Figures

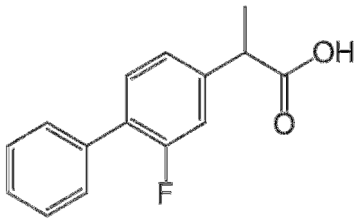

Figure 1: The structure of flurbiprofen acid

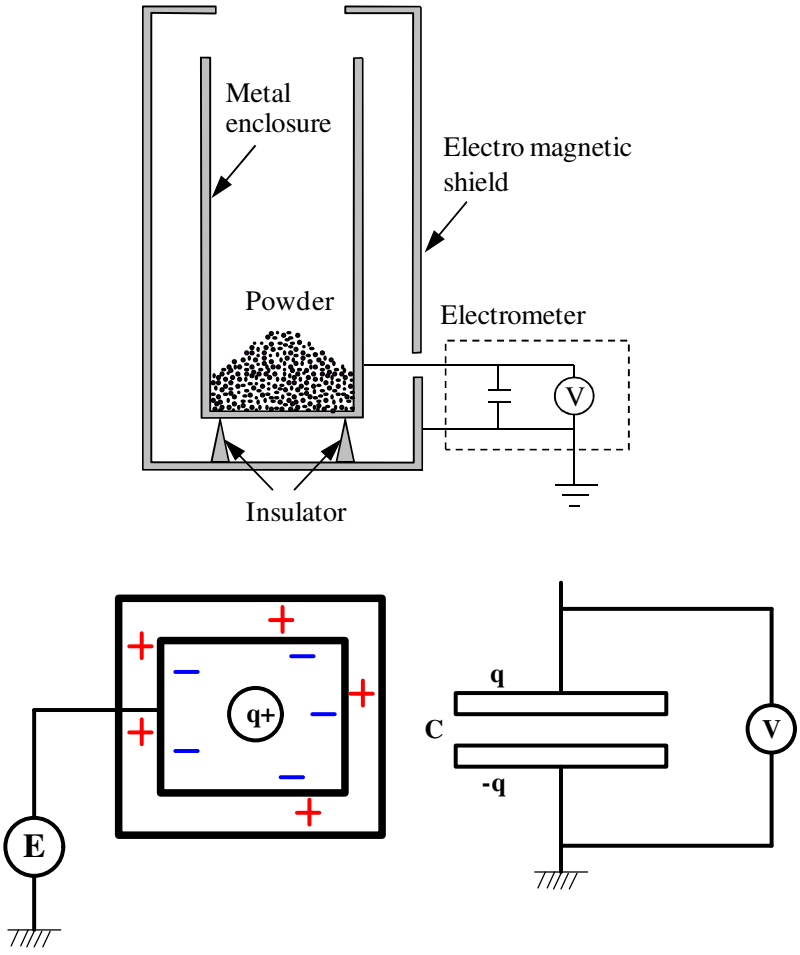

Figure 2: Faraday cup (top) (Matsusaka *et al.*, 2010) and its equivalent circuit (bottom)

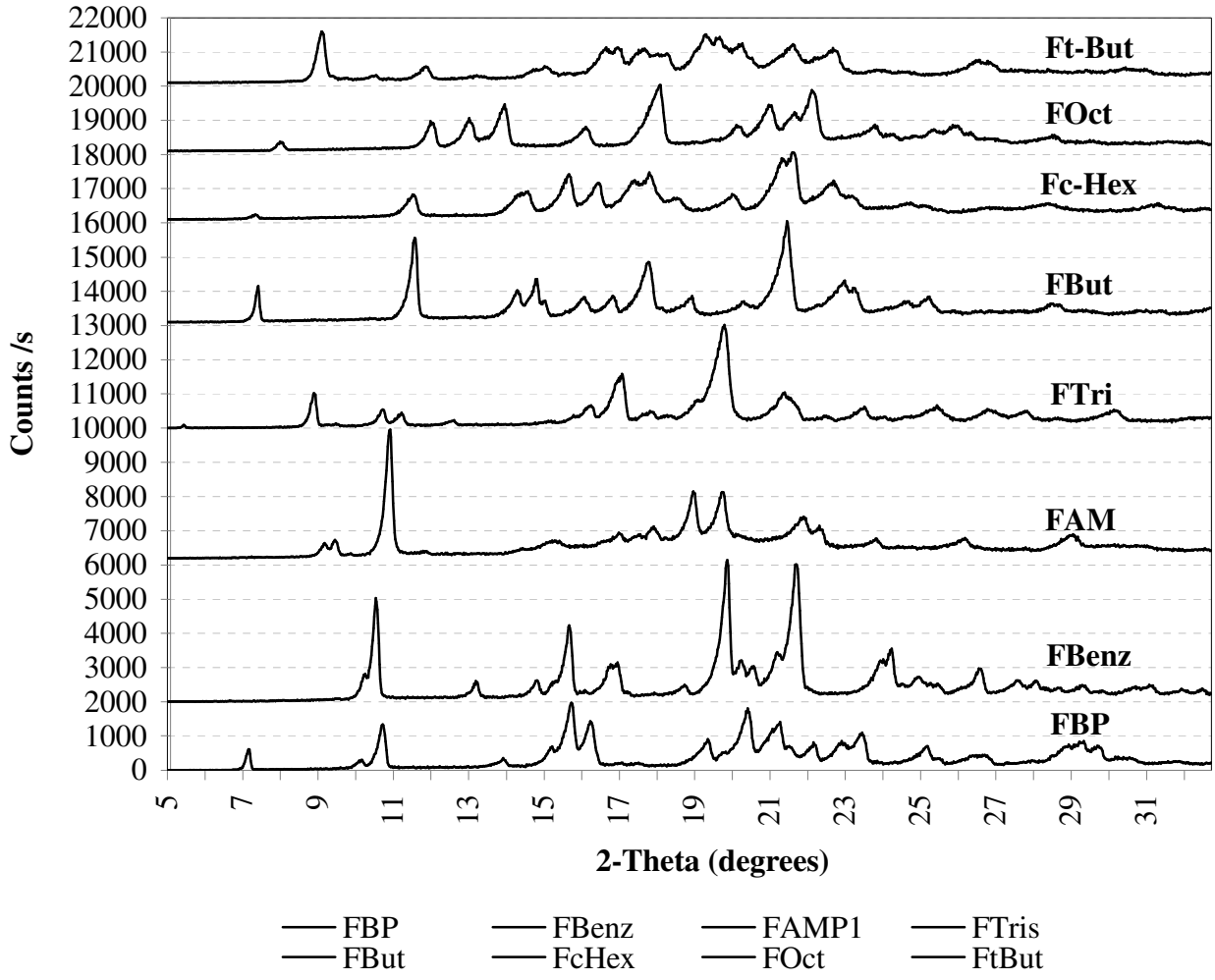

Figure 3: XRD patterns of flurbiprofen and the salts formed using different counter ions.

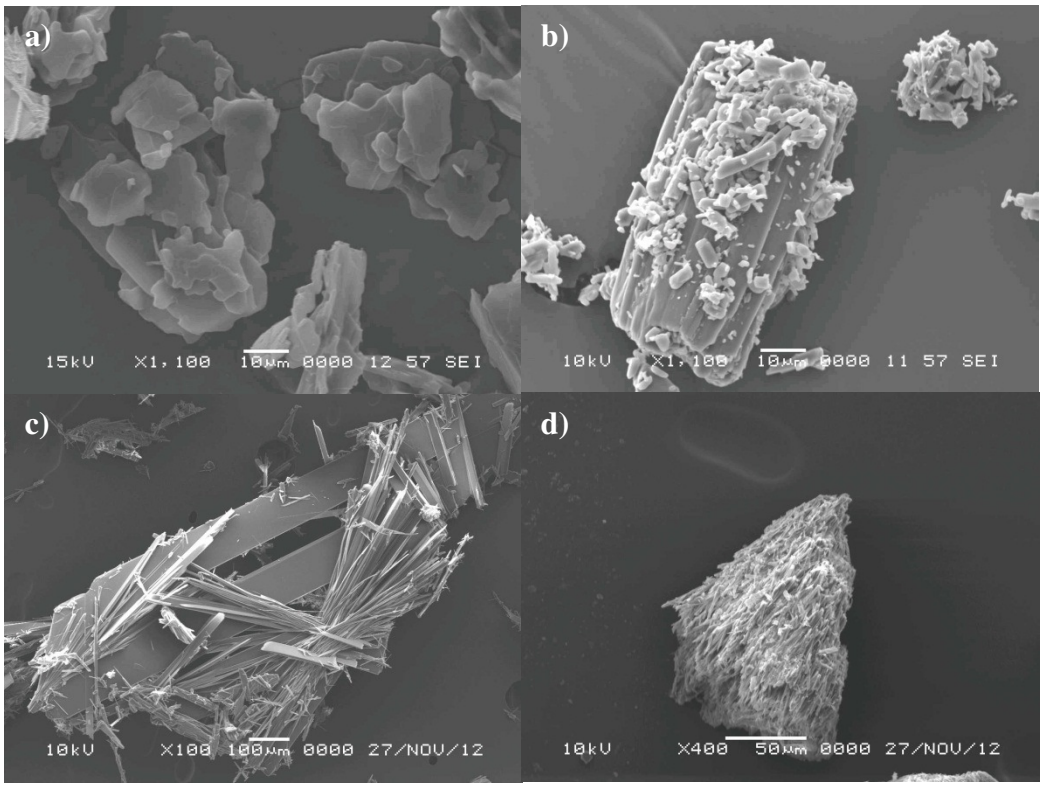

Figure 4: SEM images of a) flurbiprofen (x1,100), b) F-But (x1,100), c) F-Tbut (x100), d) F-AMP1 (x400).

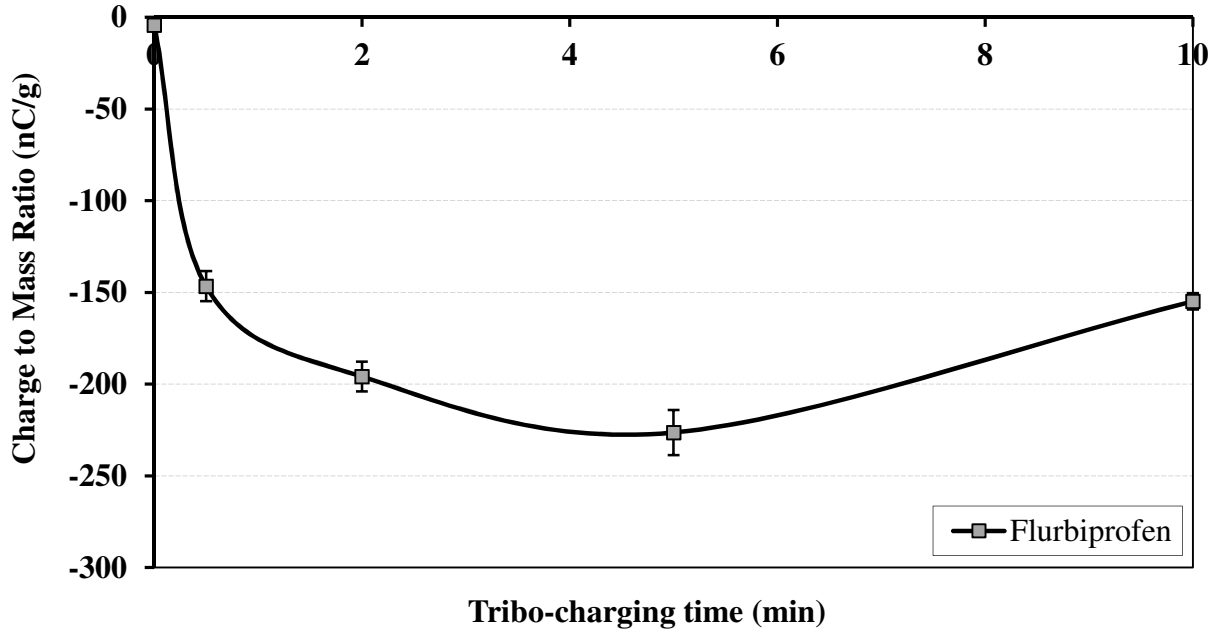

Figure 5: Charge to mass ratio as a function of shaking time inside a stainless steel container at 20 Hz and a temperature of 23 °C with the relative humidity at 47 % for the API 1 powder.

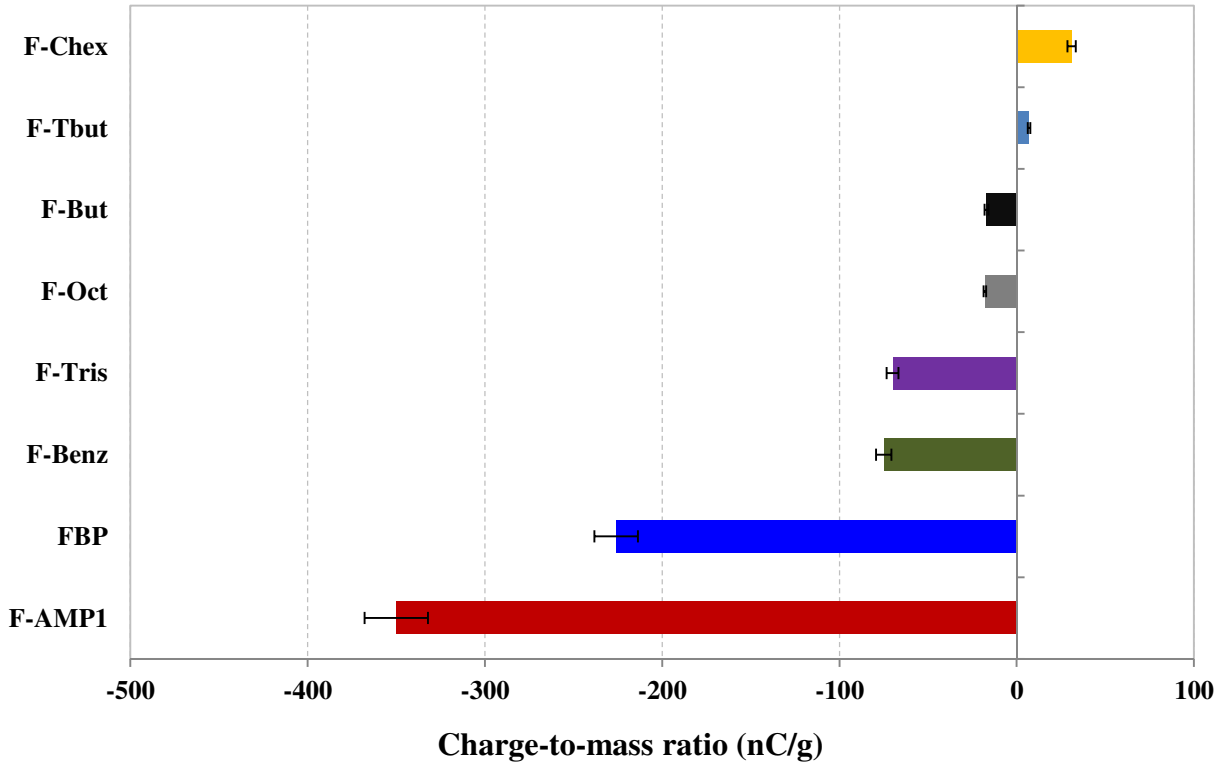

Figure 6: Specific charge and polarity for flurbiprofen and the salts against stainless steel container at saturation point of tribo-charging.

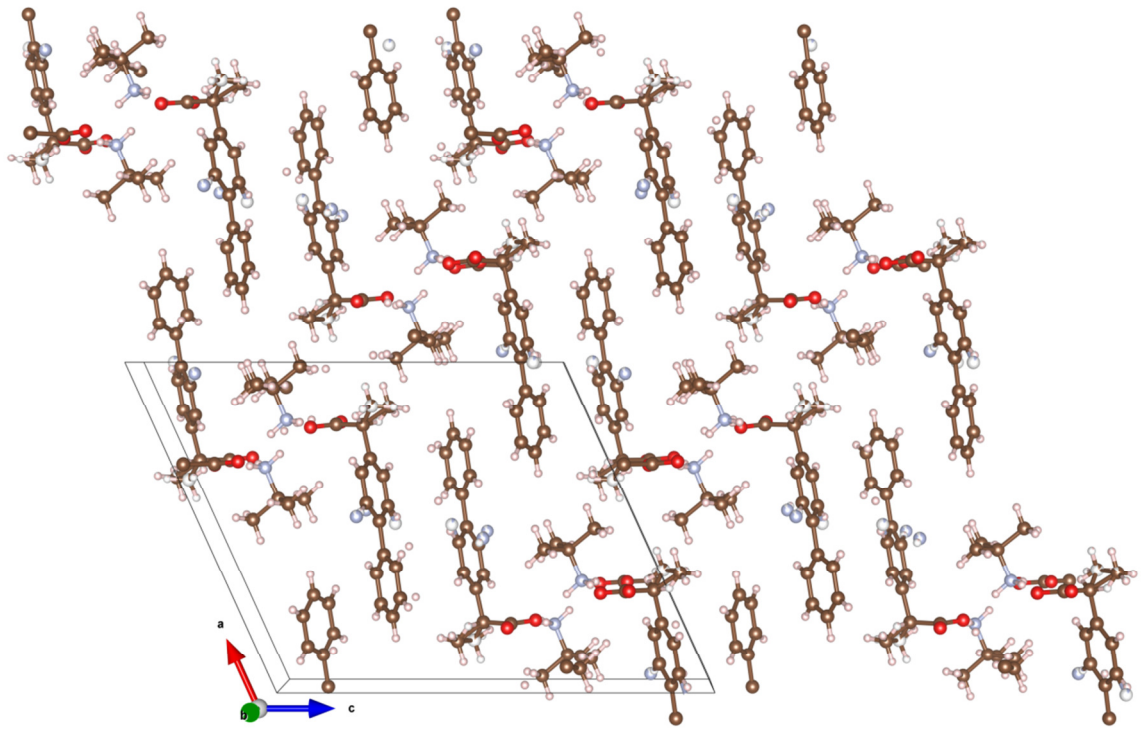

Figure 7: Packing of F-Tbut salt viewed down the *a* axis.

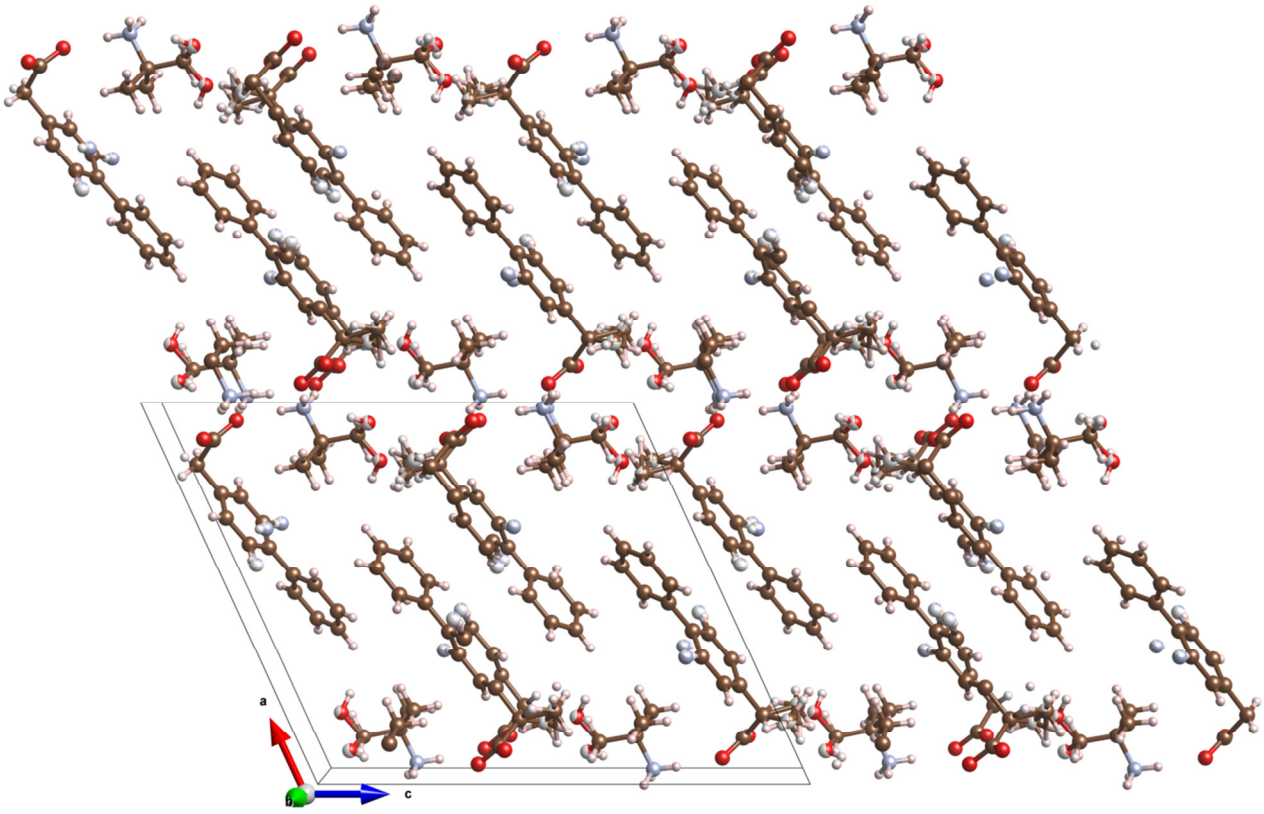

Figure 8: Packing of F-AMP1 salt viewed down the *a* axis.

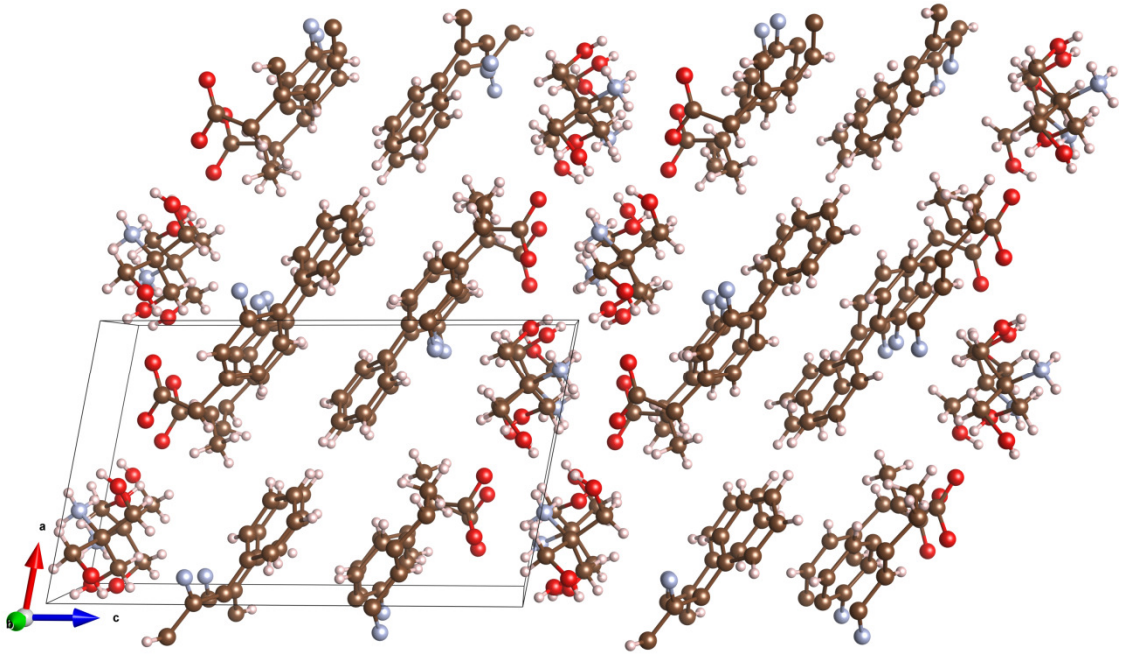

Figure 9: Packing of F-Tris salt viewed down the *a* axis.

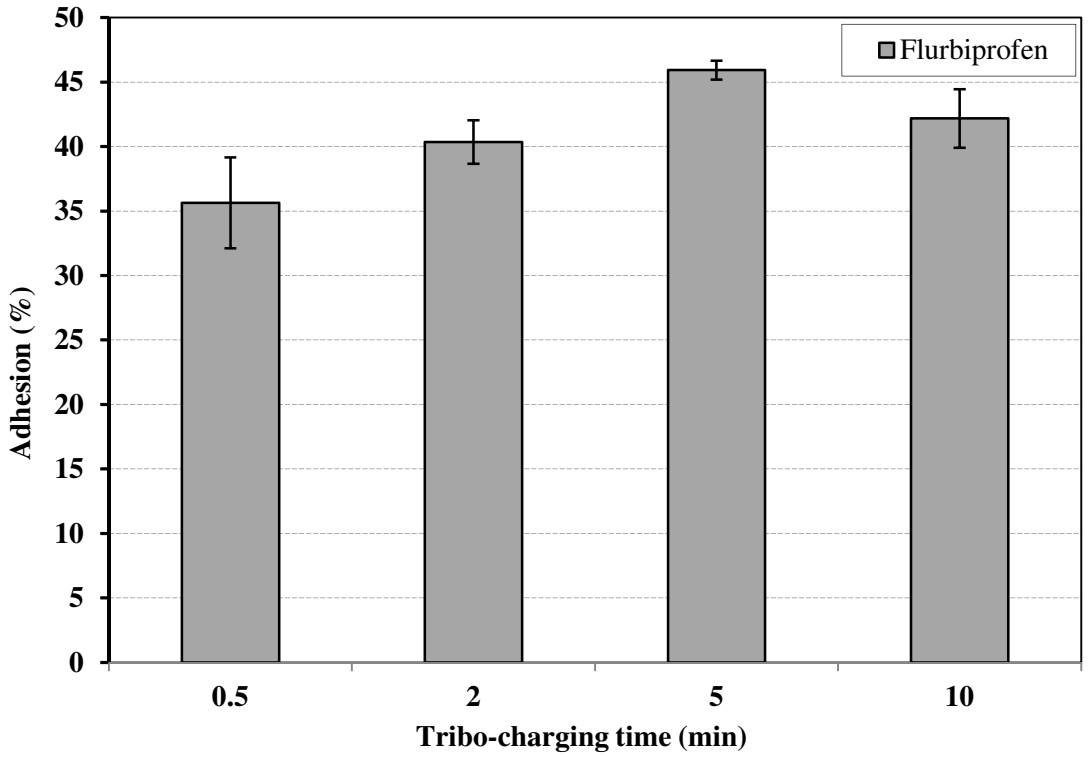

Figure 10: Percentage of mass loss of flurbiprofen corresponding to the charge to mass ratio in Figure 5 by powder adhering to the stainless steel container surface at 20 Hz.

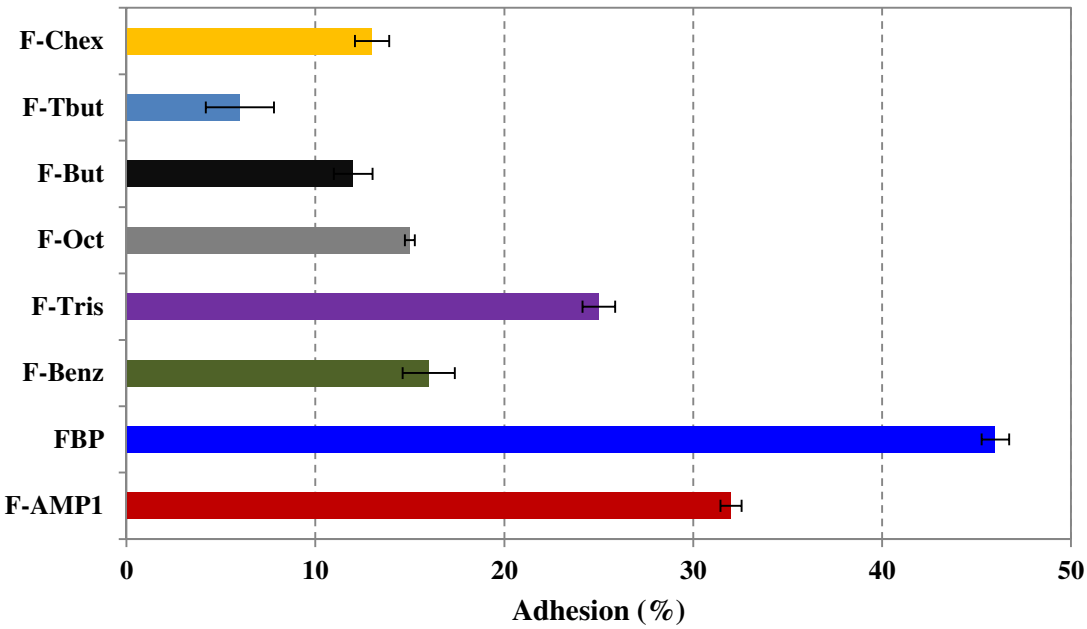

Figure 11: Percentage of mass loss for API samples against a stainless steel surface after 1 minute of tribo-charging.

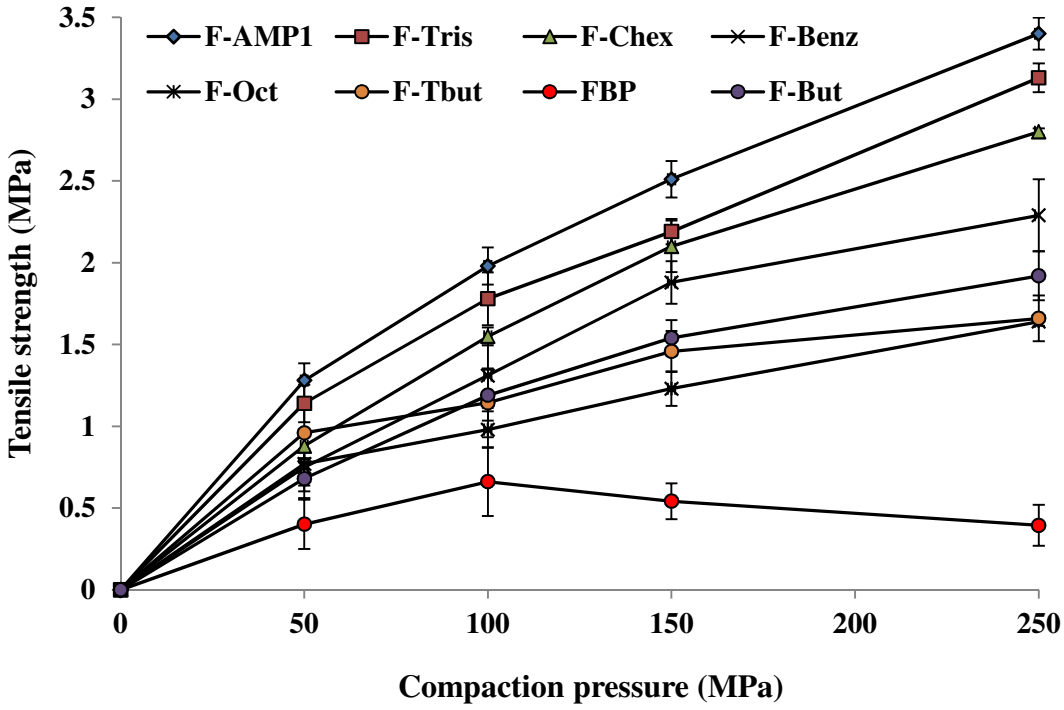

Figure 12: Compact tensile strength of fluriprofen and its salts (n=5).