Supporting Informations For

A new visual test for p-quinone and its relevance to biodiesel industry

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SUPPLEMENTARY DATA

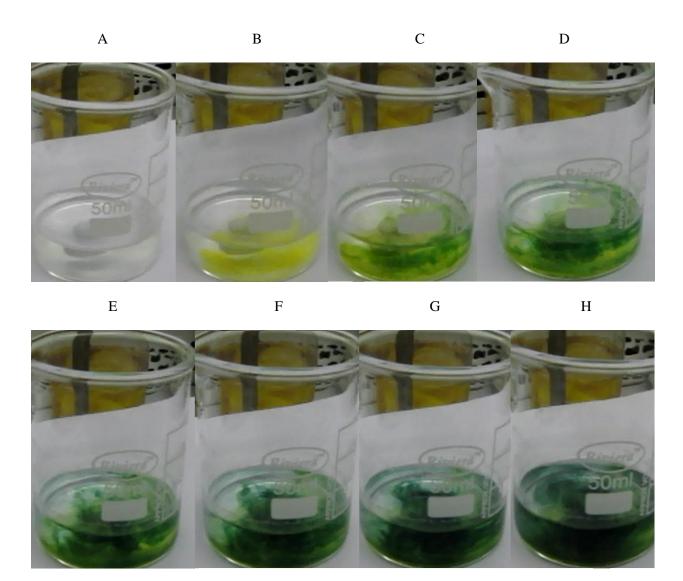


Figure S1. Progression of colour change in a mixture containing acetone and methoxide (A) followed by addition of negligible amount of *p*-quinone (B-H).

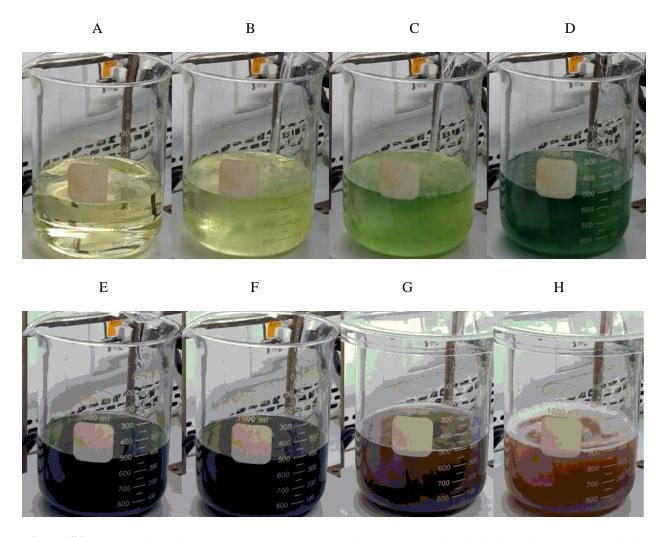


Figure S2. Progression of colour change (A to H) during the synthesis of biodiesel from commercially available soybean oil (Fortune brand) using acetone and methoxide as a co-solvent and catalyst, respectively.

$$CH_{3}COCH_{3} \xrightarrow{OMe} CH_{2}COCH_{3} \xrightarrow{H_{2}C=C-CH_{3}} OH \xrightarrow{OH} OH \xrightarrow{OH} CH_{2} \overset{O}{C}-CH_{3}$$

$$CH_{3}COCH_{3} \xrightarrow{OMe} CH_{2}COCH_{3} \xrightarrow{OH} OH \xrightarrow{OH} CH_{2} \overset{O}{C}-CH_{3}$$

$$CH_{2}C-CH_{3} \xrightarrow{OH} CH_{2} \overset{O}{C}-CH_{3}$$

$$CH_{2}C-CH_{3} \xrightarrow{OH} CH_{2} \overset{O}{C}-CH_{3}$$

$$CH_{2}C-CH_{3} \xrightarrow{OH} CH_{2} \overset{O}{C}-CH_{3}$$

Figure S3. Mechanism of formation of green-blue complex with acetone and methoxide in presence of p-quinone.

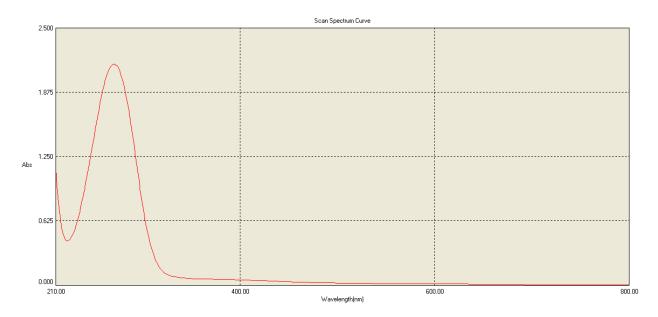


Figure S4. UV-Vis spectra of the green-blue complex on addition of p-quinone into the mixture of acetone and methoxide solution.