

Supplementary material

Carbon Fiber Ultramicroelectrode as a simple tool to direct Antioxidant estimation based on caffeic acid oxidation

Ava Gevaerd, Bruna Medeiros da Silva, Paulo Roberto de Oliveira, Luiz Humberto Marcolino Júnior, Márcio Fernando Bergamini

Figure S1: Schematic representation of CF-UME construction.

Figure S2: Images of the final CF-UME. A) Before sealing, B) After sealed, and C) Front view after being sealed.

Figure S3: Representative SEM images of Carbon Fibers used for UME construction.

Figure S4: EDS spectra obtained for Carbon Fiber.

Figure S5: Comparison between the behavior of GCE and CF-UME under A) Chronoamperometric study, B) Voltammetric profile for GCE, and C) Voltammetric profile for CF-UME.

Figure S6: A) Voltammograms obtained for concomitant study; B) Current variation graph obtained for the concomitant study. $C_{\text{HAF}} = 100 \mu\text{mol L}^{-1}$; $C_{\text{CONC}} = 100 \mu\text{mol L}^{-1}$

Figure S1

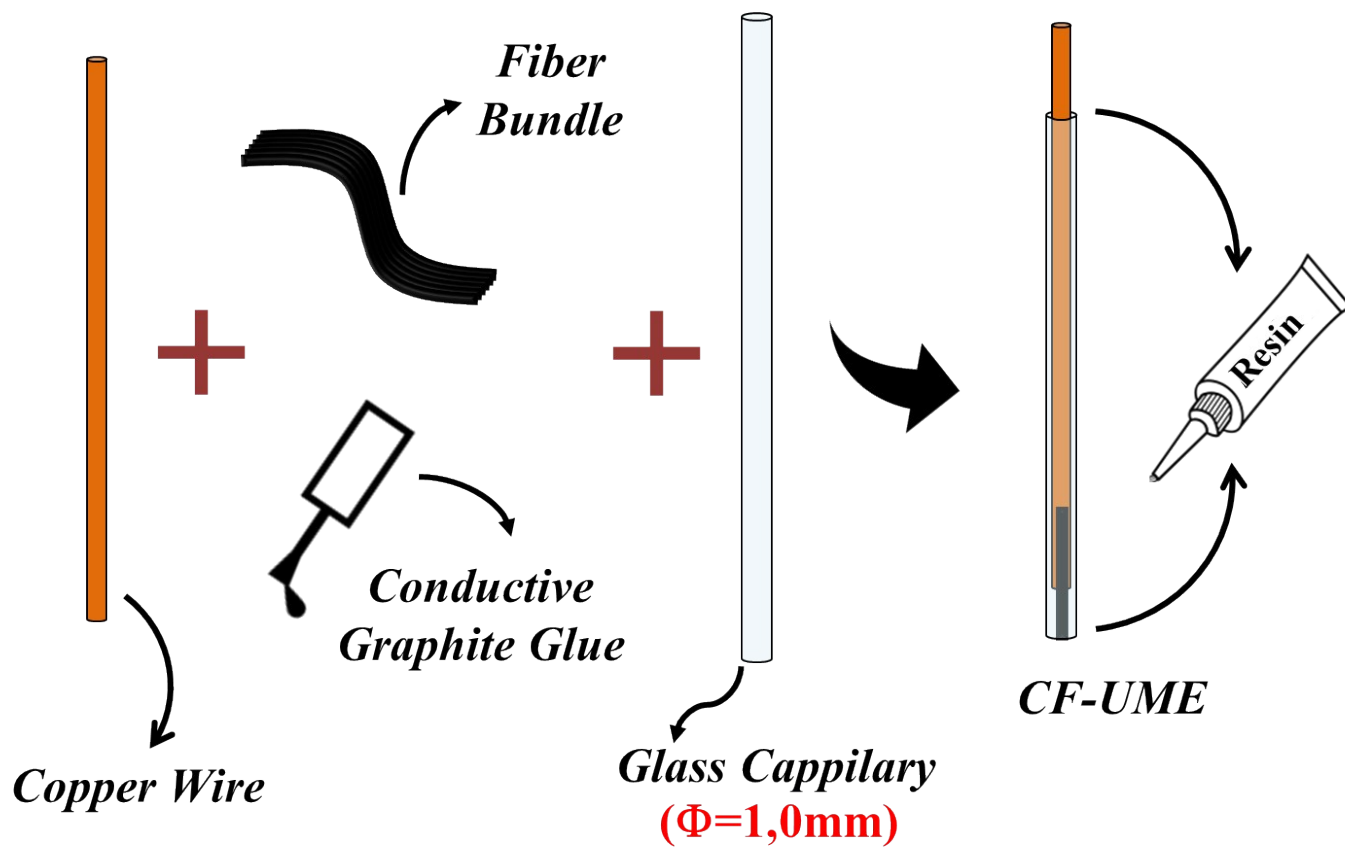


Figure S1. Schematic representation of CF-UME construction.

Figure S2

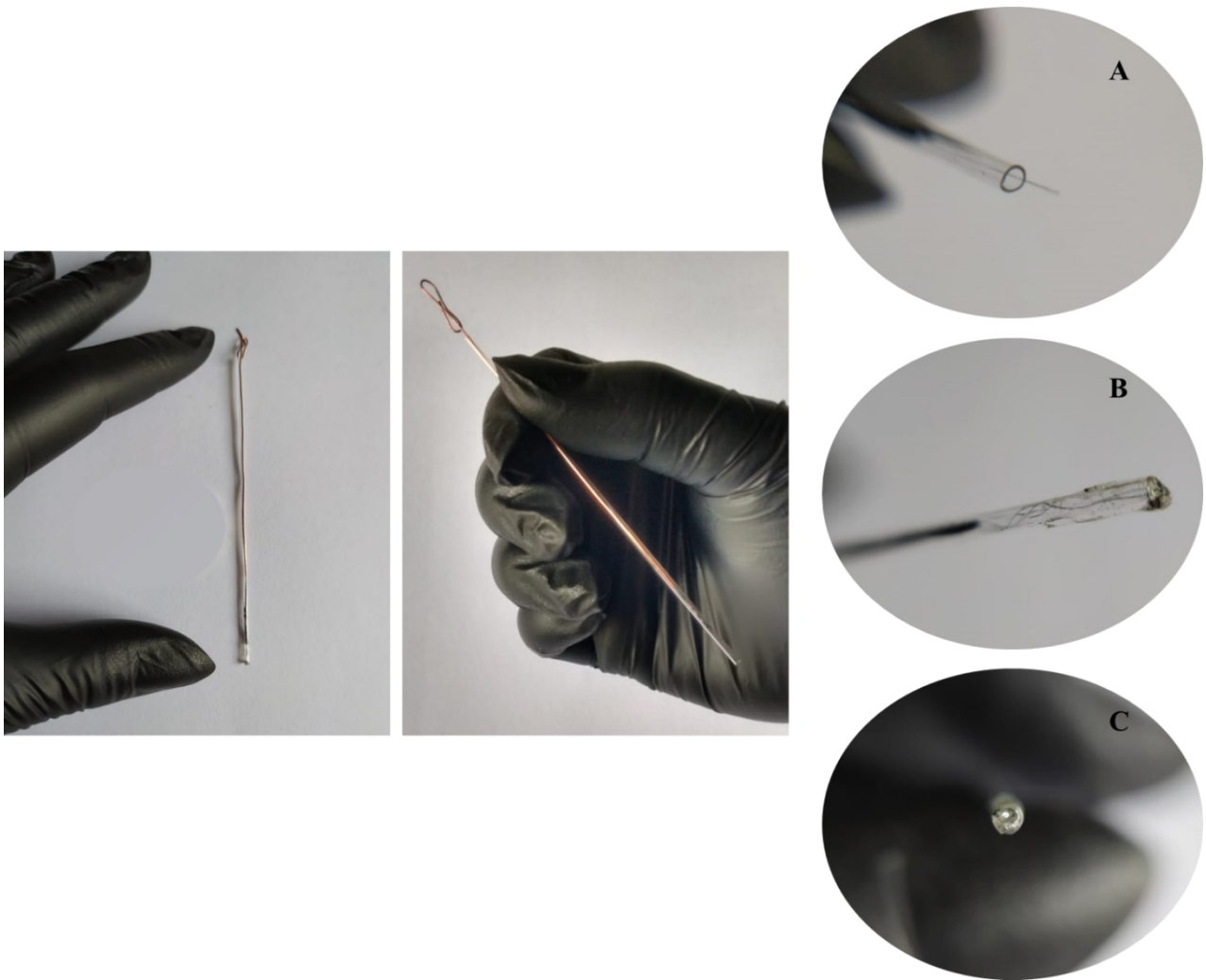


Figure S2. Images of the final CF-UME. A) Before sealing, B) After sealed, and C) Front view after being sealed.

FIGURE S3

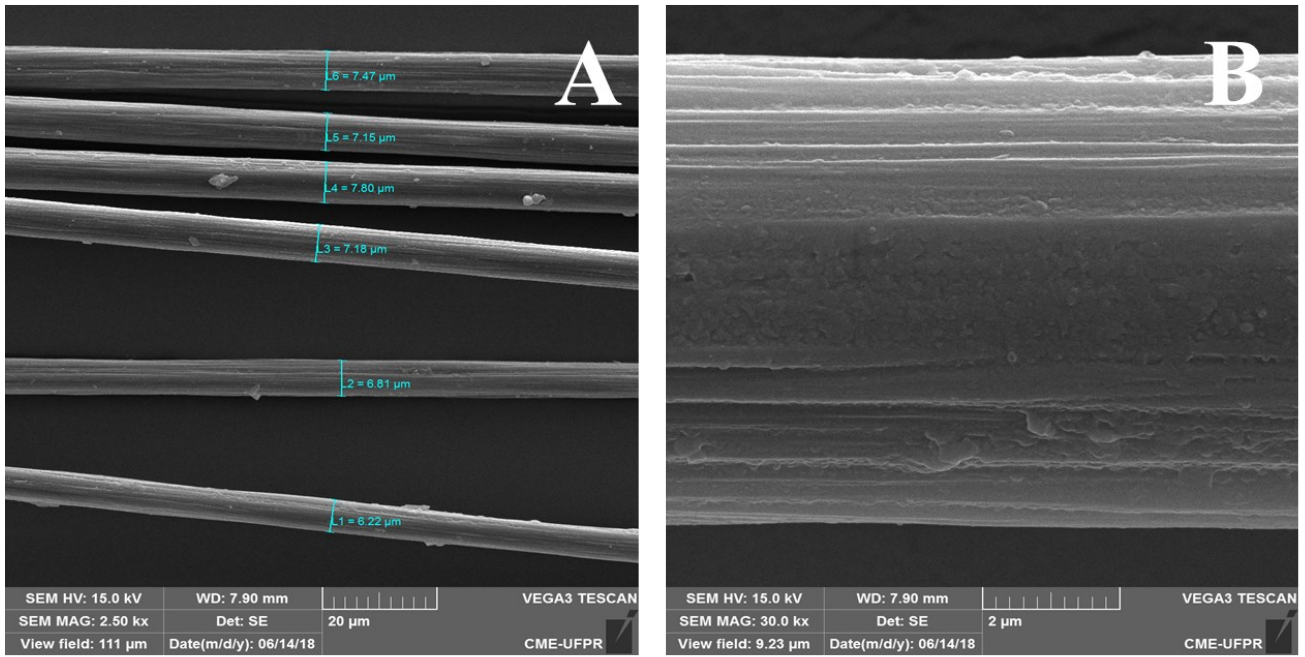


Figure S3. Representative SEM images of Carbon Fibers used for UME construction.

FIGURE S4

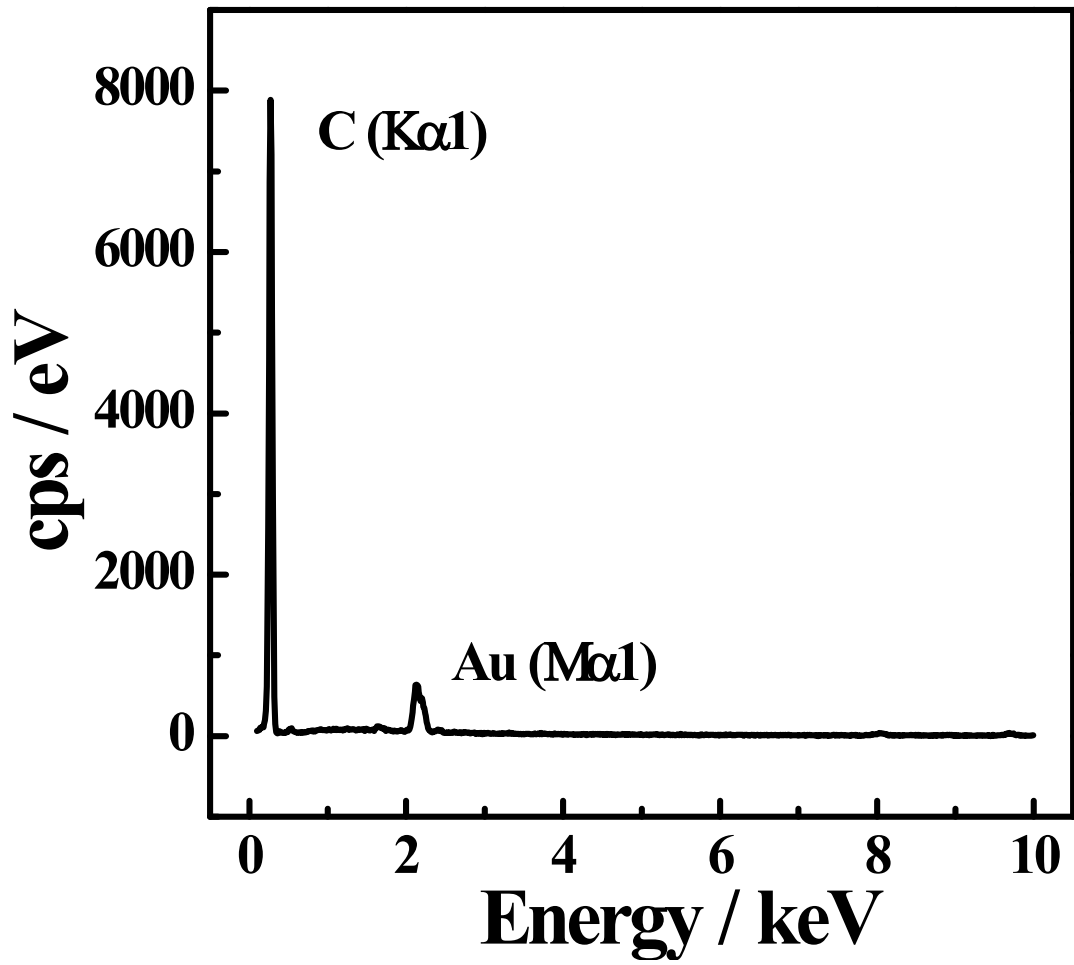


Figure S4. EDS spectra obtained for Carbon Fiber.

FIGURE S5

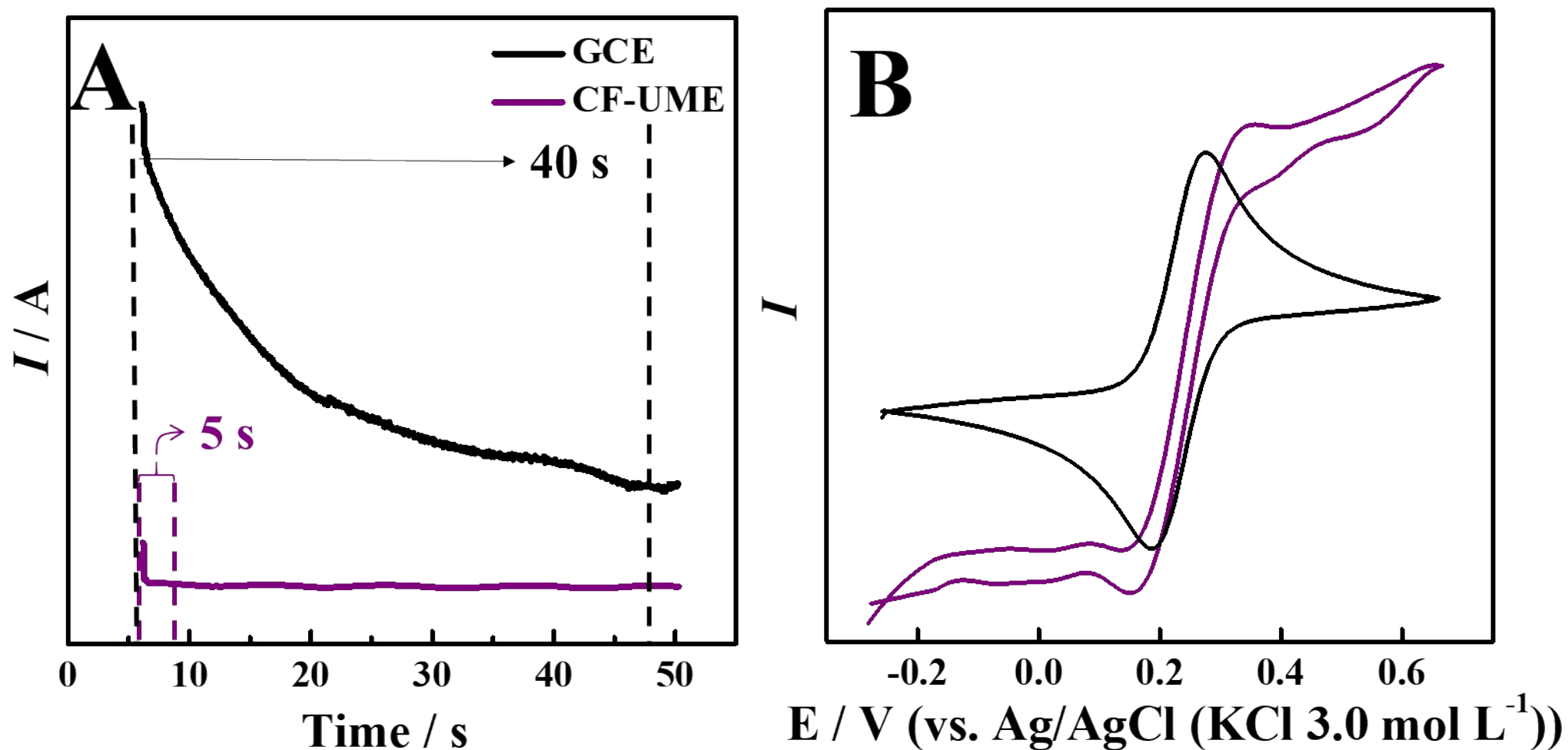


Figure S5. Comparison between the behavior of GCE and CF-UME under A) Chronoamperometric study, B) Voltammetric profile for GCE, and C) Voltammetric profile for CF-UME.

FIGURE S6

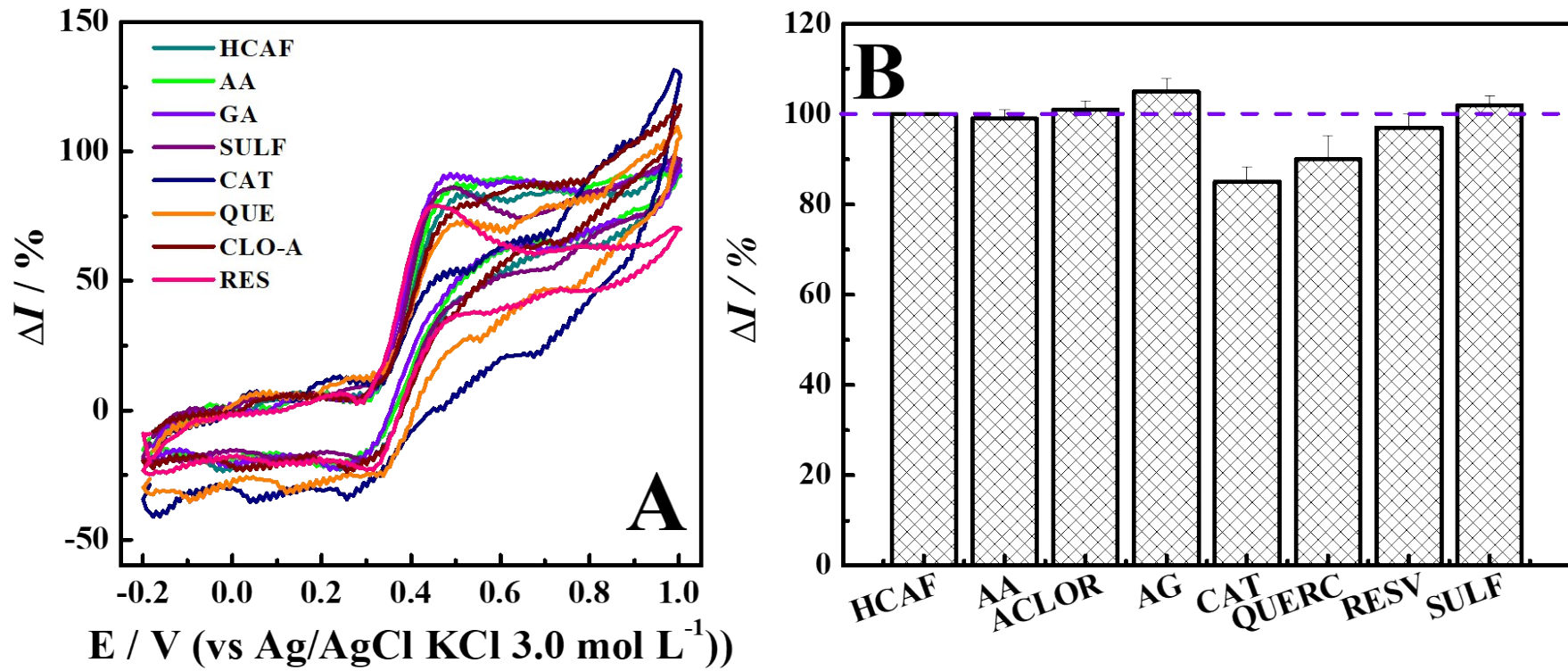


Figure S6. A) Voltammograms obtained for concomitant study; B) Current variation graph obtained for the concomitant study. $C_{\text{HCAF}} = 100 \mu\text{mol L}^{-1}$; $C_{\text{CONC}} = 100 \mu\text{mol L}^{-1}$