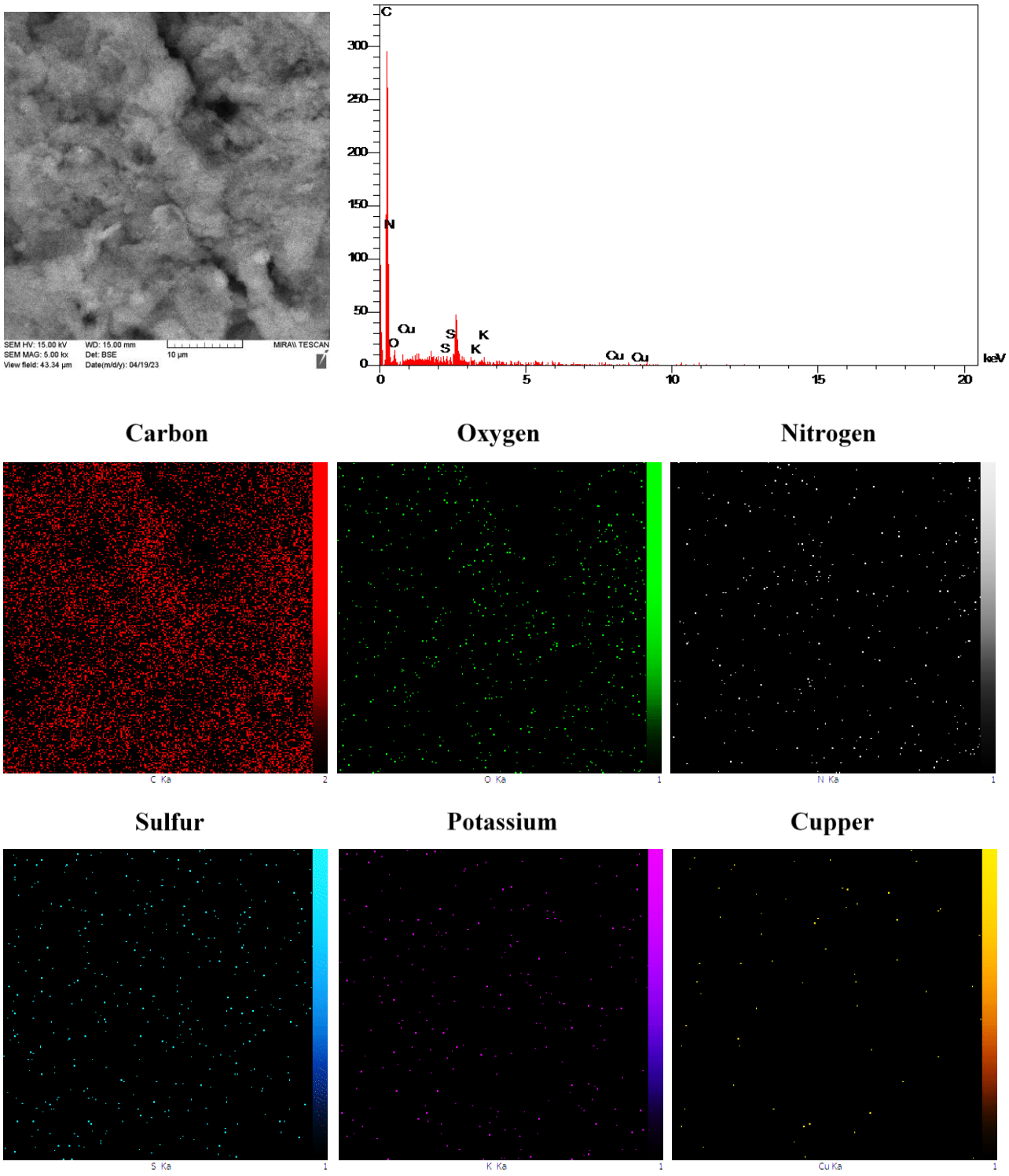

Figure S2. SEM-EDX elemental maps of sample 4 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 3 equiv. of $K_2S_2O_8$ as oxidant and 0.2 equiv. of $CuSO_4$ as catalyst in autoclave at 120 °C for 1 h).

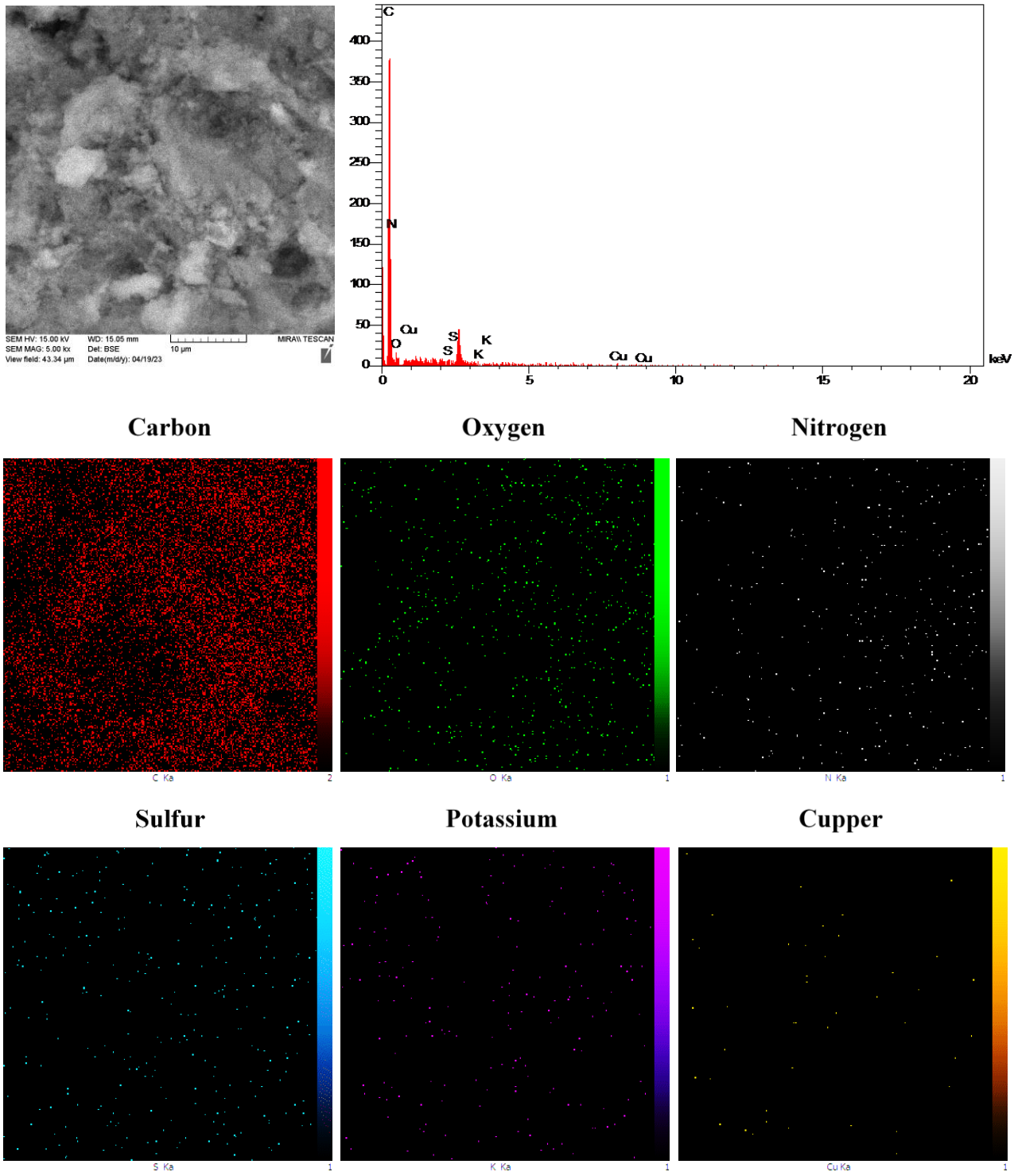

Figure S3. SEM-EDX elemental maps of sample 5 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 3 equiv. of $K_2S_2O_8$ as oxidant and 0.2 equiv. of $CuSO_4$ as catalyst in autoclave at 60 °C for 6 h).

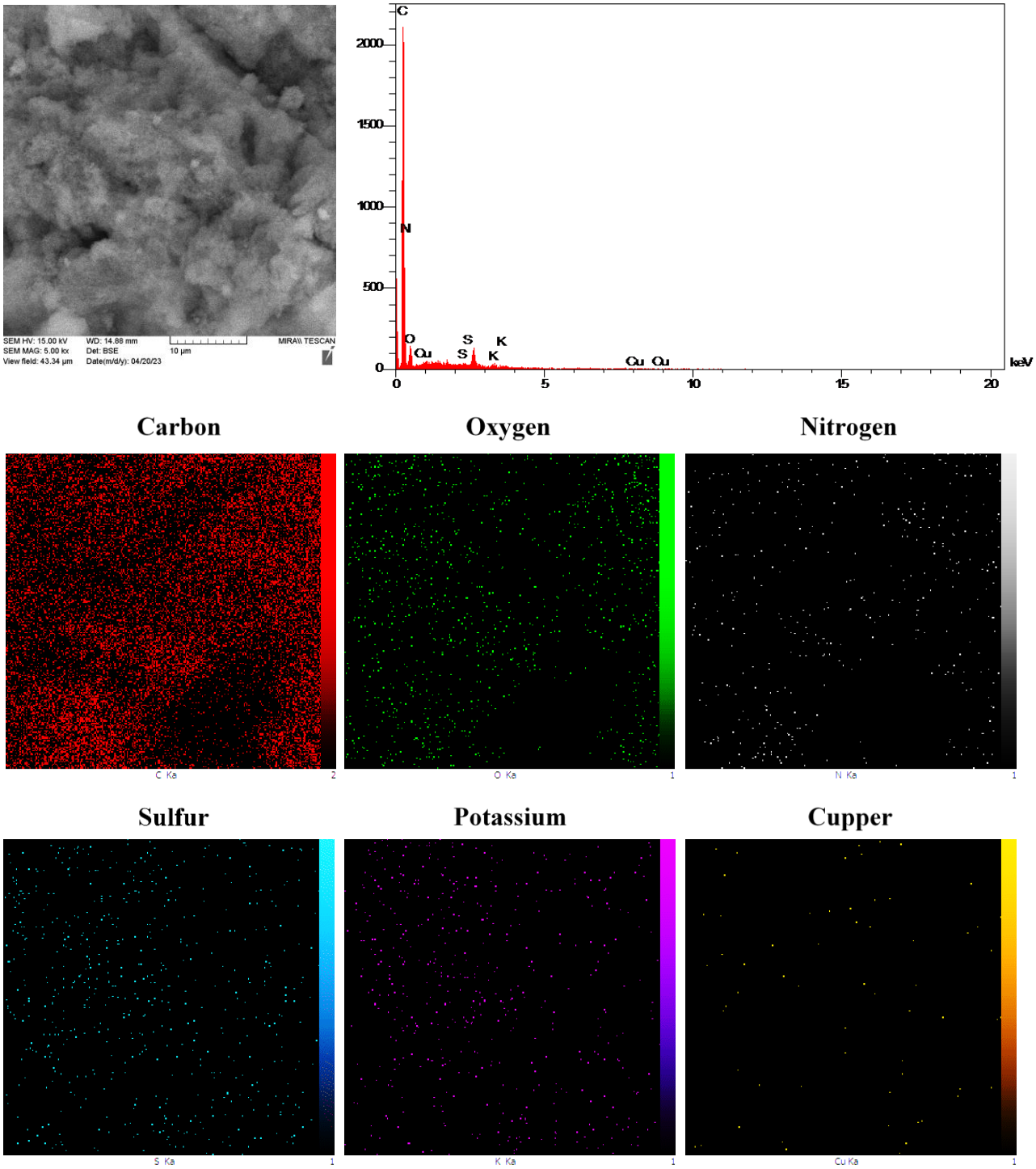

Figure S4. SEM-EDX elemental maps of sample 7 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 1 equiv. of $K_2S_2O_8$ as oxidant and 0.2 equiv. of $CuSO_4$ as catalyst in autoclave at 120 °C for 6 h).

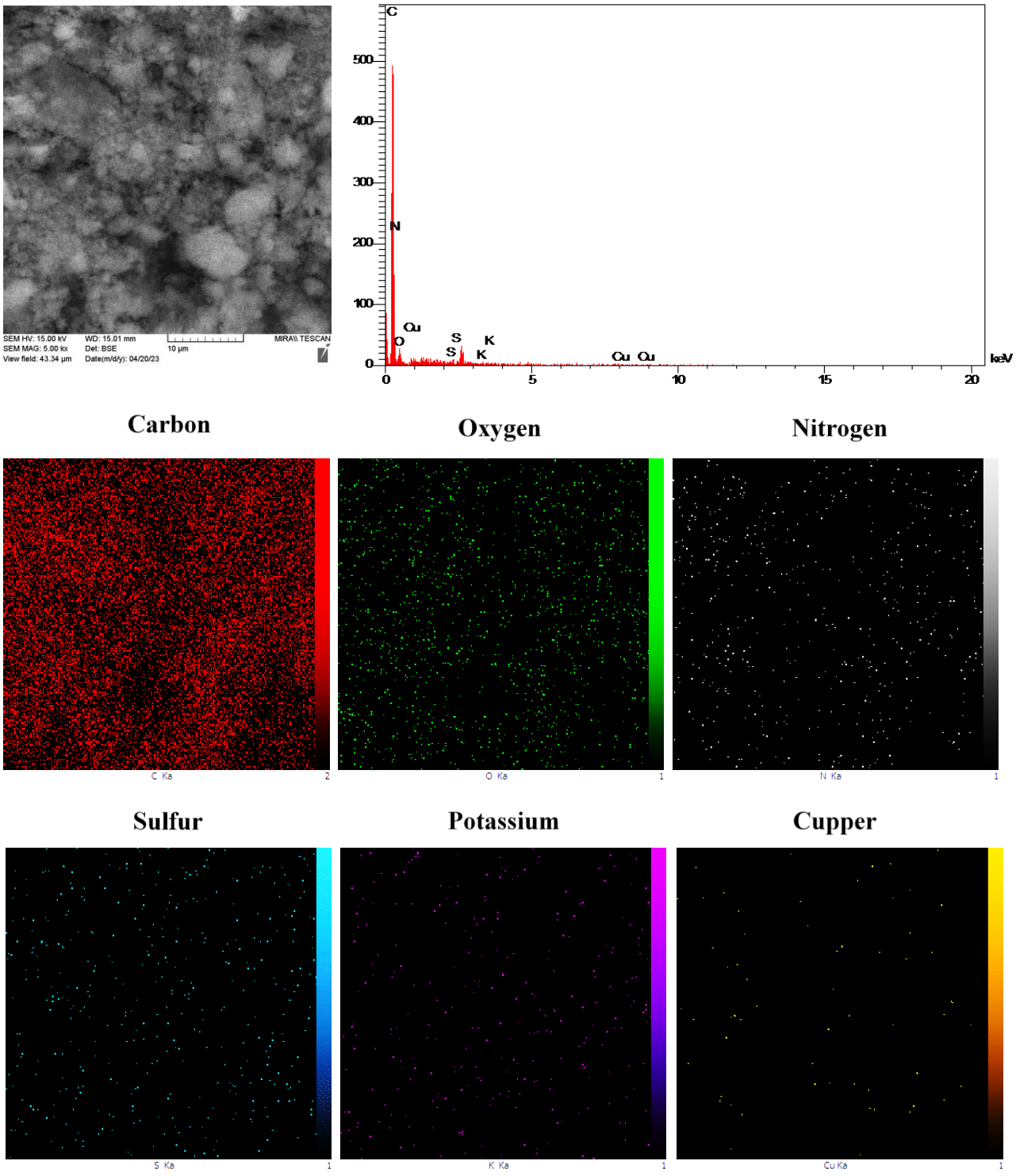

Figure S5. SEM-EDX elemental maps of sample 9 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 3 equiv. of $K_2S_2O_8$ as oxidant and 1 equiv. of $CuSO_4$ as catalyst in autoclave at 120 °C for 6 h).

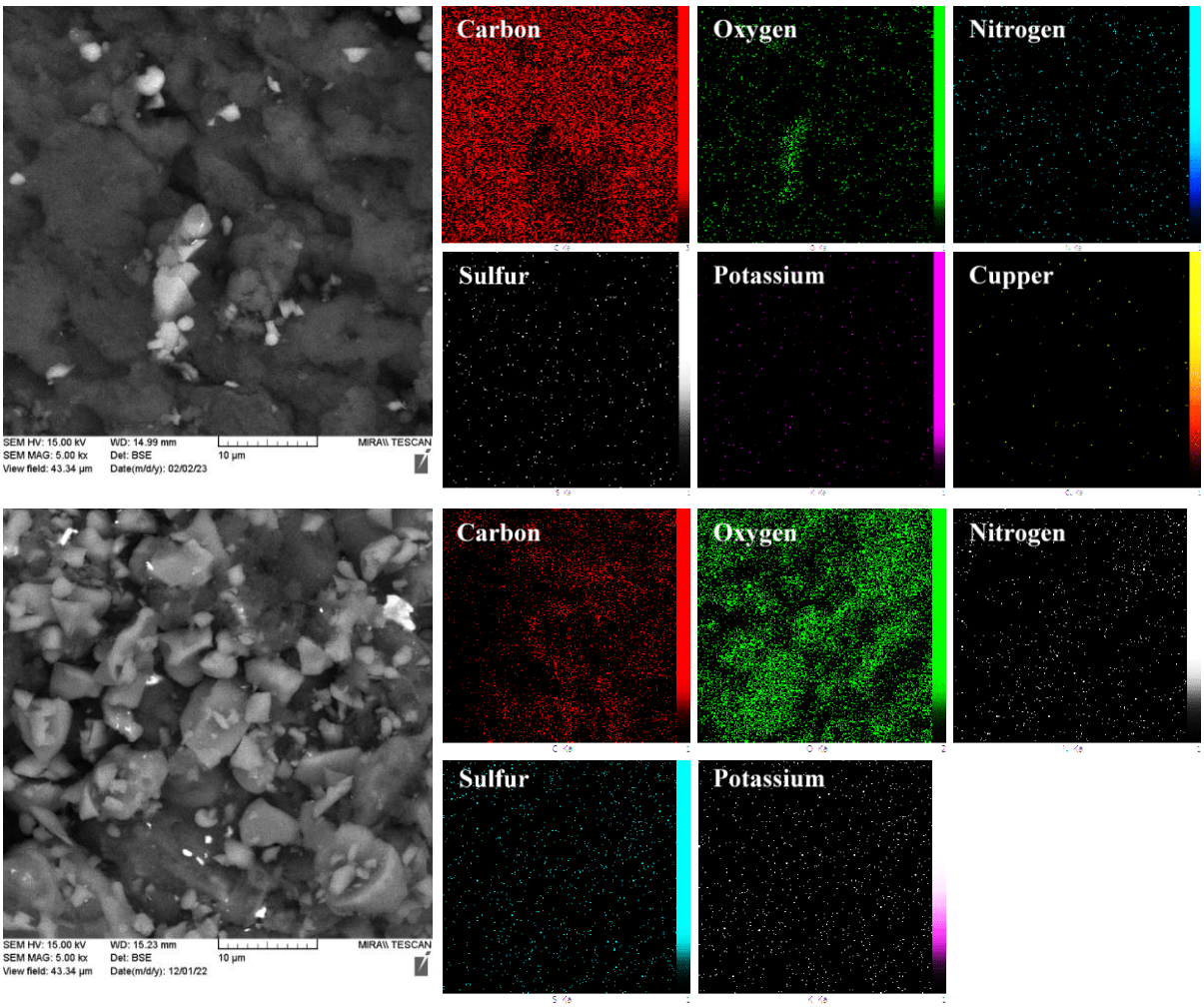

Figure 6. SEM-EDX elemental maps of samples 11 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant, 3 equiv. of $K_2S_2O_8$ as oxidant and 0.2 equiv. of $CuSO_4$ as catalyst in oil-bath at 60 °C for 12 h; top) and 10 (prepared with 1 equiv. of 4-NO_2PhB$(OH)_2$ as reactant and 3 equiv. of $K_2S_2O_8$ as oxidant without catalyst in oil-bath at 60 °C for 12 h; bottom).