

Supporting Information

Efficient one-pot green synthesis of tetrakis(acetonitrile)copper(I) complex in aqueous media.

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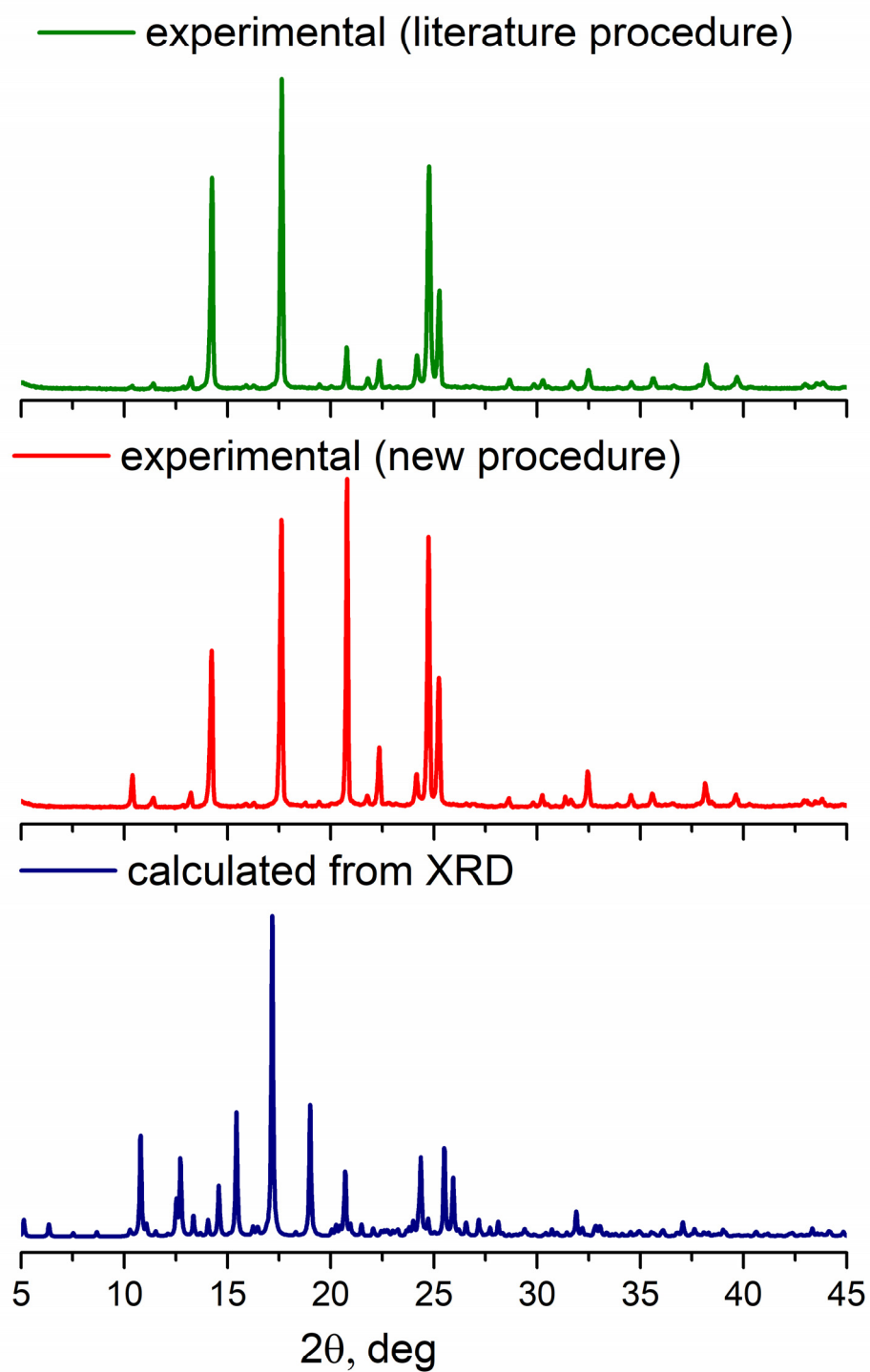


Figure S1. Powder X-ray diffraction patterns of [Cu(CH₃CN)₄][PF₆]: experimental for complex, synthesized according to literature procedure (green), new procedure (red) and calculated from the single-crystal data CCDC 815342 (blue).

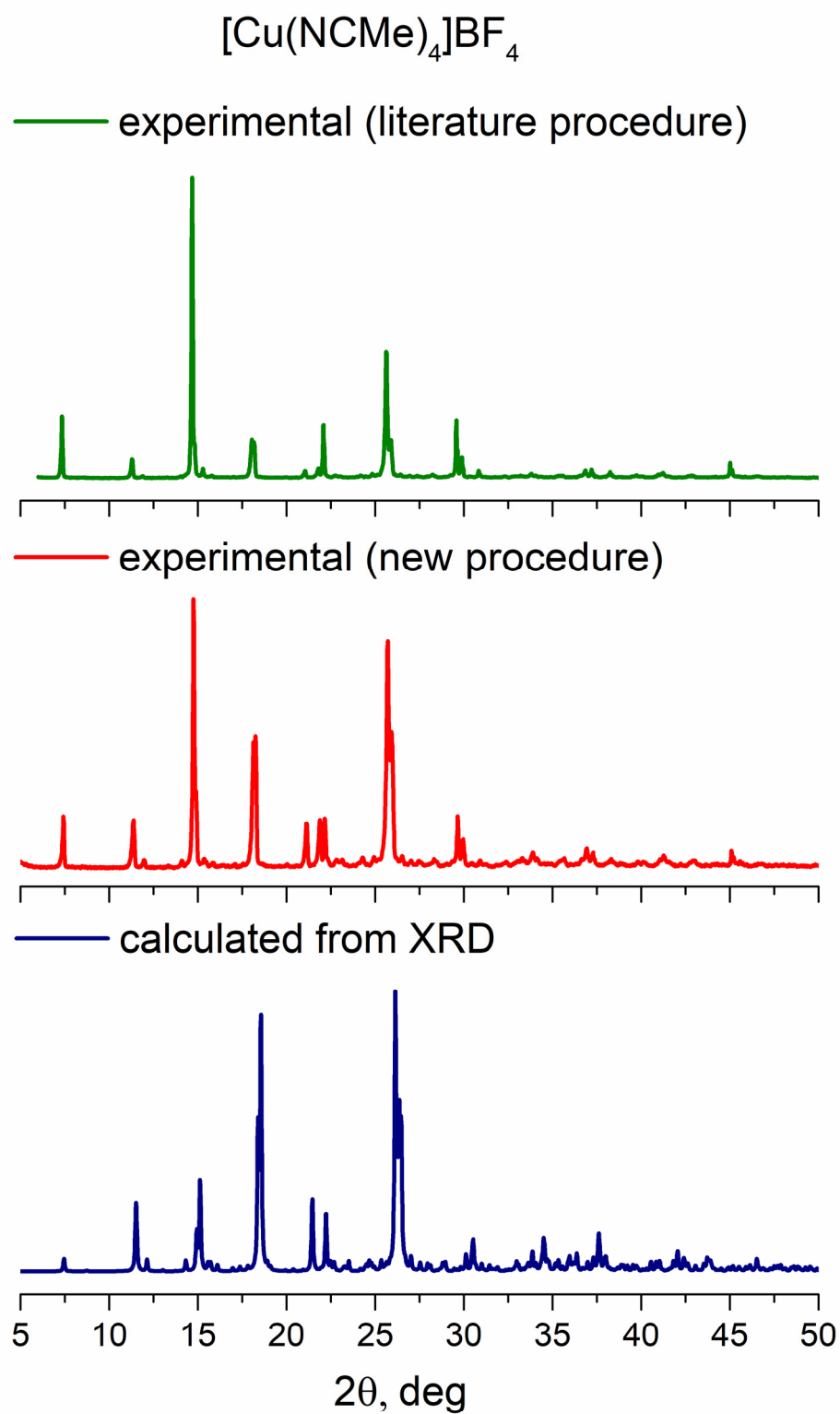


Figure S2. Powder X-ray diffraction patterns of $[\text{Cu}(\text{CH}_3\text{CN})_4][\text{BF}_4]$: experimental for complex, synthesized according to literature procedure (green), new procedure (red) and calculated from the single-crystal data CCDC 929493 (blue).

^1H , BF = 400.13 MHz, Solvent - Acetone, T=298 K

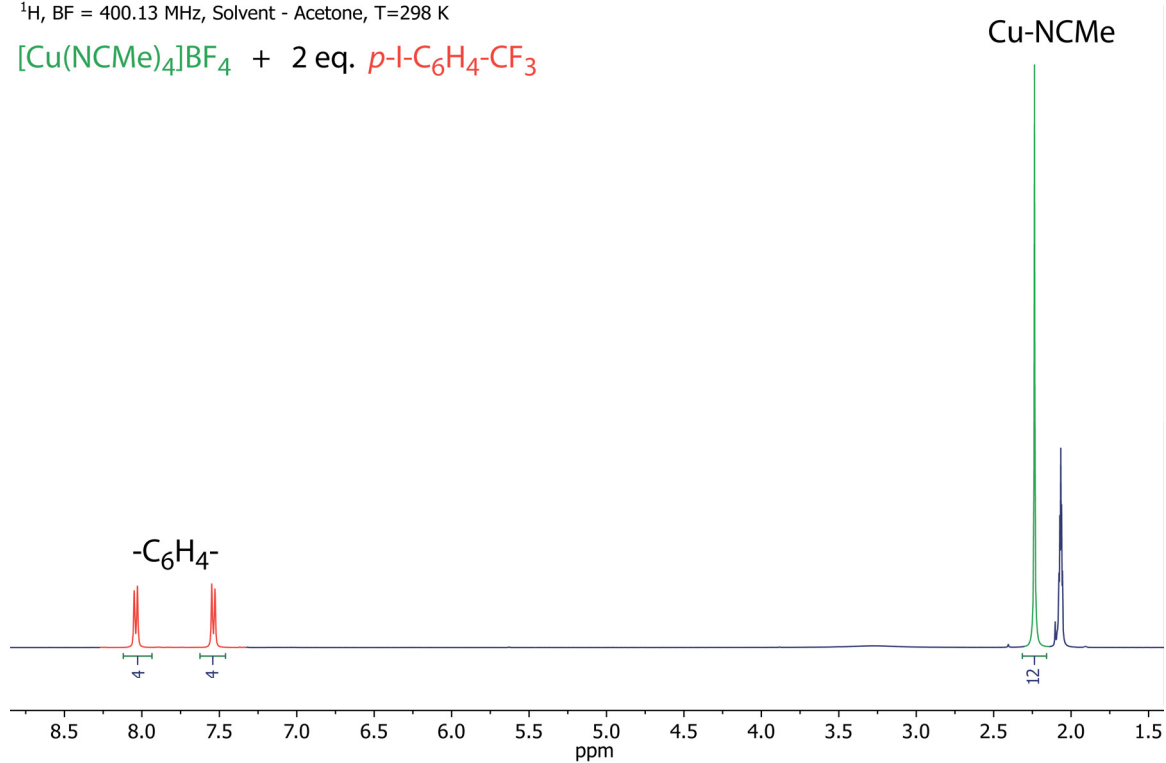
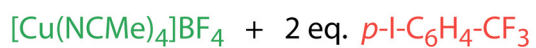


Figure S3. ^1H NMR spectrum of $[\text{Cu}(\text{CH}_3\text{CN})_4][\text{BF}_4]$ in presence of 2 equivalents of 4-iodobenzotrifluoride

^1H , BF = 400.13 MHz, Solvent - Acetone, T=298 K

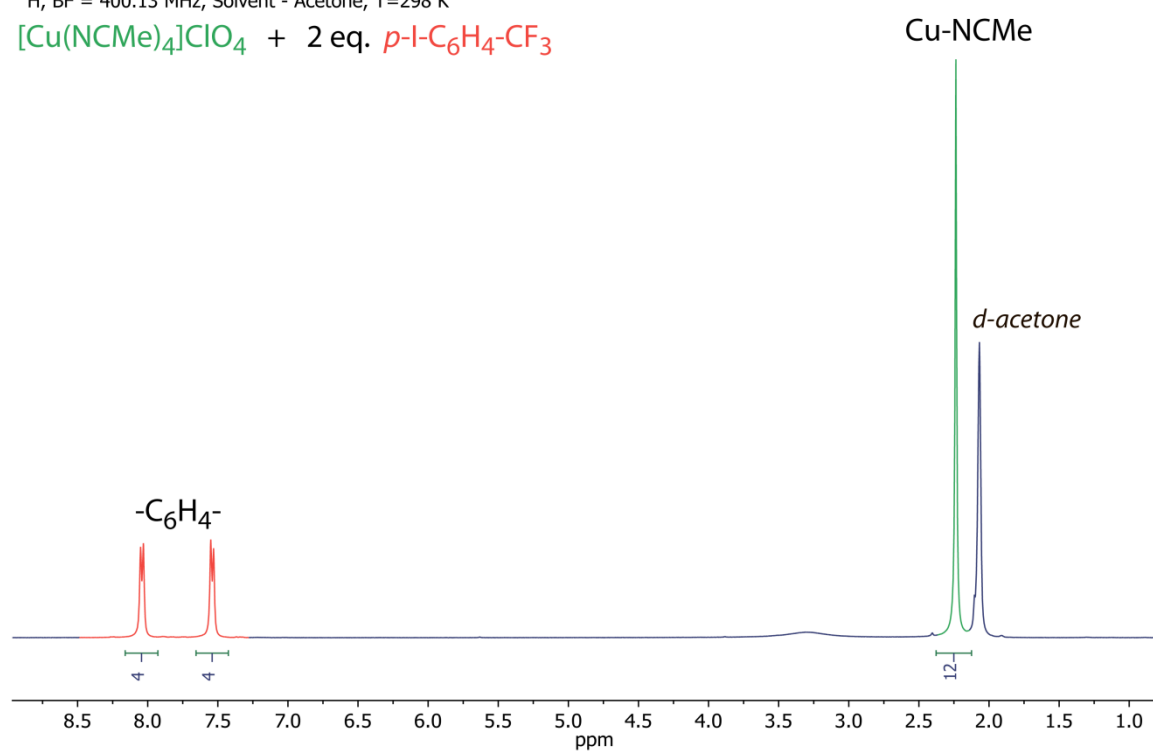
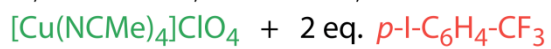


Figure S4. ^1H NMR spectrum of $[\text{Cu}(\text{CH}_3\text{CN})_4][\text{ClO}_4]$ in presence of 2 equivalents of 4-iodobenzotrifluoride

^{19}F , BF = 376.498366 MHz, Solvent - Acetone, T=298 K

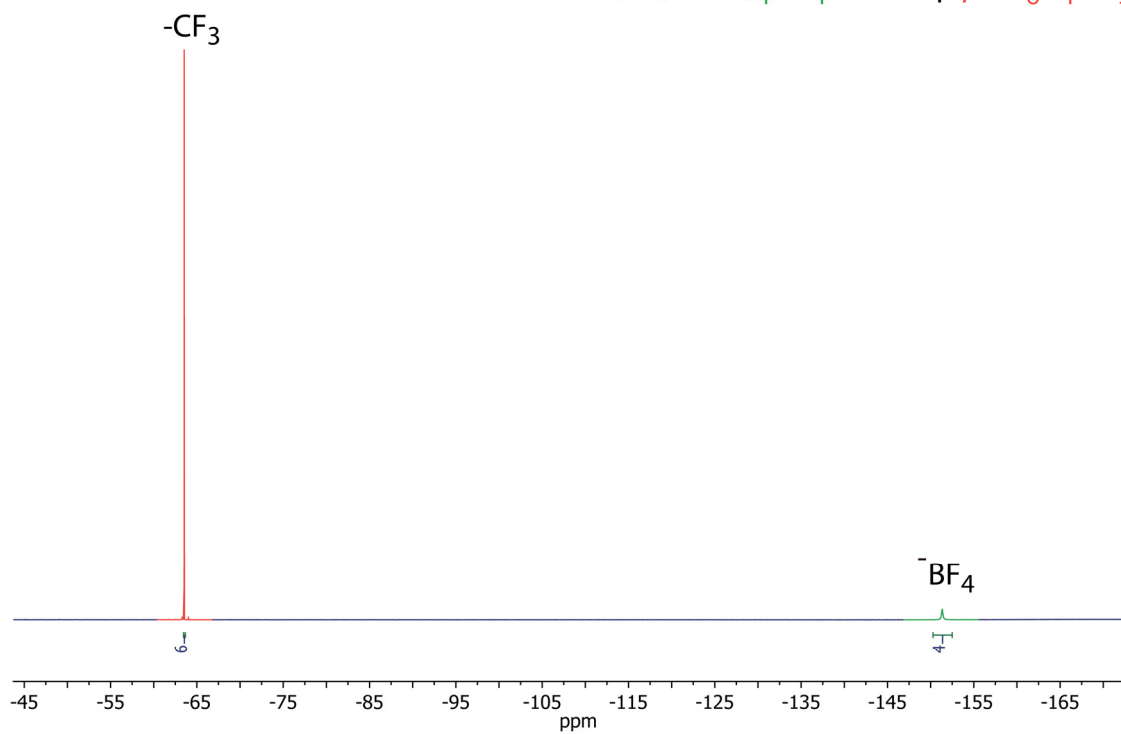
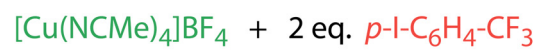


Figure S5. ^{19}F NMR spectrum of $[\text{Cu}(\text{CH}_3\text{CN})_4][\text{BF}_4]$ in presence of 2 equivalents of 4-iodobenzotrifluoride.