

Supporting Information

for

Electro-conversion of cumene into acetophenone using boron-doped diamond electrodes

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Characterization data and ¹H NMR spectra of isolated compounds 2, 3, 4, and 5

Characterization data and ¹H NMR spectra of isolated compounds

Cumene hydroperoxide (2)

 ^{1}H NMR (400 MHz, CDCl₃): δ 7.49–7.24 (m, 5H), 1.62 (s, 6H).

The spectral data agreed with the literature [S1].

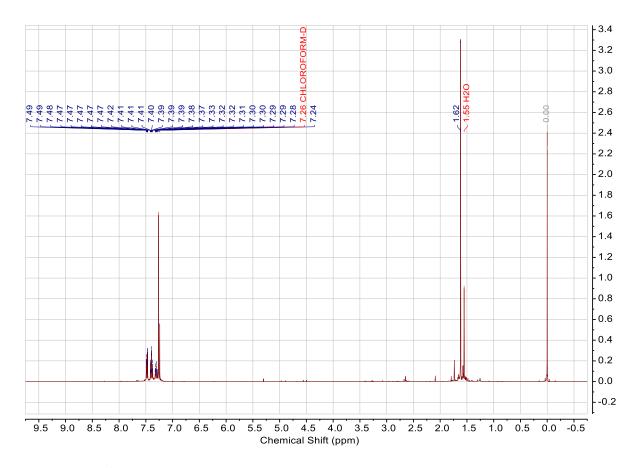


Figure S1: ¹H NMR spectrum of cumene hydroperoxide (2).

Acetophenone (3)

 1 H NMR (400 MHz, CDCl₃): δ 7.97–7.44 (m, 5H), 2.61 (s, 3H).

The spectral data agreed with the literature [S1].

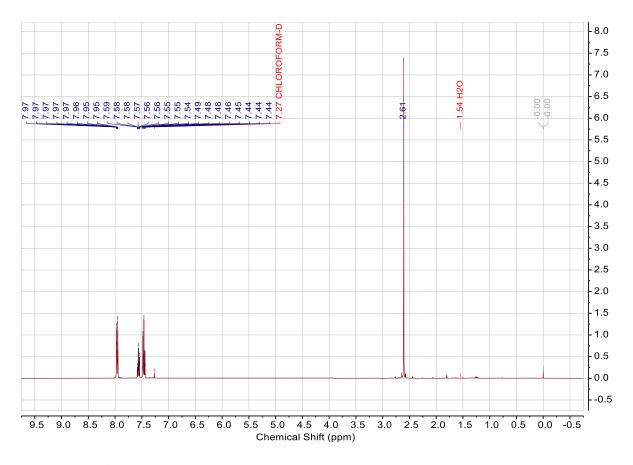


Figure S2: ¹H NMR spectrum of acetophenone (3).

Cumyl alcohol (4)

¹H NMR (400 MHz, CDCl₃): δ 7.50–7.22 (m, 5H), 1.84 (s, 1H), 1.58 (s, 6H).

The spectral data agreed with the literature [S1].

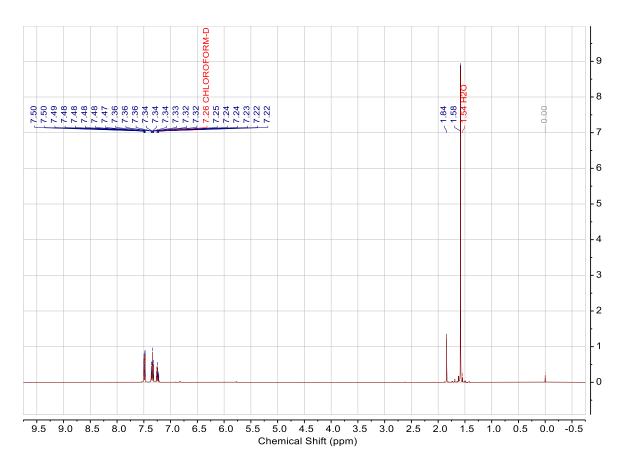


Figure S3: ¹H NMR spectrum of cumyl alcohol (4).

Methyl cumyl ether (5)

 1 H NMR (400 MHz, CDCl₃): δ 7.48–7.22 (m, 5H), 3.07 (s, .3H), 1.53 (s, 6H).

The spectral data agreed with the literature [S2].

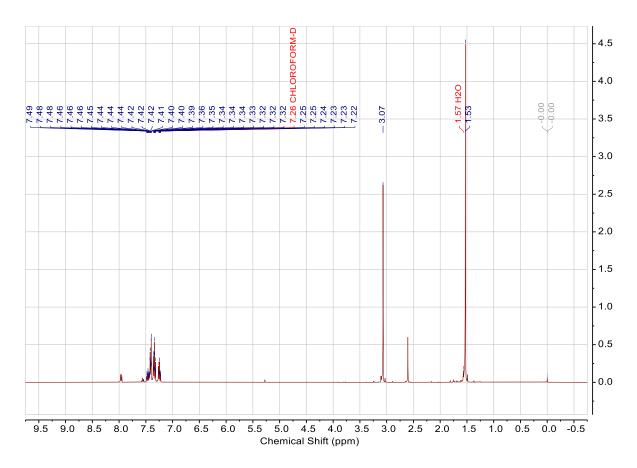


Figure S4: ¹H NMR spectrum of methyl cumyl ether (5).

References

- S1. The Aldrich FT-NMR library, Sigma-Aldrich Corp., 2003.
- S2. Murphy, J. A.; Khan, T. A.; Zhou, S.-Z.; Thomson, D. W.; Mahesh, M. *Angew. Chem. Int. Ed.* **2005**, *44*, 1356–1360.