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A promising mixed micellar approach to tune the oxidation of isoprenol by diperiodatoargentate(III) in aqueous media

Sandip Kundu[a], Priya Karmakar[a], Sk Mehebub Rahaman[a], Mandira Mitra[a], Sangita Rajwar[b], Subhendu Dhibar[a], Mousumi Layek[a], Pintu Sar*[,a], Bidyut Saha*[,a]

[a]Surfactant Chemistry Laboratory, Department of Chemistry, The University of Burdwan, Burdwan-713104, West Bengal, India

[b]Department of Chemical Sciences, Indian Institute of Science Education and Research, Kolkata-741246, West Bengal, India

*Corresponding authors

Email addresses: pintusar1@gmail.com (PS), b_saha31@redifmail.com (BS), bsaha@chem.buruniv.ac.in (BS)

Supplementary data

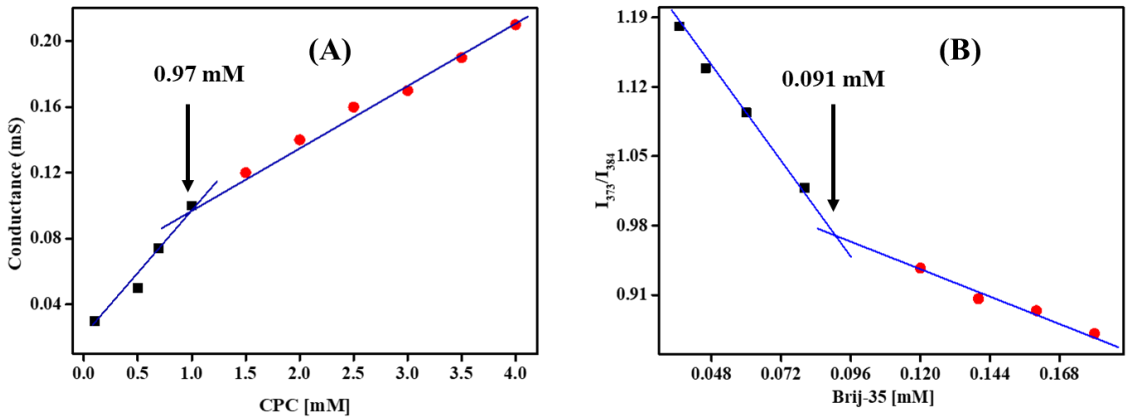

Figure 1S. CMC determination of CPC (A) and Brij-35 (B) surfactants following conductometric and fluorimetric methods, respectively.

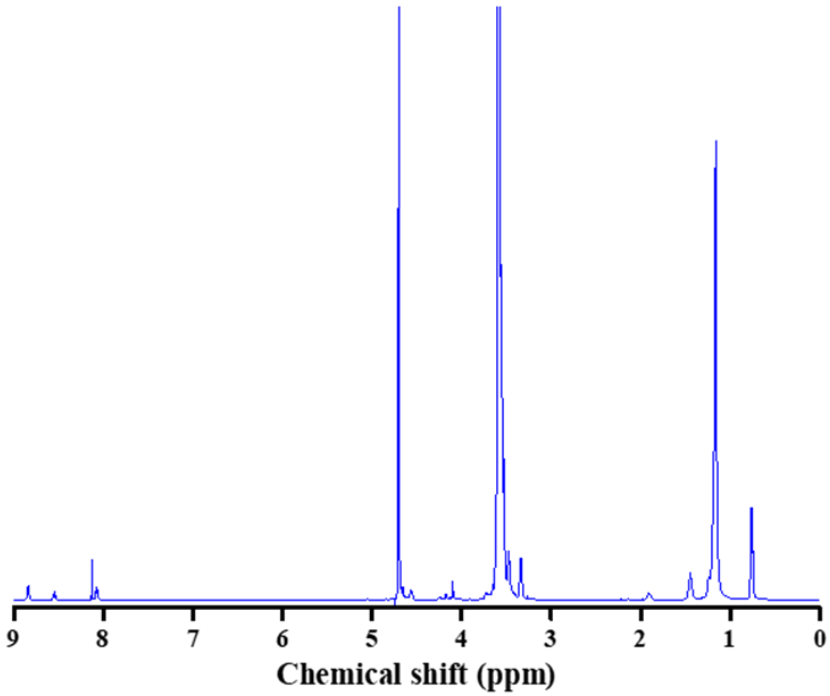

Figure 2S. ^{1}H NMR spectra of binary surfactant mixture of CPC and Brij-35 in D_2O at post micellar concentration.

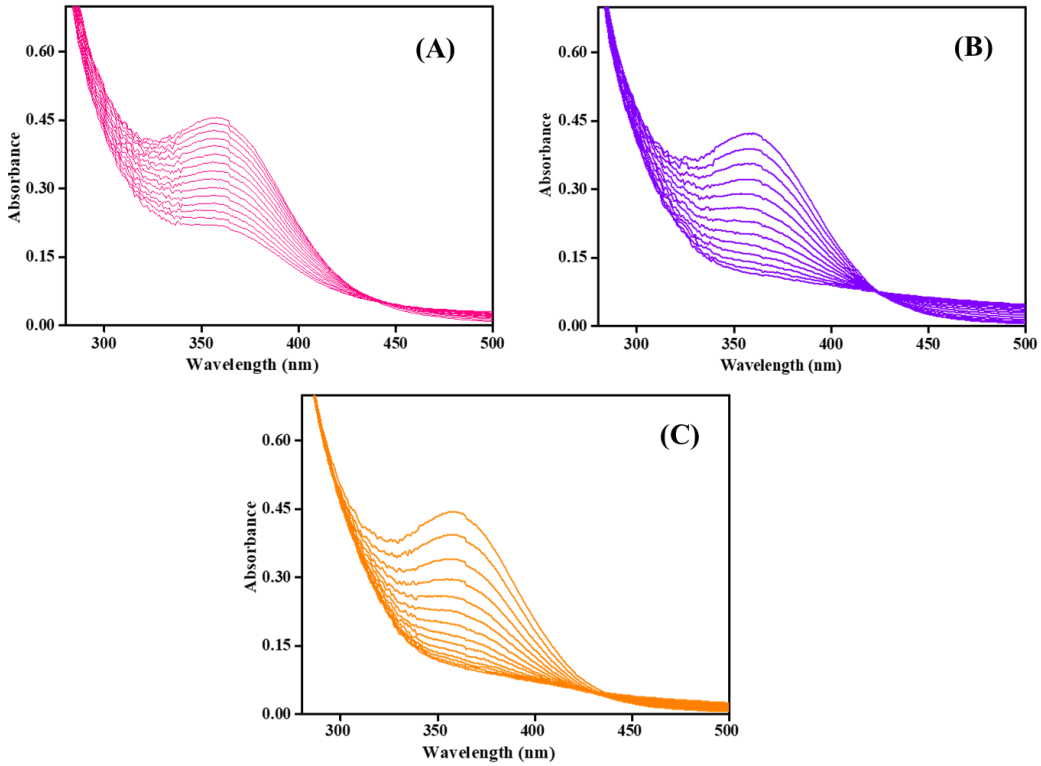

Figure 3S. UV-vis scanned absorption spectra of isoprenol oxidation by DPA in presence of CPC surfactant at 6 min interval; [isoprenol] = 2.72×10^{-4} mol dm^{-3}, [DPA] = 2.72×10^{-5} mol dm^{-3} (A) 1 mM CPC (B) 3 mM CPC (C) 5 mM CPC.

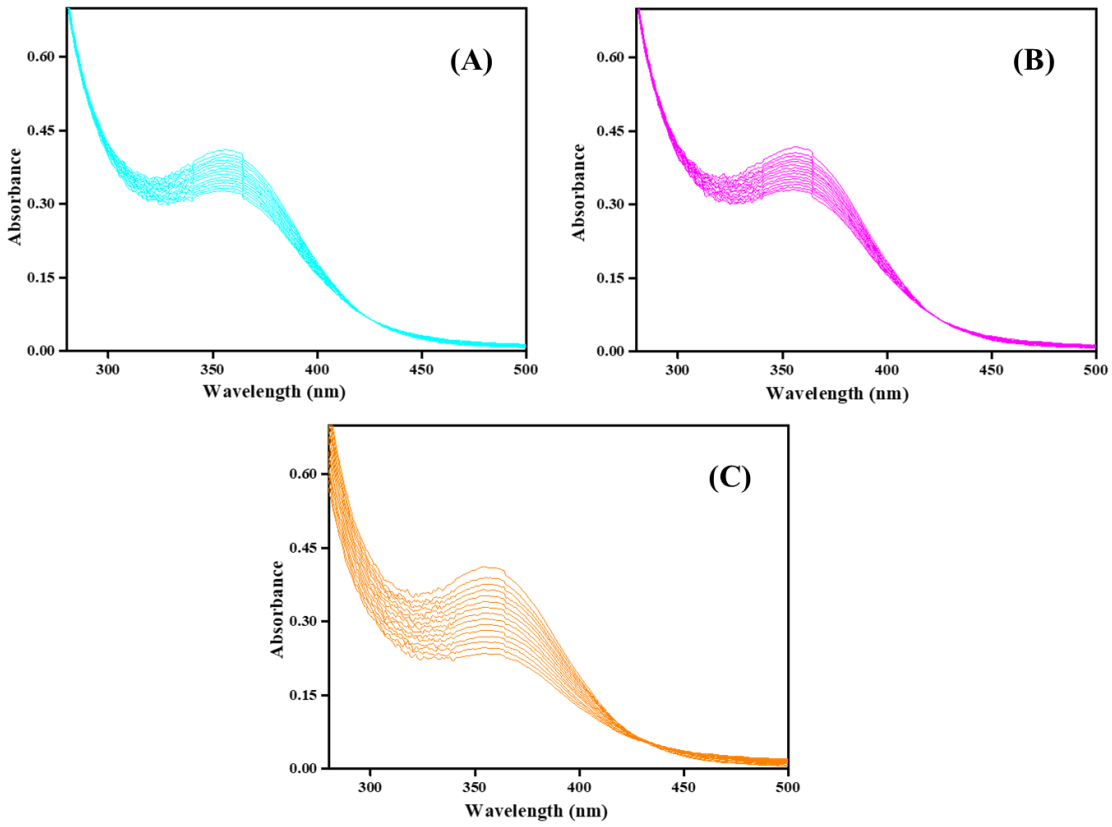

Figure 4S. UV-vis scanned absorption spectra of isoprenol oxidation by DPA in presence of Brij-35 surfactant at 6 min interval; [isoprenol] = 2.72×10^{-4} mol dm^{-3}, [DPA] = 2.72×10^{-5} mol dm^{-3} (A) 0.8 mM Brij-35 (B) 1 mM Brij-35 (C) 3 mM Brij-35.

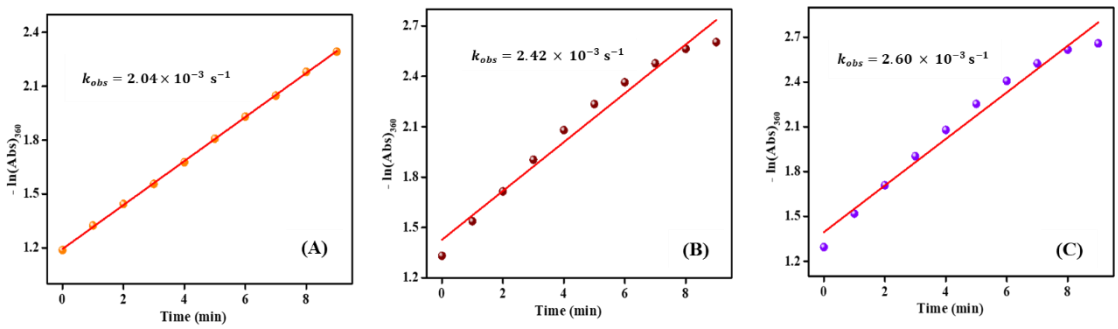

Figure 5S. Determination of rate constant values (k_{obs}) for the studied reactions in mixed micellar media at varying composition of surfactants (CPC: Brij-35), (A) 3:1 (B) 1:3 (C) 1:1

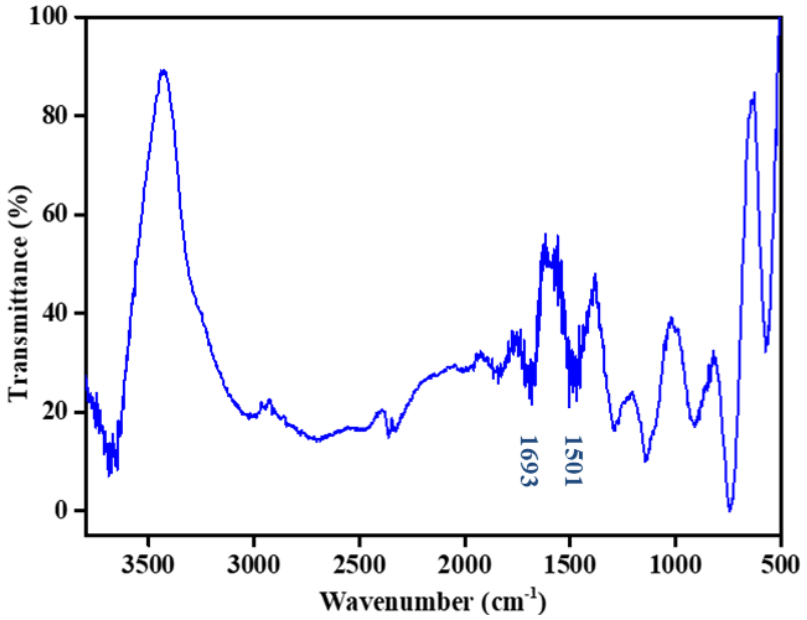

Figure 6S. FT-IR spectrum of isolated oxidized product of the studied oxidation reaction.

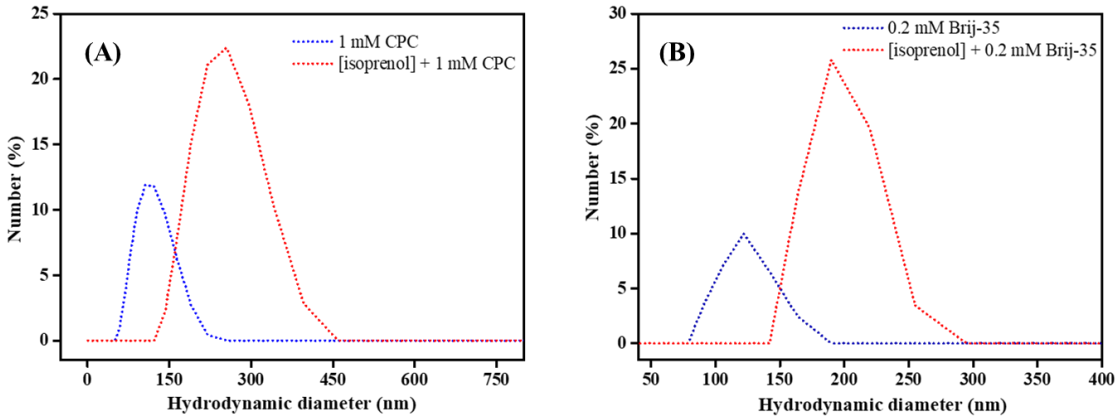

Figure 7S. Hydrodynamic diameter of aqueous surfactant solution alone and in presence of isoprenol at the post-micellar concentration of surfactants: (A) CPC (B) Brij-35

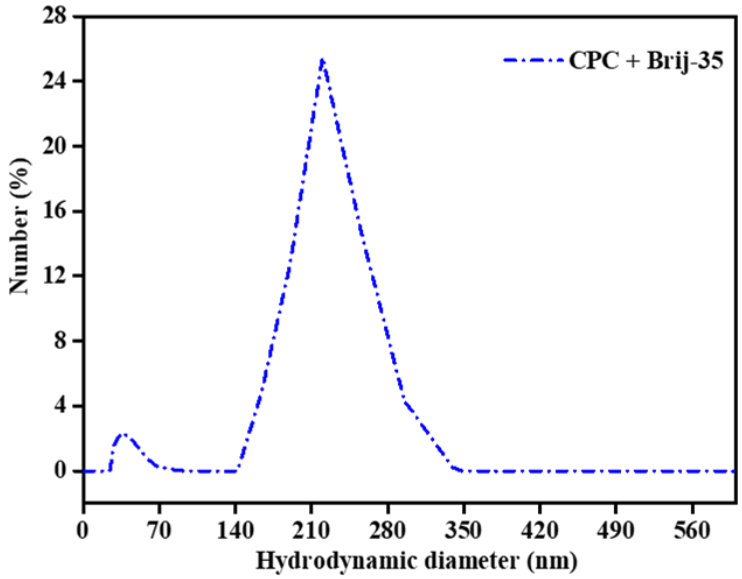

Figure 8S. Hydrodynamic diameter of mixed surfactant system (CPC and Brij-35) above their CMC (> 0.241 mM).

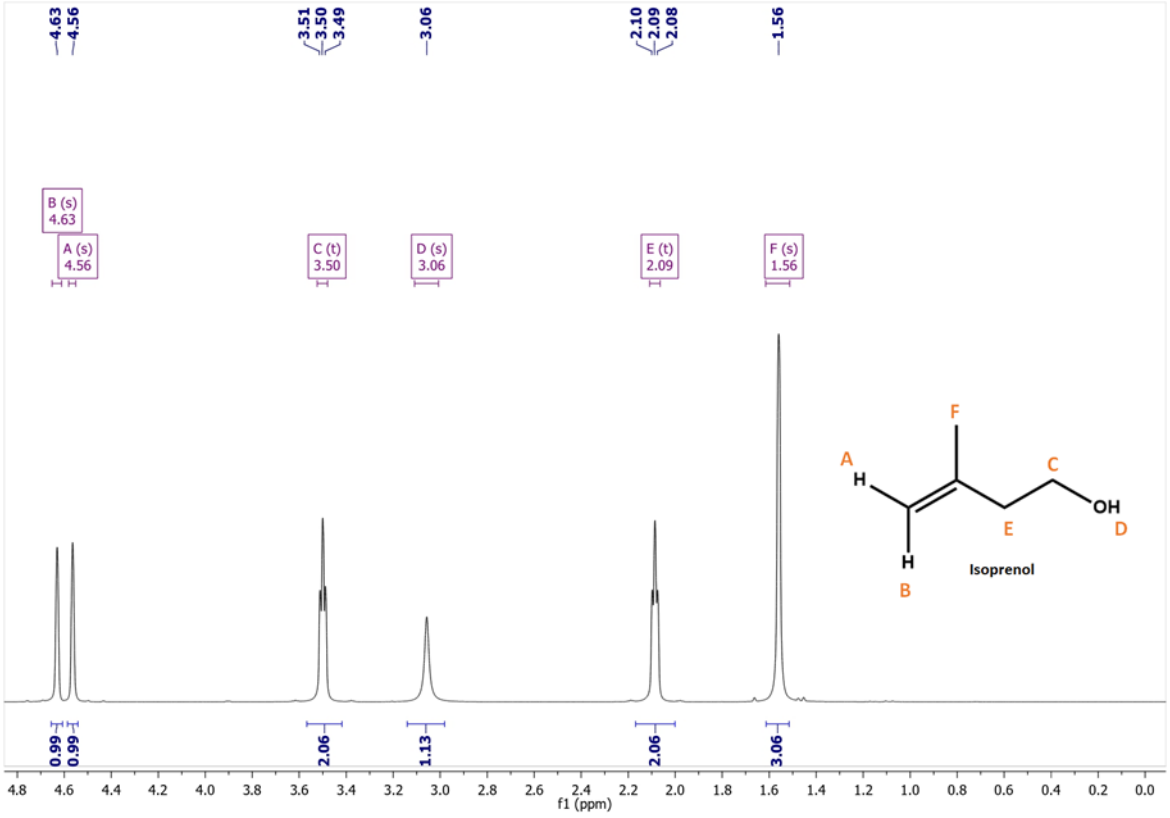

Figure 9S. ^{1}H NMR spectrum of isoprenol in $CDCl_3$ medium.