Electronic Supplementary Material (ESI) for Dalton Transactions.

Synthesis of Cobalt(II) Phenolate Selenoether Complexes to Mimic Hydrogenase like Activity for Hydrogen Gas Production

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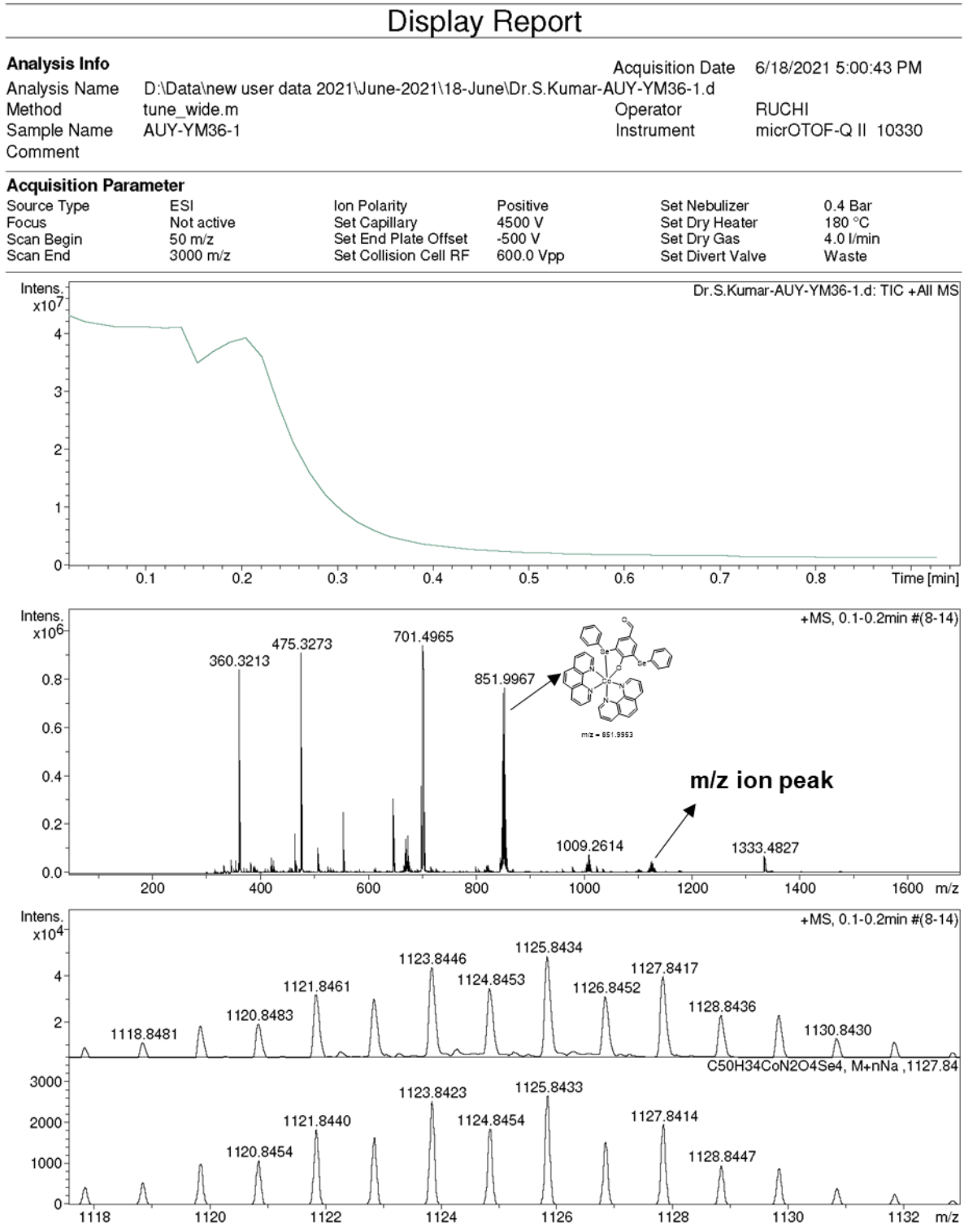

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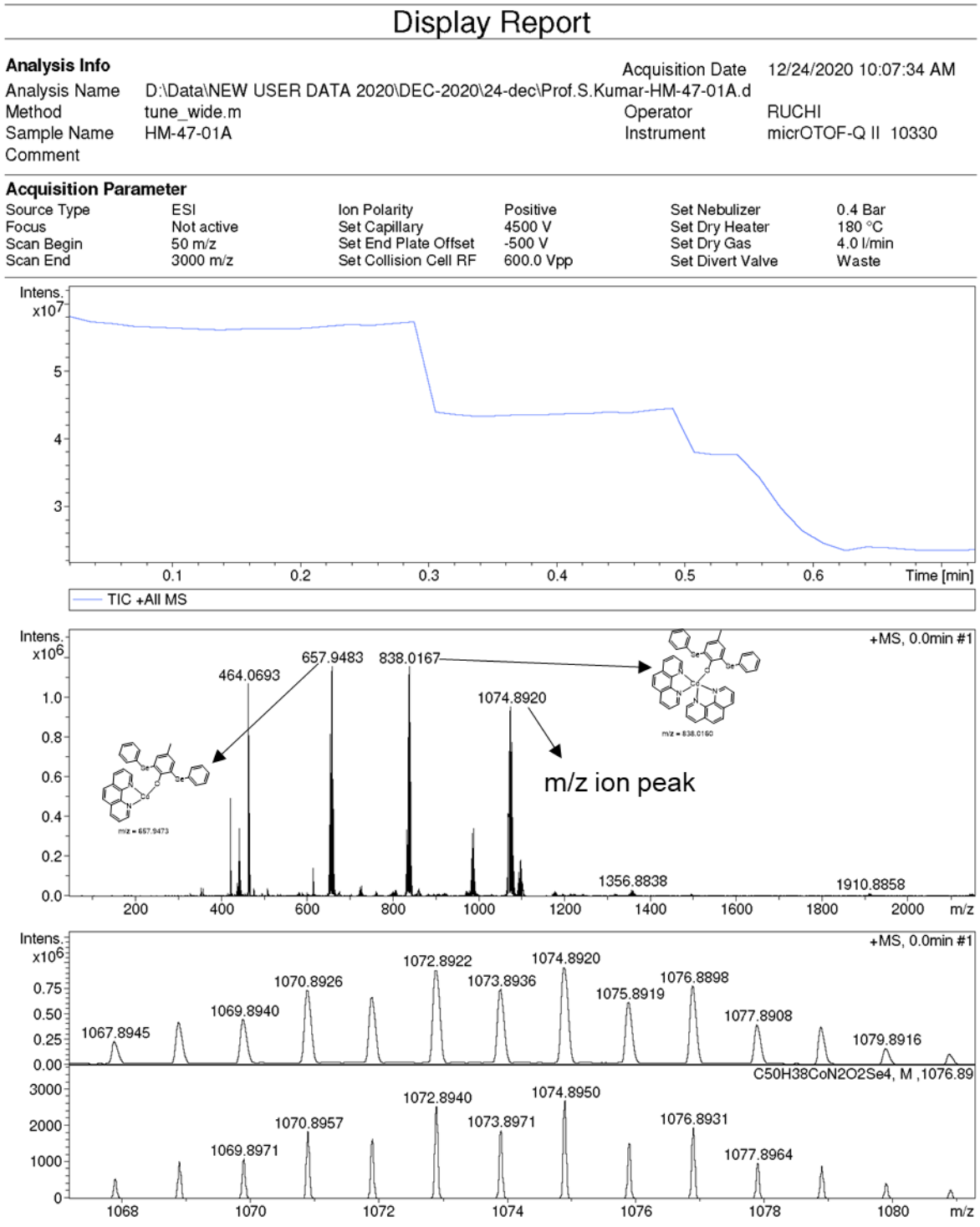

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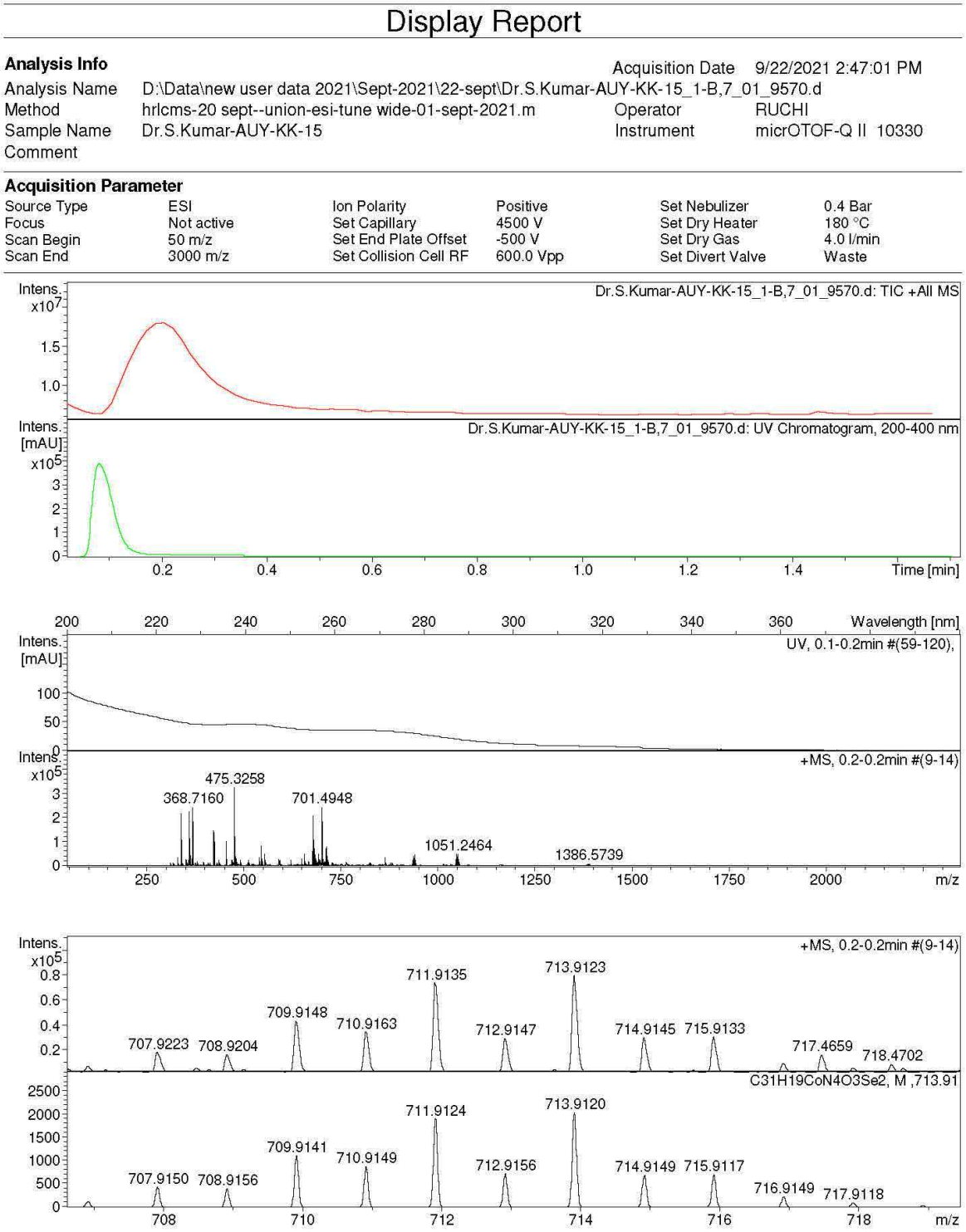

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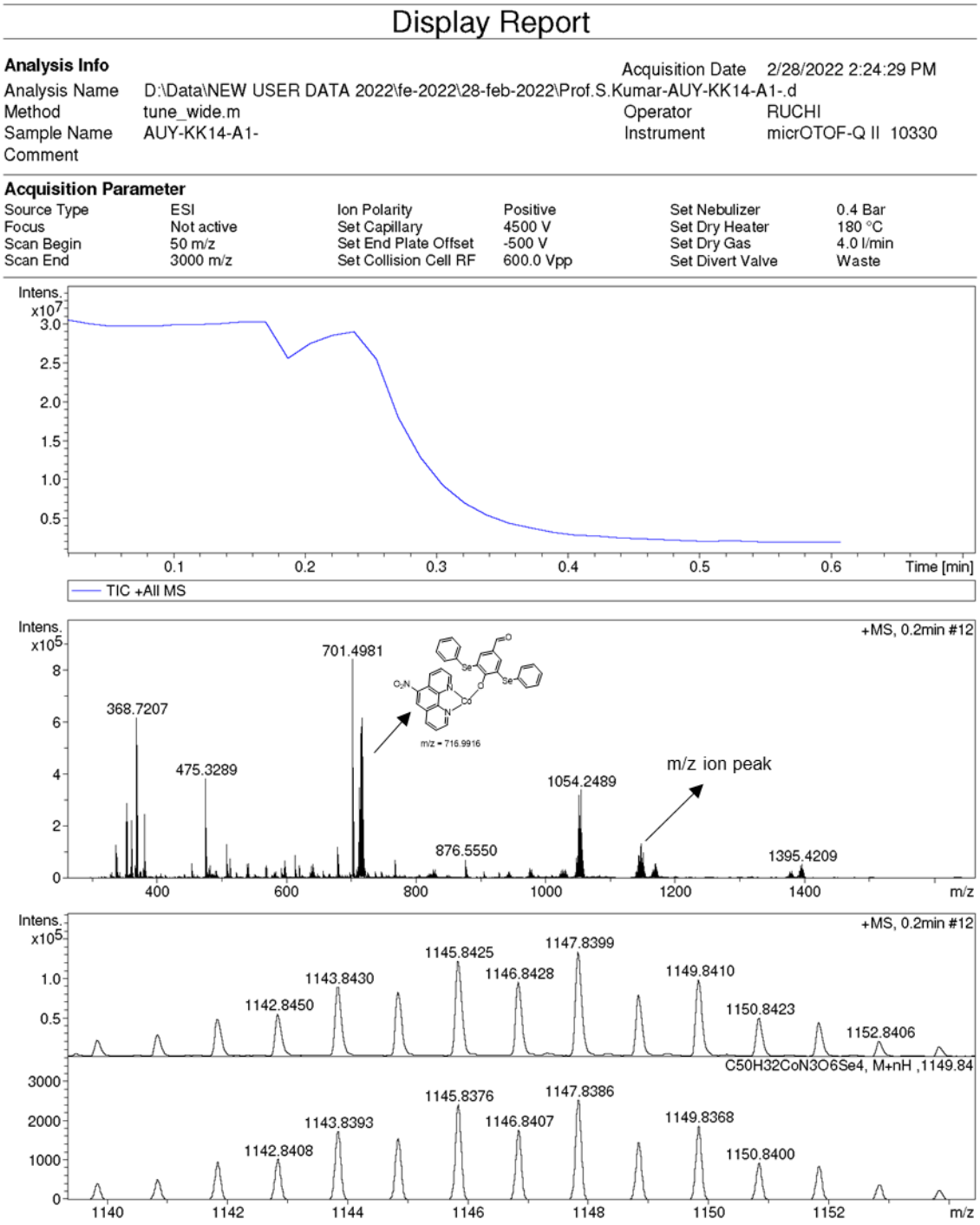

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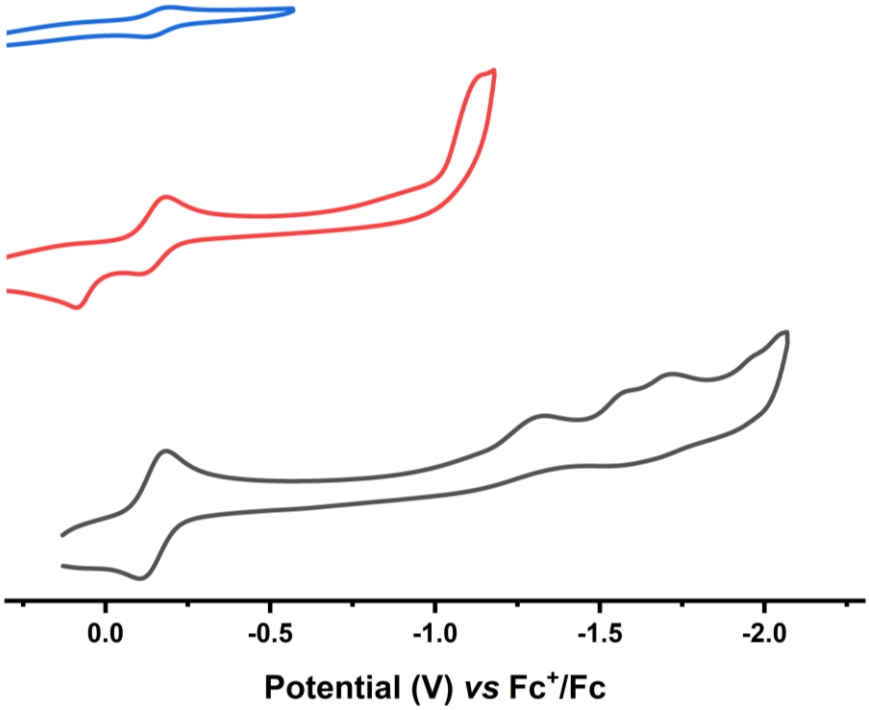

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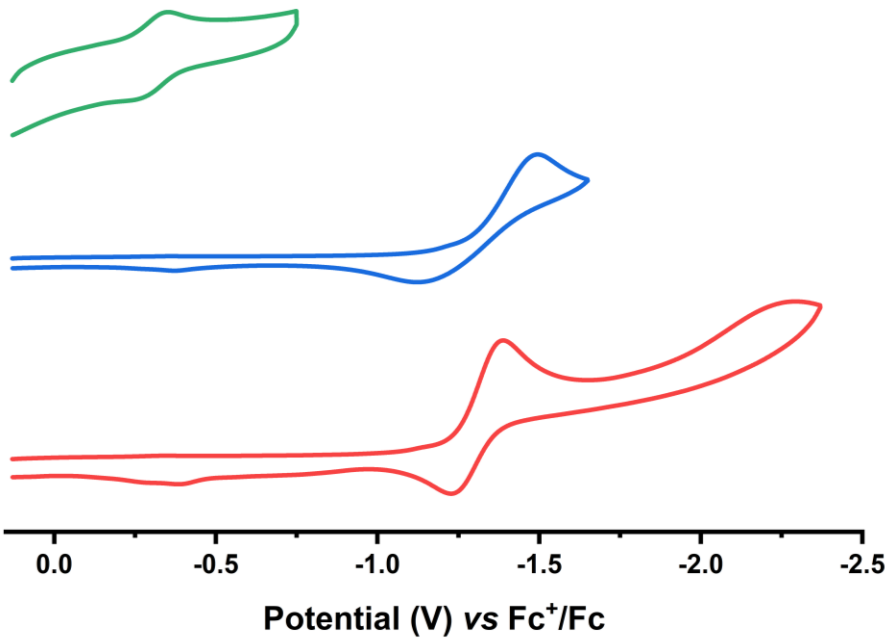

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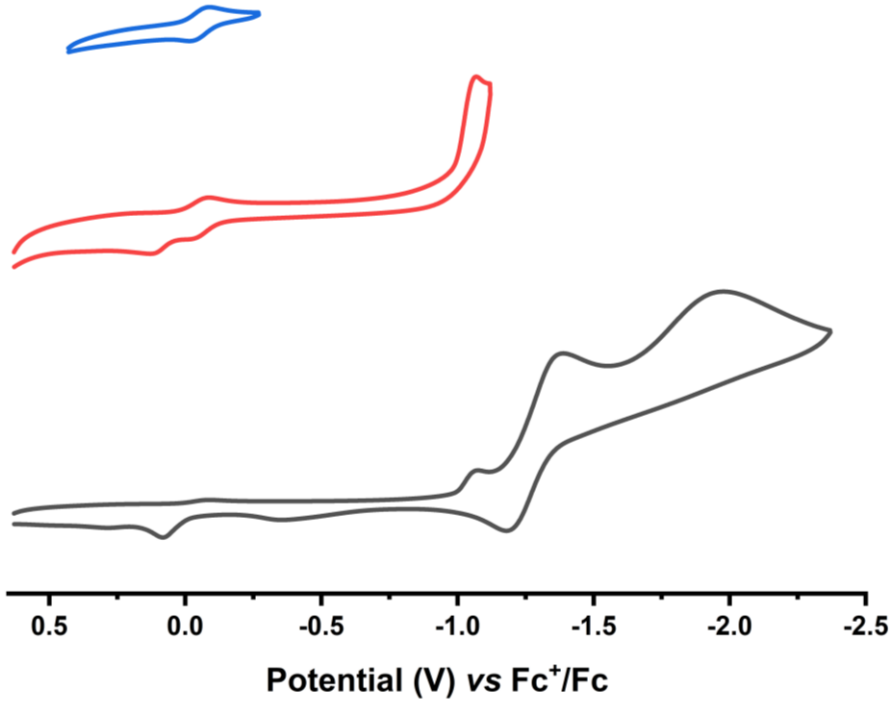

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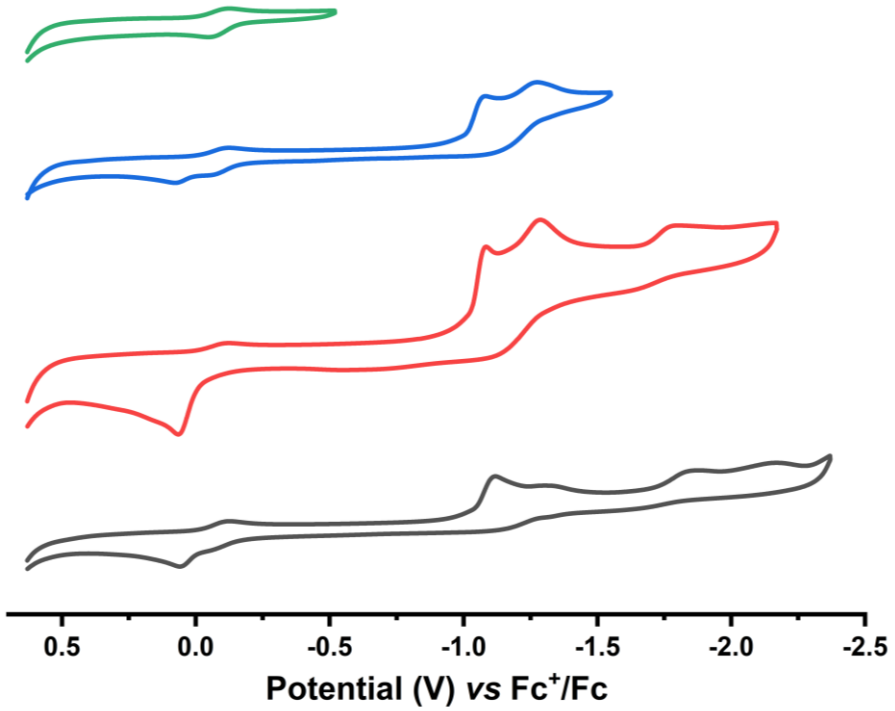

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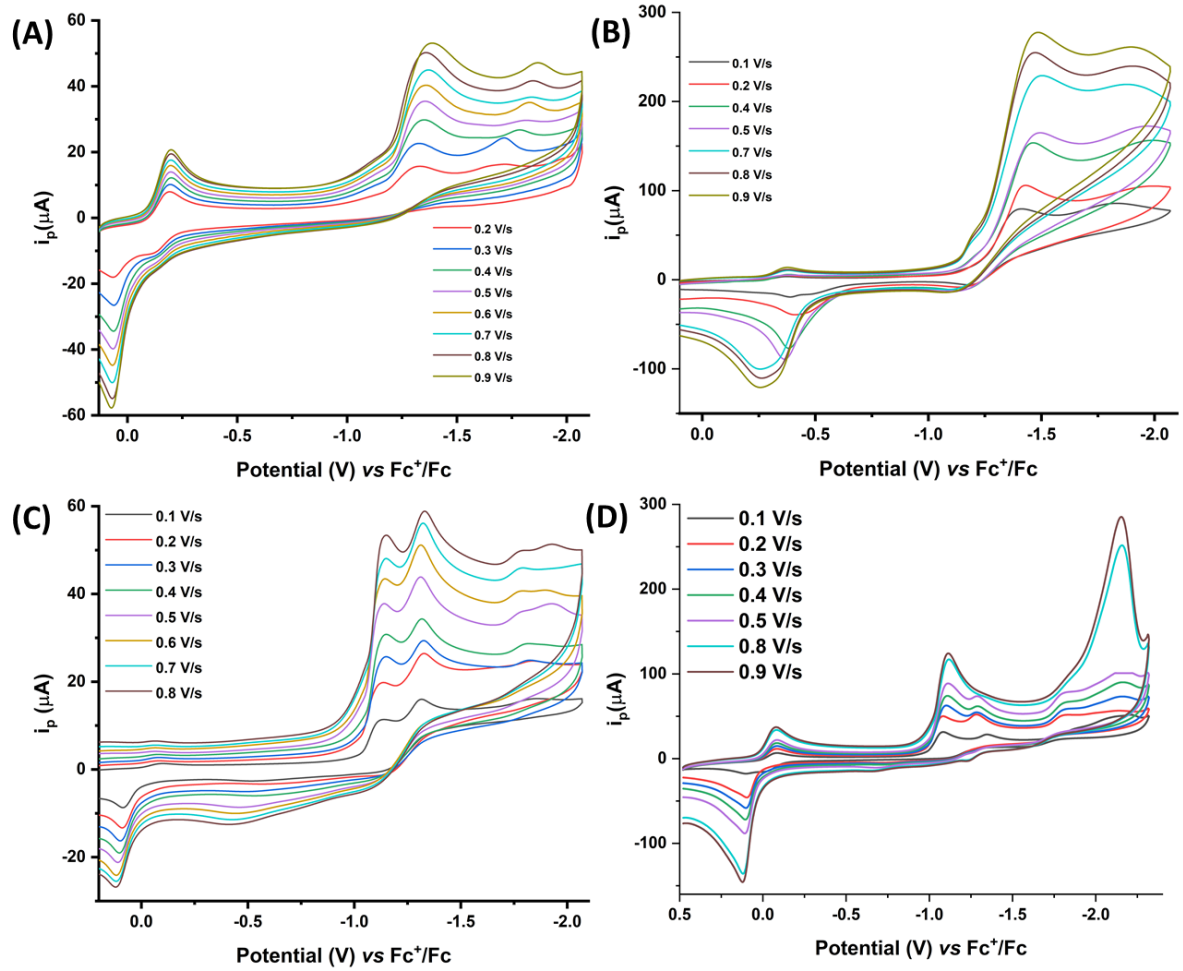

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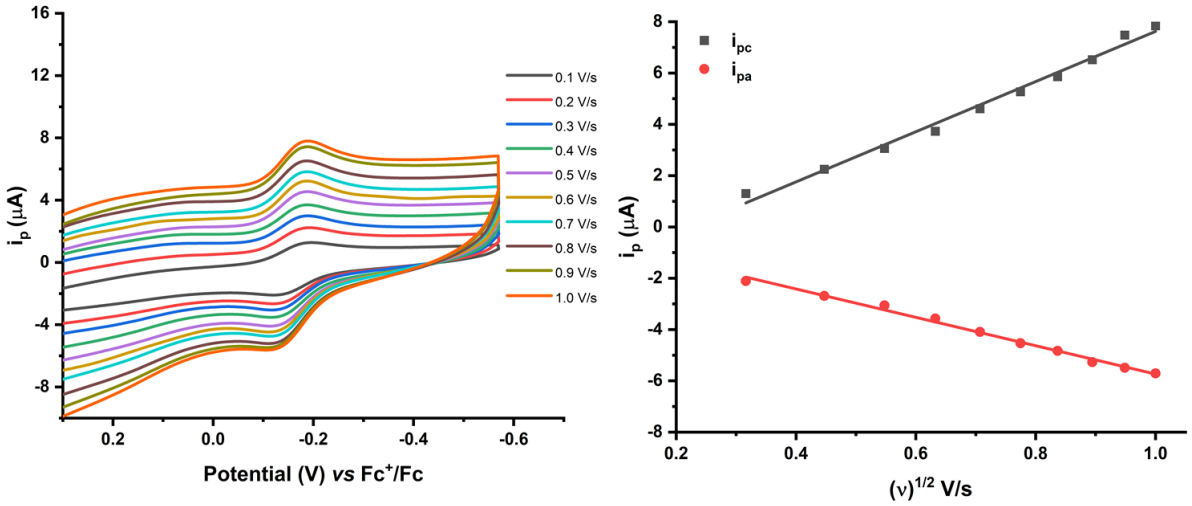

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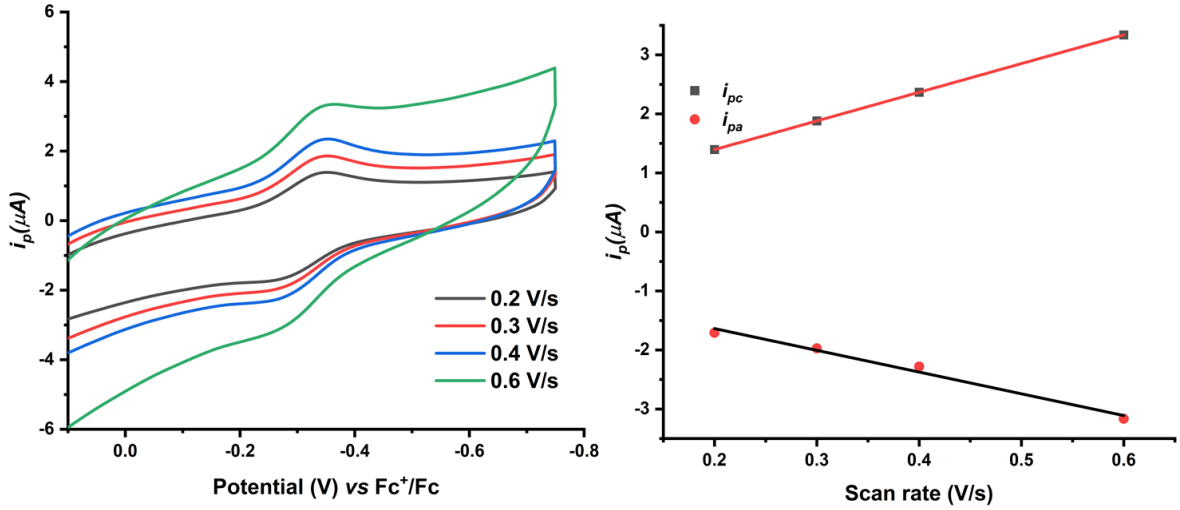

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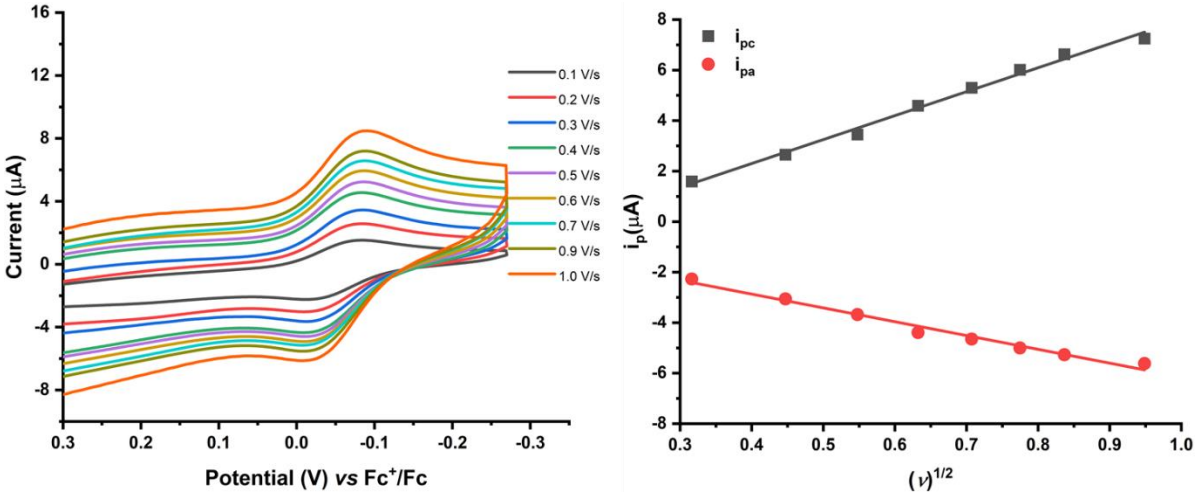

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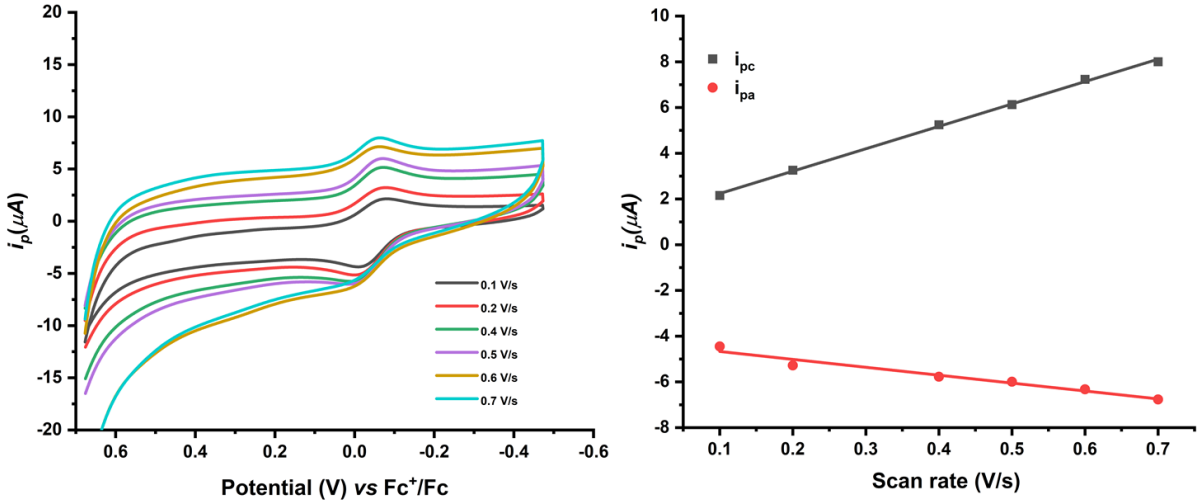

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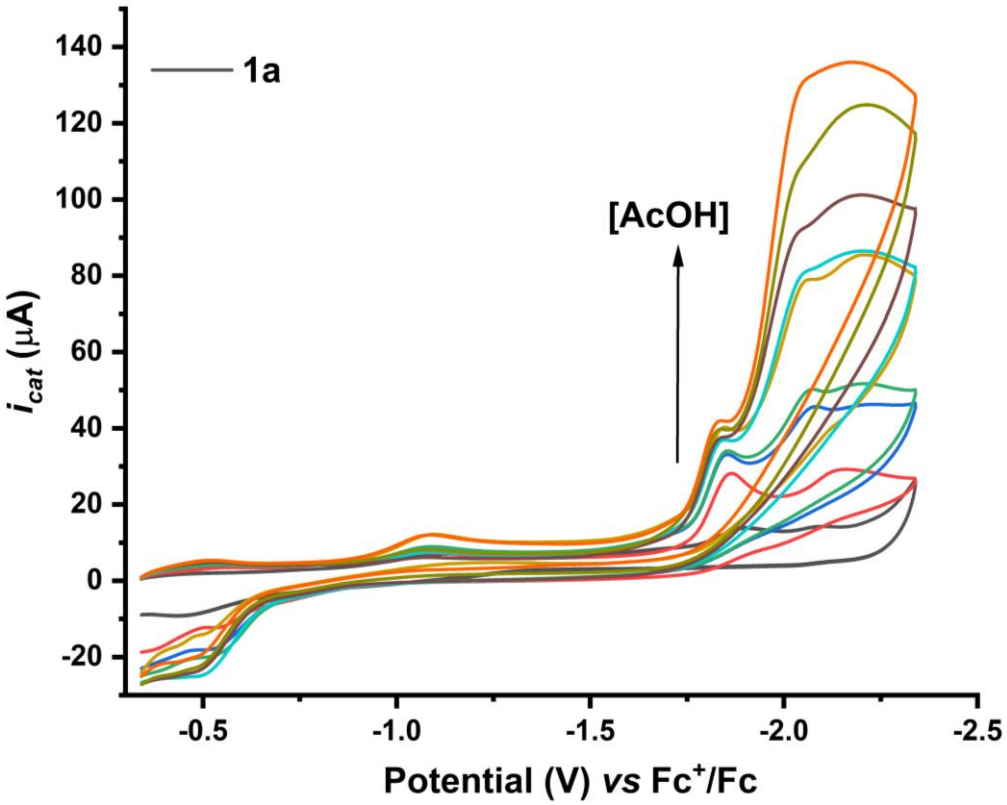

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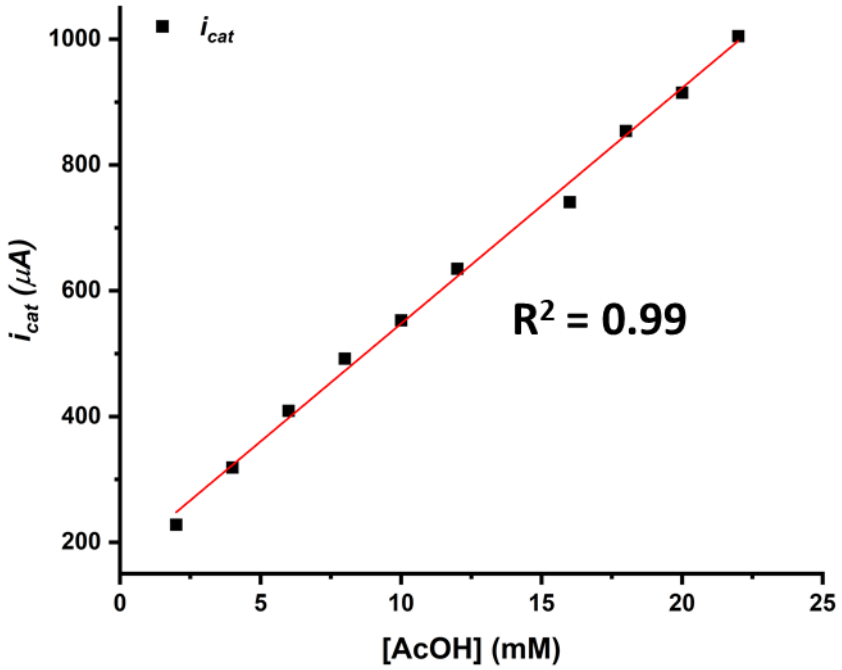

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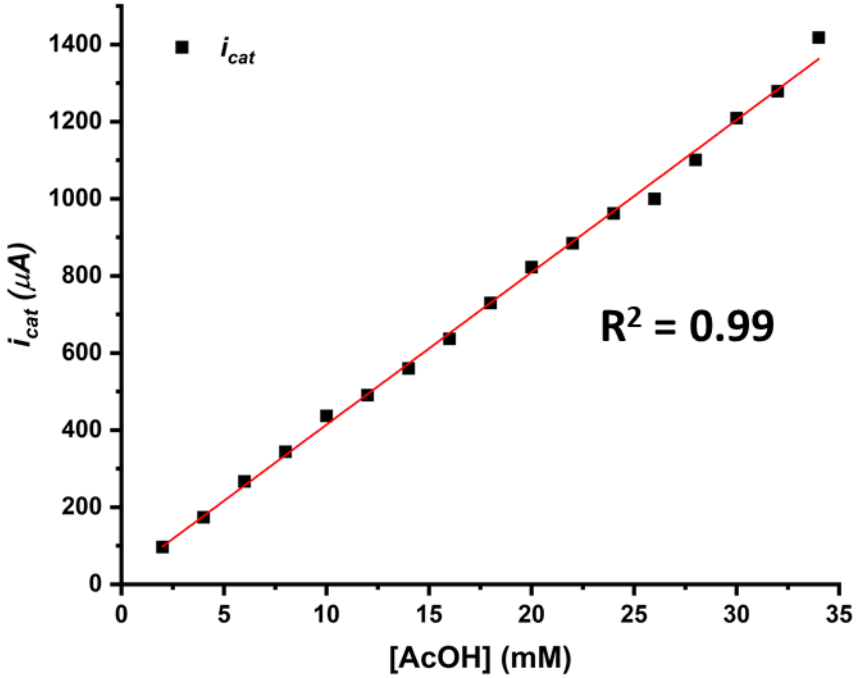

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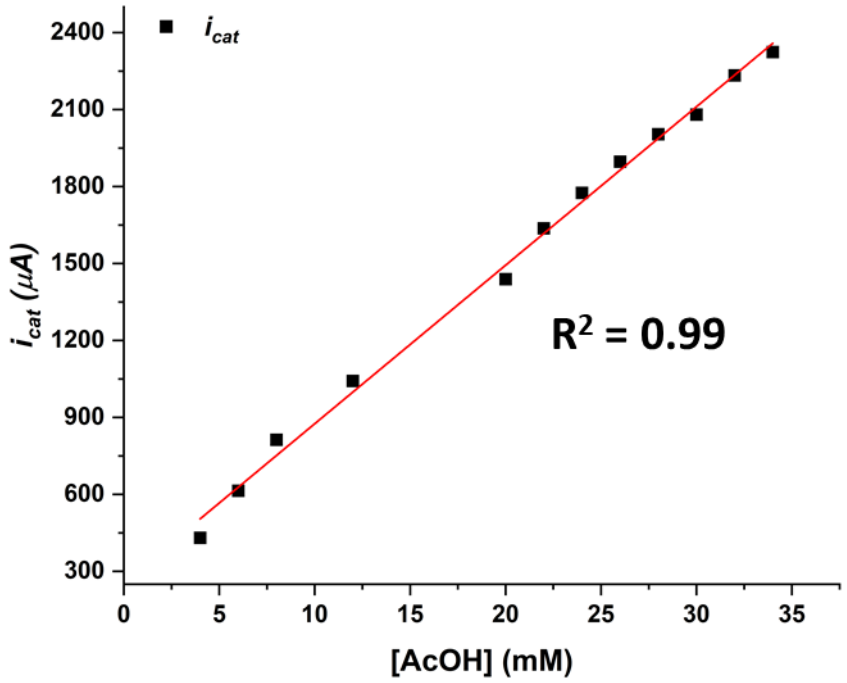

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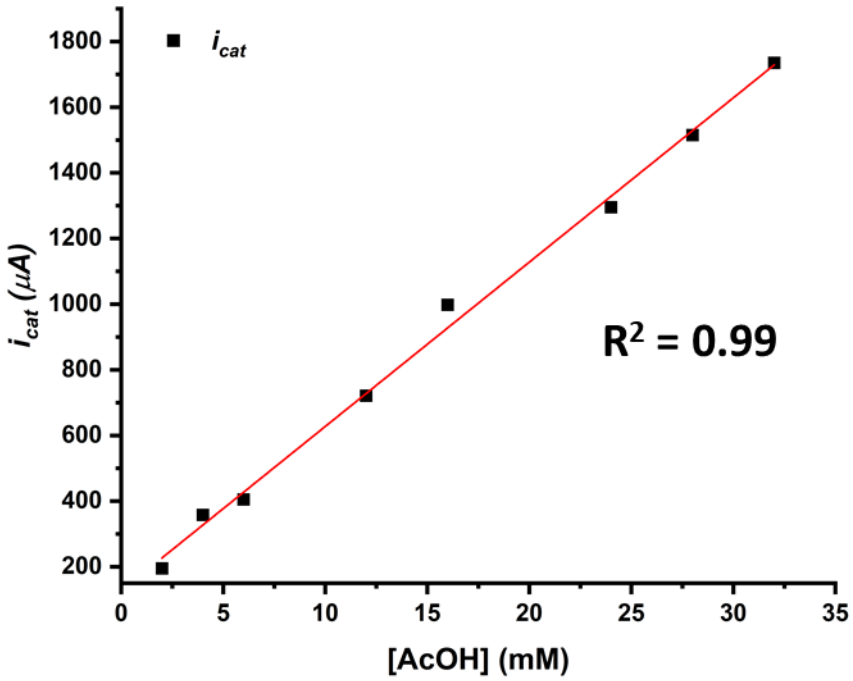

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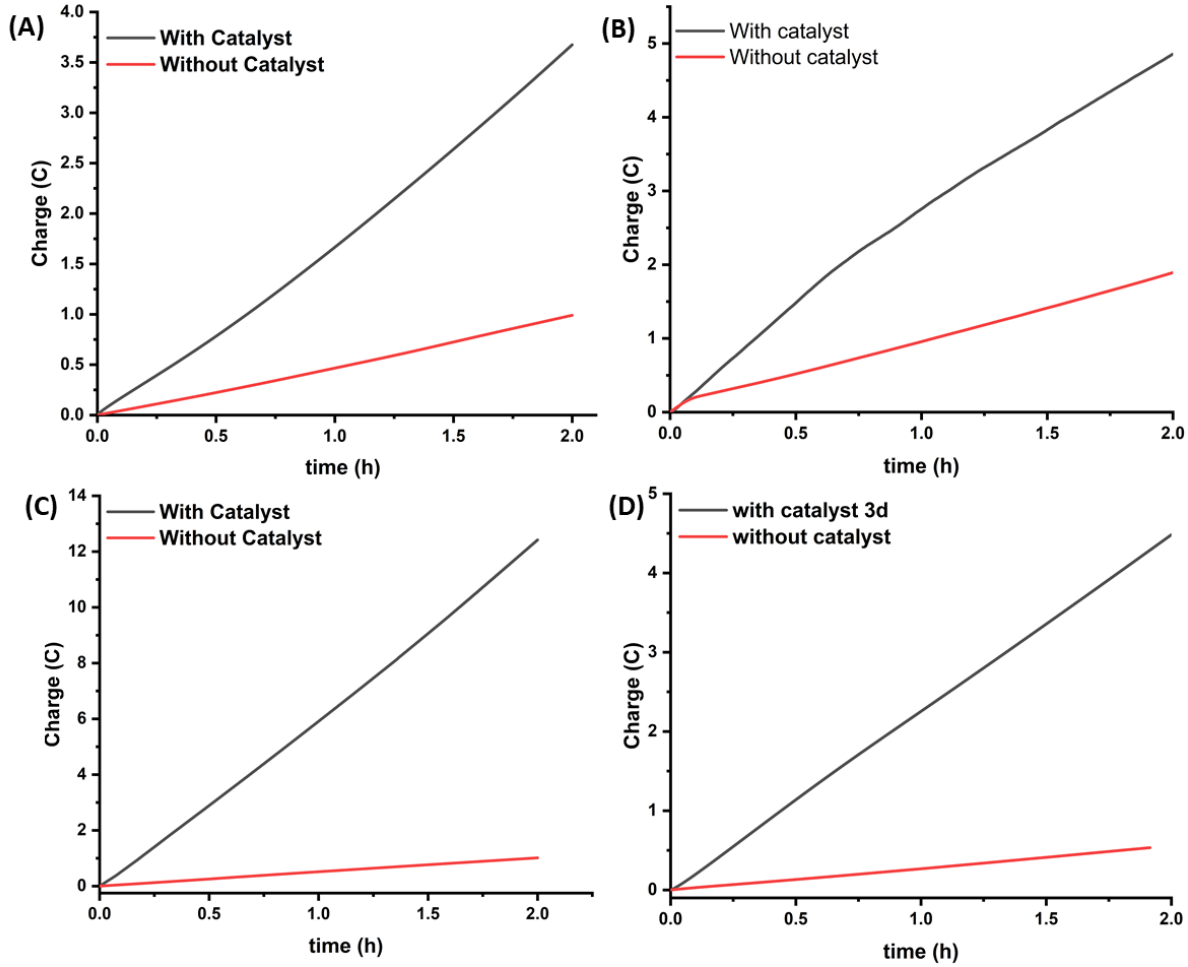

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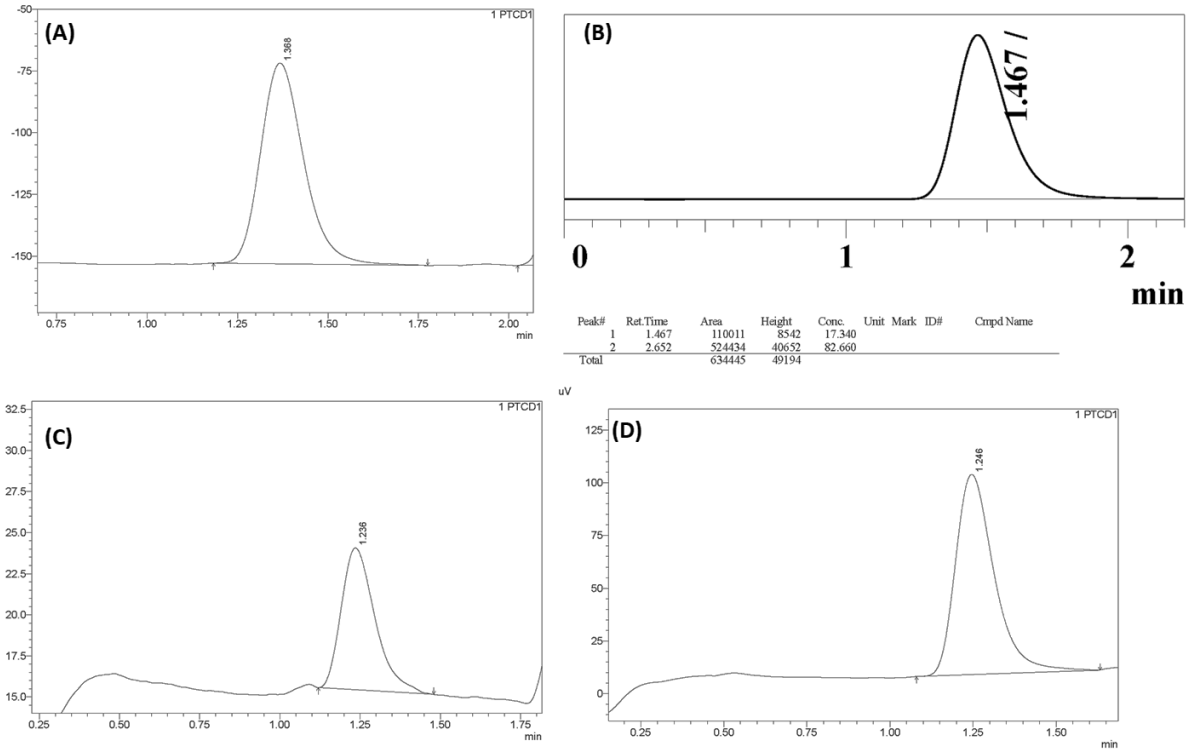

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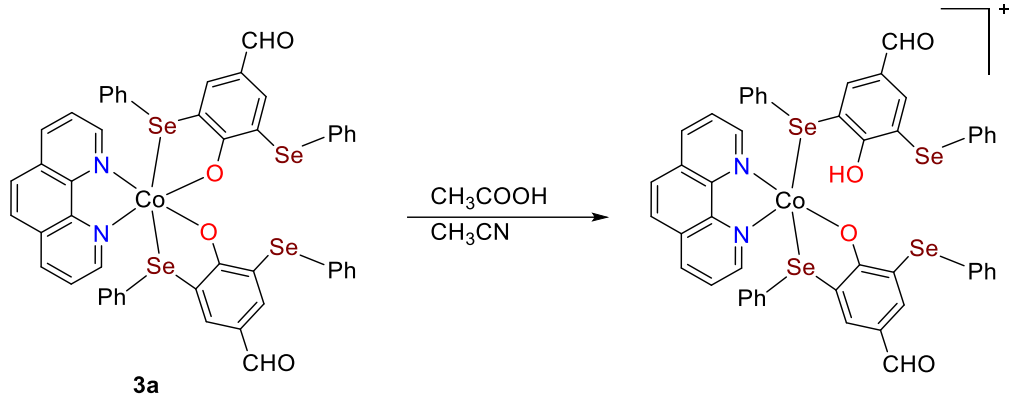
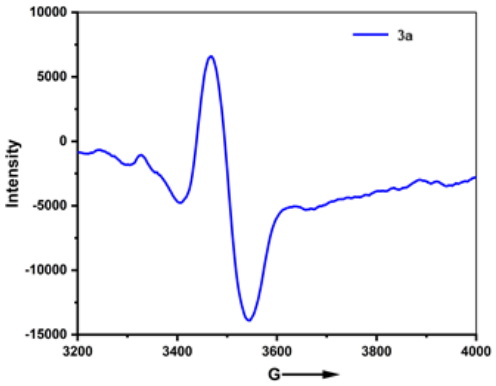
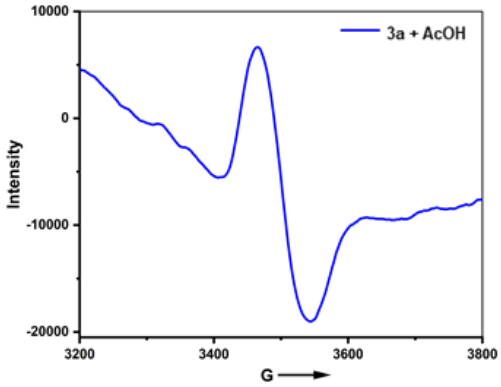
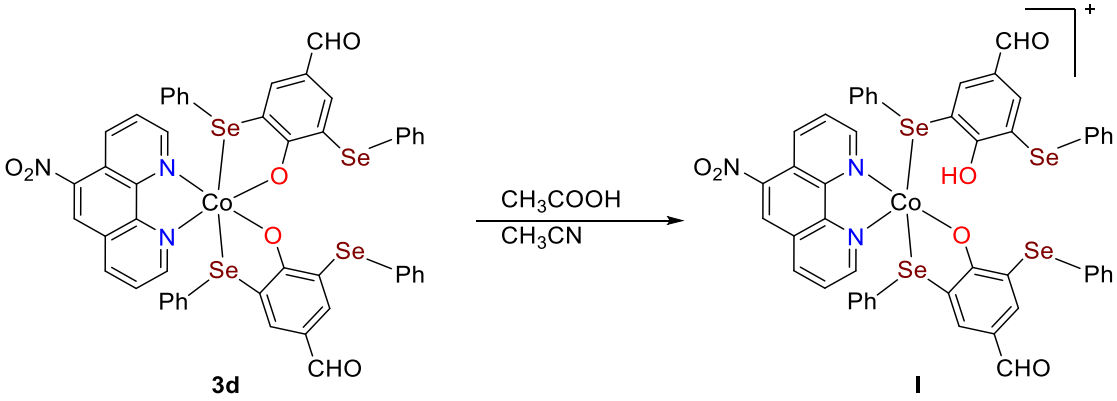


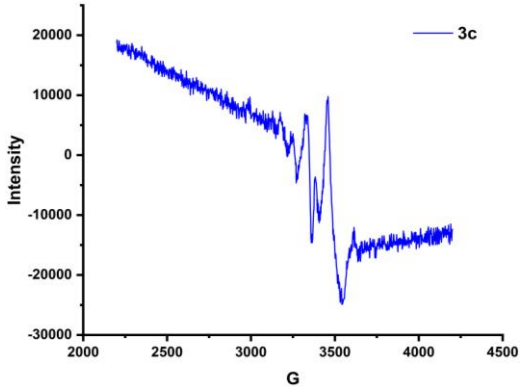
3a







3d I



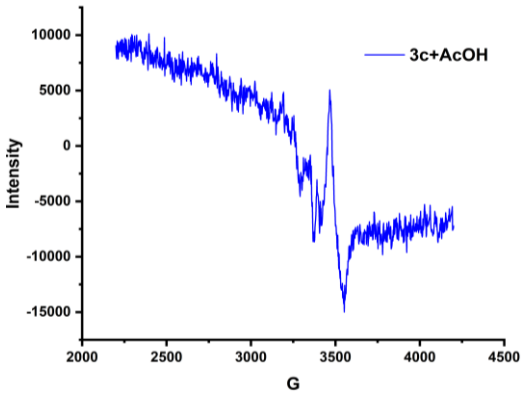


Figure S22. The UV-Visible titration of **1b** in the presence of acetic acid

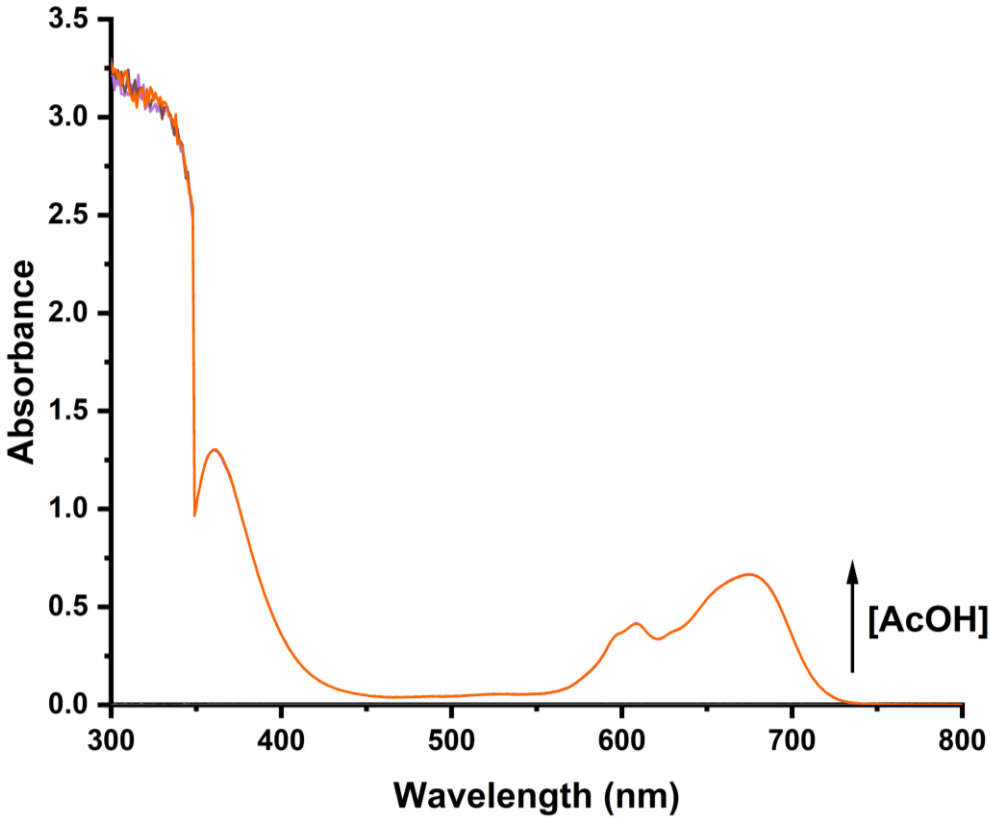
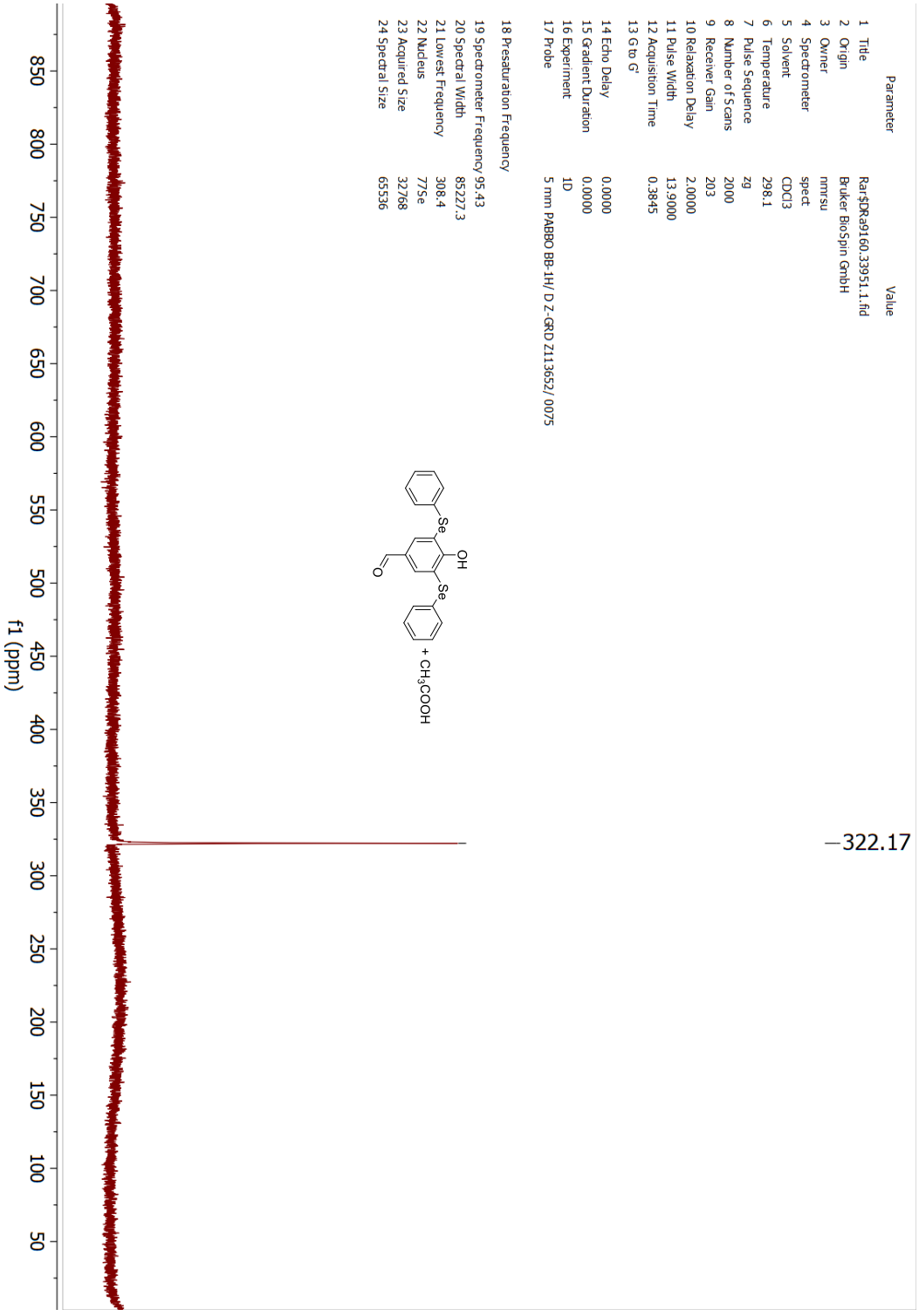


Figure S23. ^{77}Se NMR of a Reaction Mixture of Ligand **2a** and Acetic Acid in $CDCl_3$



The ^{77}Se NMR chemical shift value is similar to its actual bis-selenophenol which occurs at 320 ppm (*Chem. Asian J.* 2021, **16**, 966– 973), which suggests that selenium has not protonated on the addition of acetic acid.