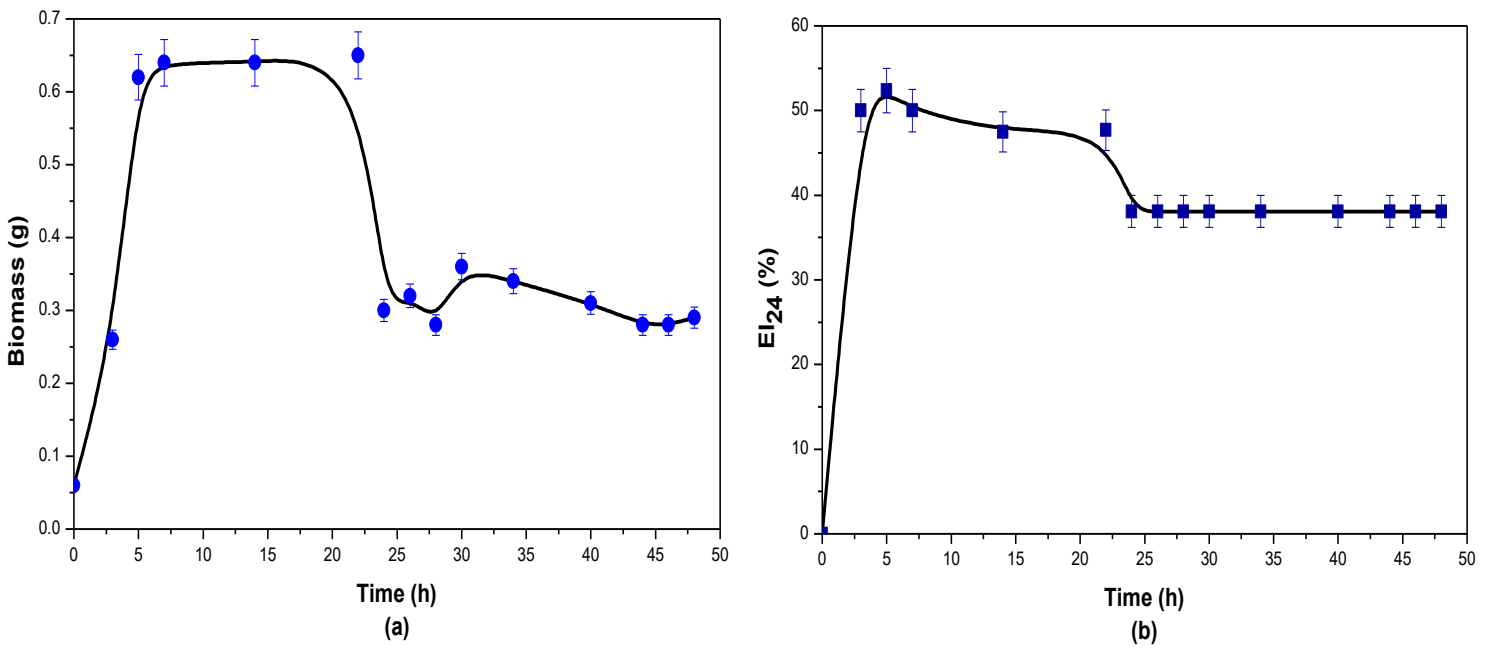
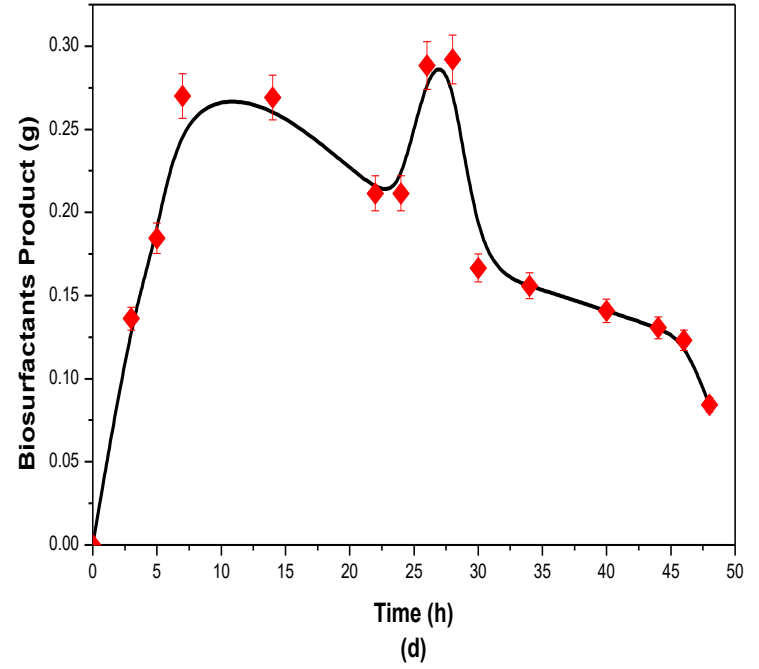
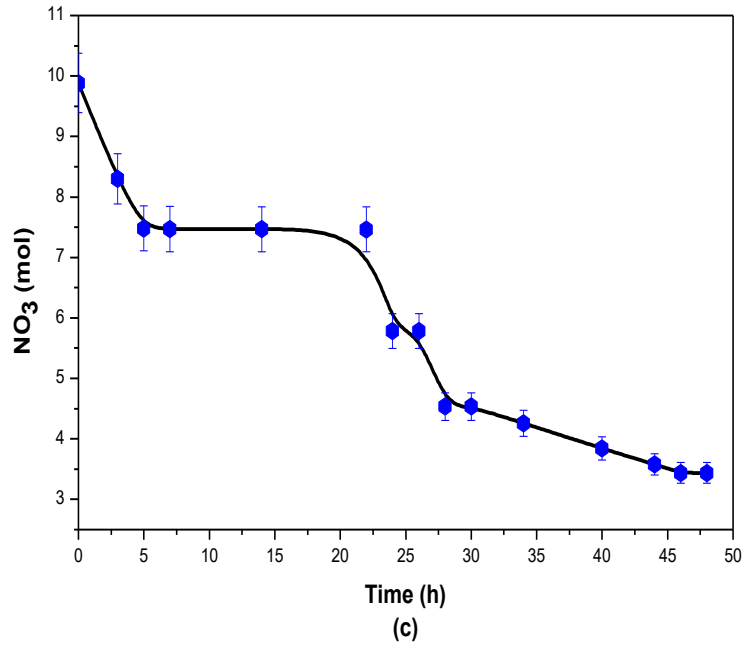
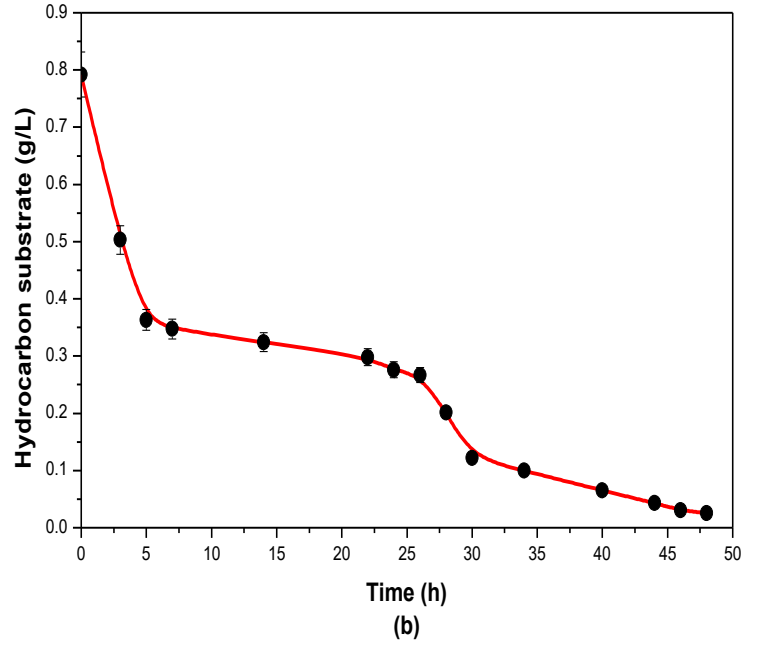
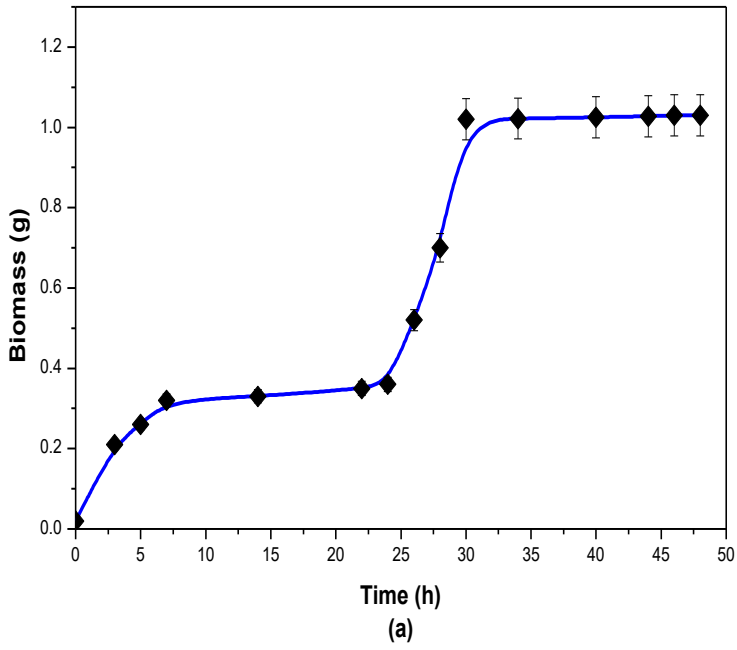


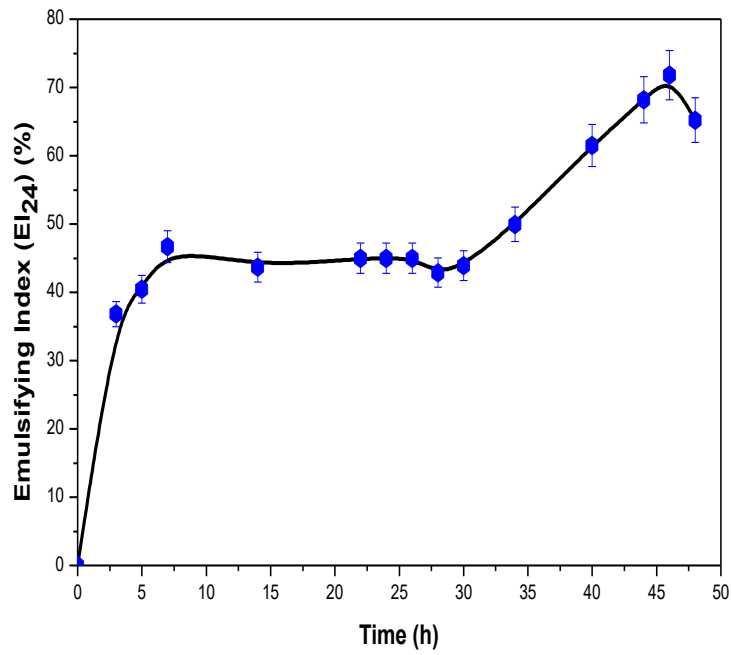
**Fig. 1.** Evolution of the emulsifying index versus time (pH = 7, T = 37°C, W = 250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 10 mmol/L, p ≤ 0.05).



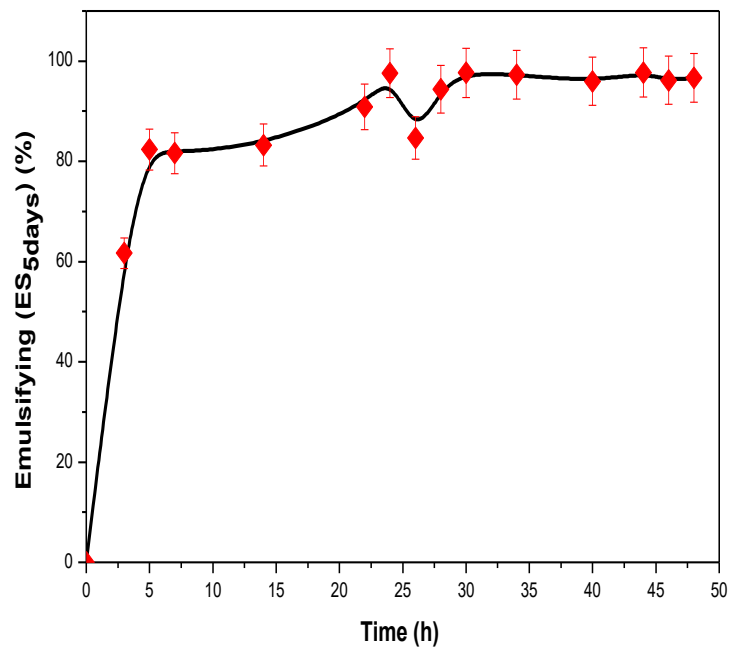
**Fig. 2.** Biomass (a) and Emulsification index (b) versus time (pH = 7, T = 37°C, W = 250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 50 mmol/L, p ≤ 0.05).



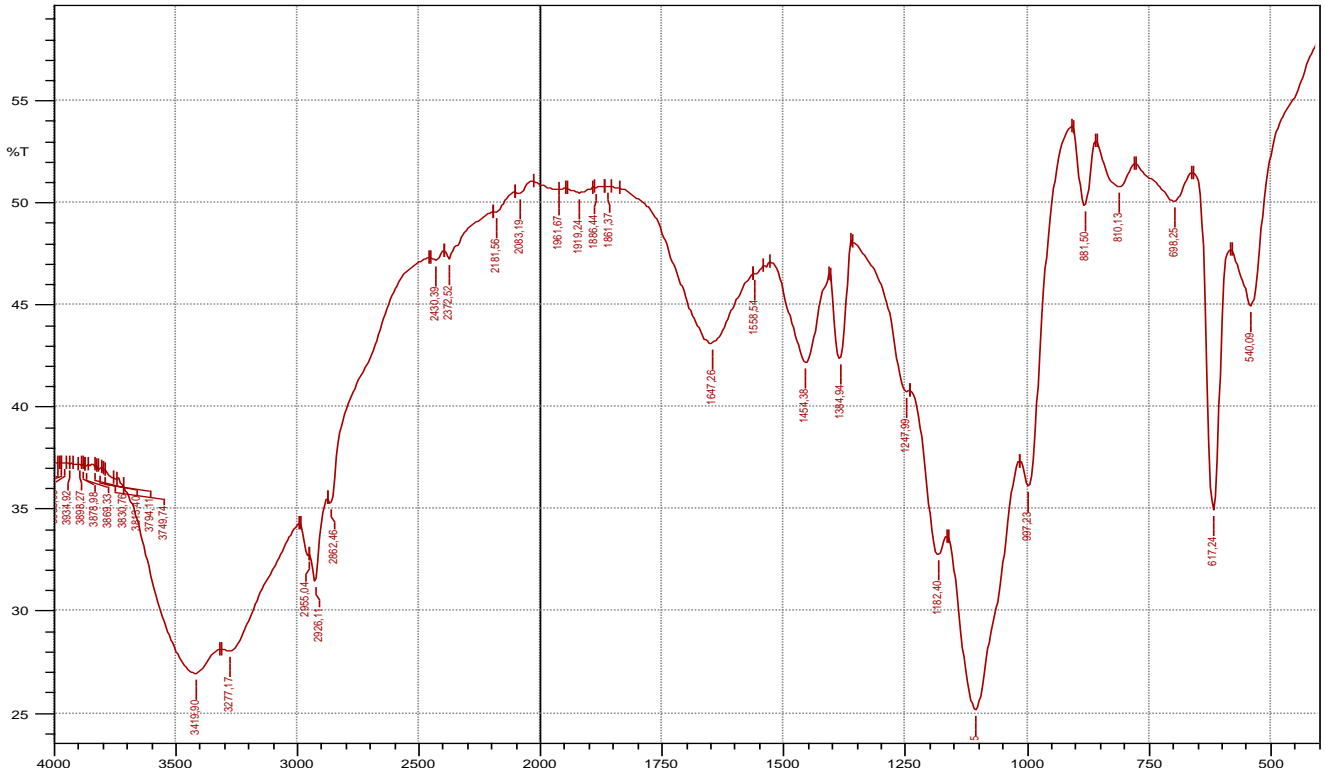
**Fig. 3.** Evolution of Growth (a); hydrocarbons substrate consumption (b); nitrogen uptake (c) and biosurfactant product (d) versus time (pH = 7, T = 37°C, W = 250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 30 mmol/L, p ≤ 0.05).



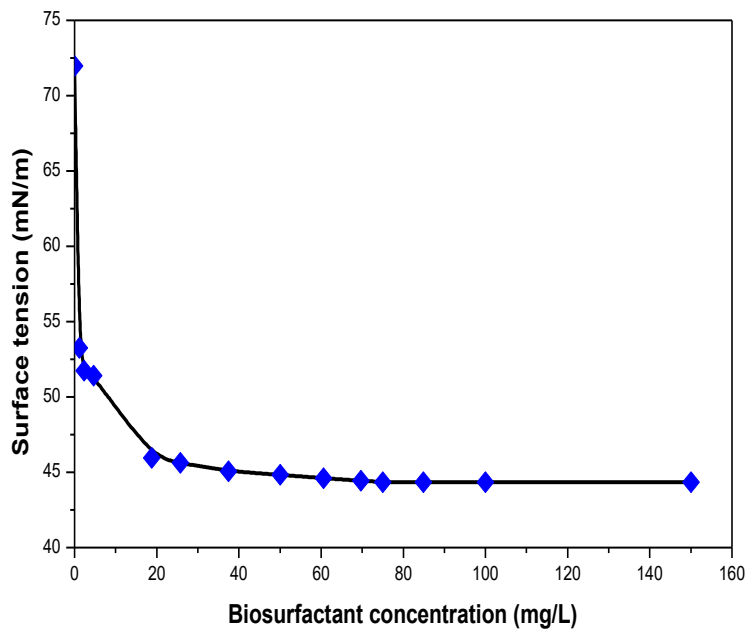
**Fig.4.** Emulsification index versus time (pH = 7, T = 37°C, W = 250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 30 mmol/L, p ≤ 0.05).



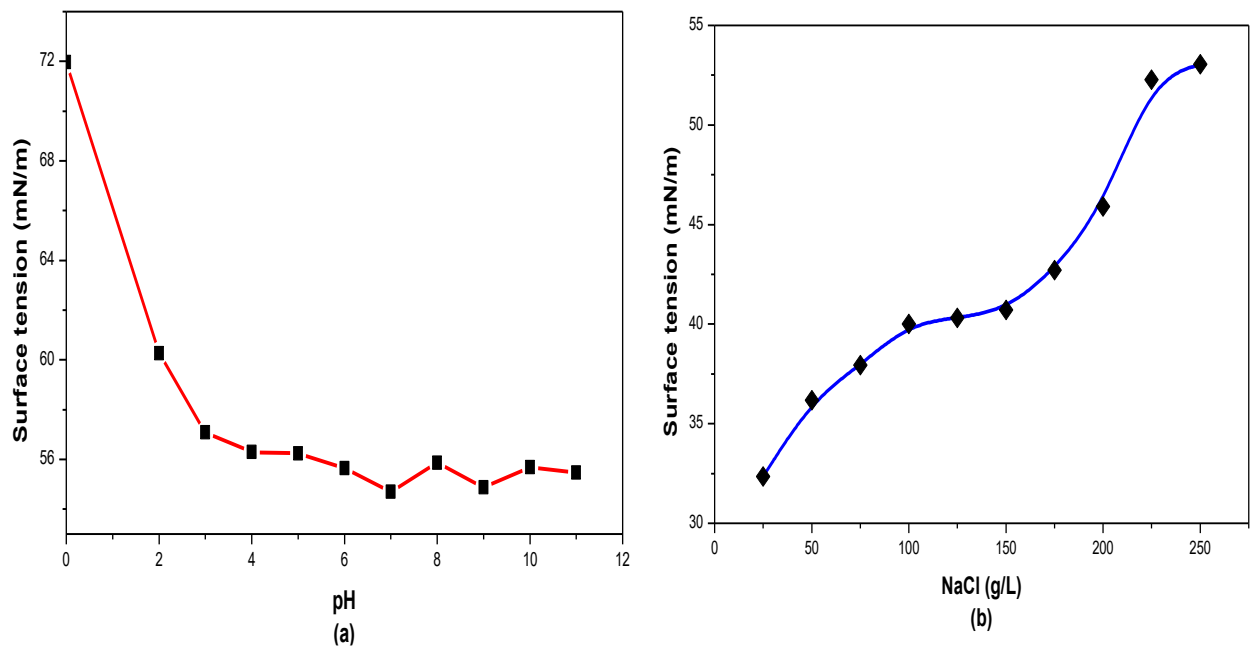
**Fig. 5.** Stability of the emulsion against the time after five days (pH = 7, T = 37°C, W = 250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 30 mmol/L, p ≤ 0.05).



**Fig. 6.** Spectral IR characterization of biosurfactant product by *Pseudomonas aeruginosa* ATCC 27853.



**Fig. 7.** Evolution of the surface tension versus the biosurfactants concentration (pH = 7, T = 37°C, W=250 rpm, KH<sub>2</sub>PO<sub>4</sub> = 30 mmol/L, p ≤ 0.05).



**Fig. 8.** Evolution of the surface tension of the crude biosurfactant versus pH (a) and NaCl amount (b) ( $T = 37^{\circ}\text{C}$ ,  $W=250$  rpm,  $\text{KH}_2\text{PO}_4 = 30$  mmol/L,  $p \leq 0.05$ ).