

Supplementary Information

Synthesis of a Ce-Based MOF-76 with High Yield: A Study of Reaction Parameters Based on a Factorial Design

Patricia F. Santos ^{id}*^{,a} and Priscilla P. Luz ^{id}*^{,a}

^aDepartamento de Química, Universidade Federal do Espírito Santo, 29075-910 Vitória-ES, Brazil

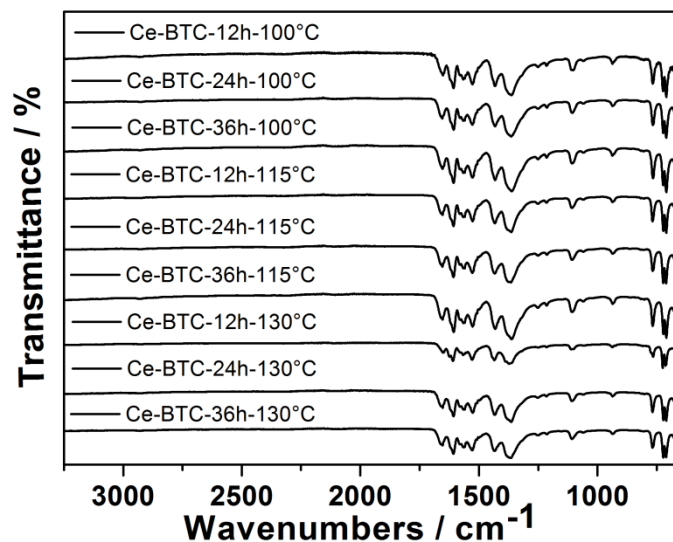


Figure S1. ATR-FTIR spectra of nine synthesized $\{[\text{Ce}(\text{BTC})(\text{H}_2\text{O})]\cdot\text{DMF}\}_n$ compounds.

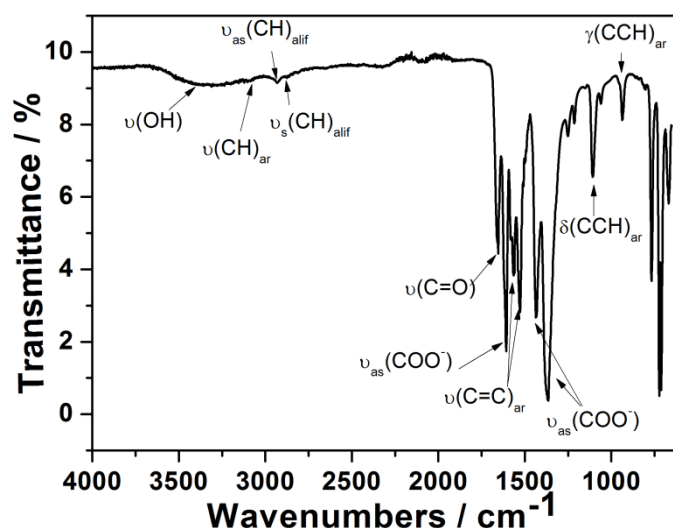


Figure S2. ATR-FTIR spectra of one of synthesized compounds with absorption bands identified.

*e-mail: patriciafigs@hotmail.com; priscilla.luz@ufes.br

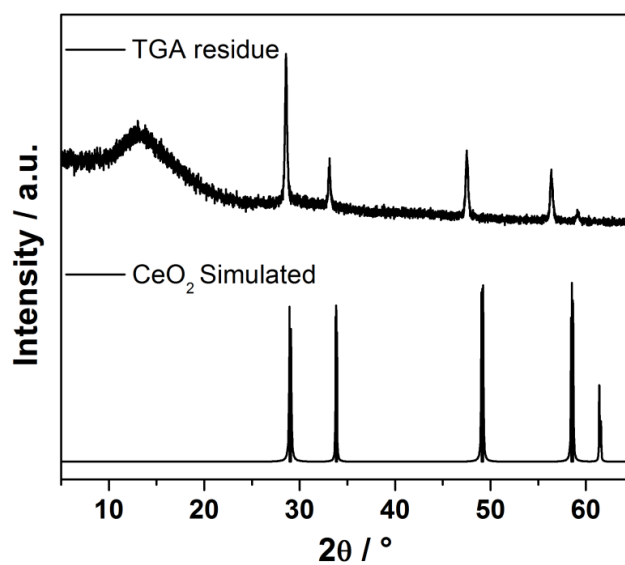


Figure S3. PXRD pattern of TGA residue and simulated data from deposited structure.¹

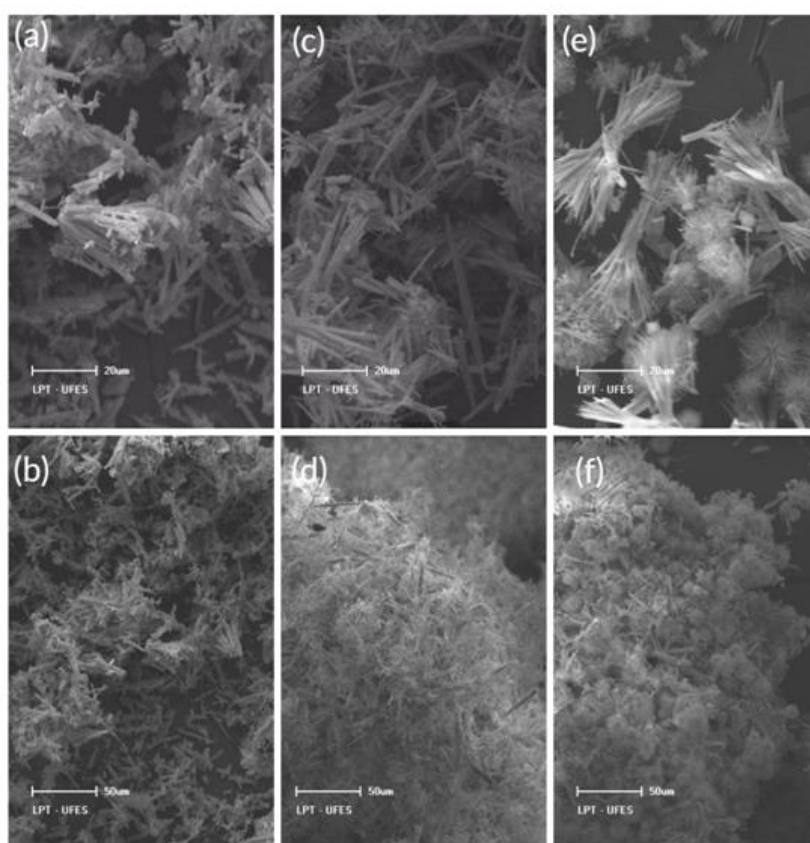


Figure S4. SEM images of Ce-BTC samples synthesized for 36 h at (a, b) 100 °C; (c, d) 115 °C and (e, f) 130 °C.

Reference

1. Łyszczek, R.; Mazur, L.; Rzaczyńska, Z.; *Inorg. Chem. Commun.* **2008**, *11*, 1091.

