

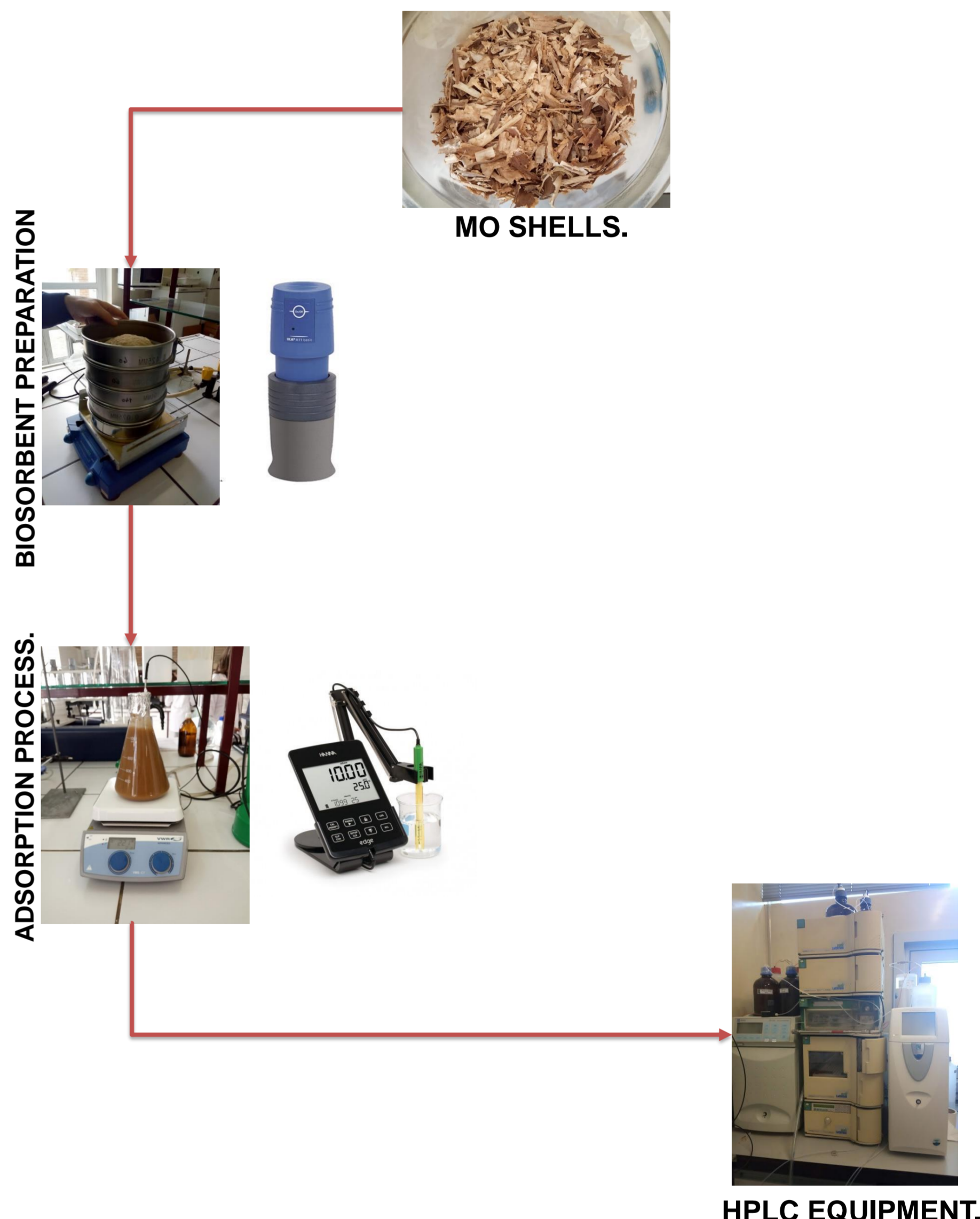
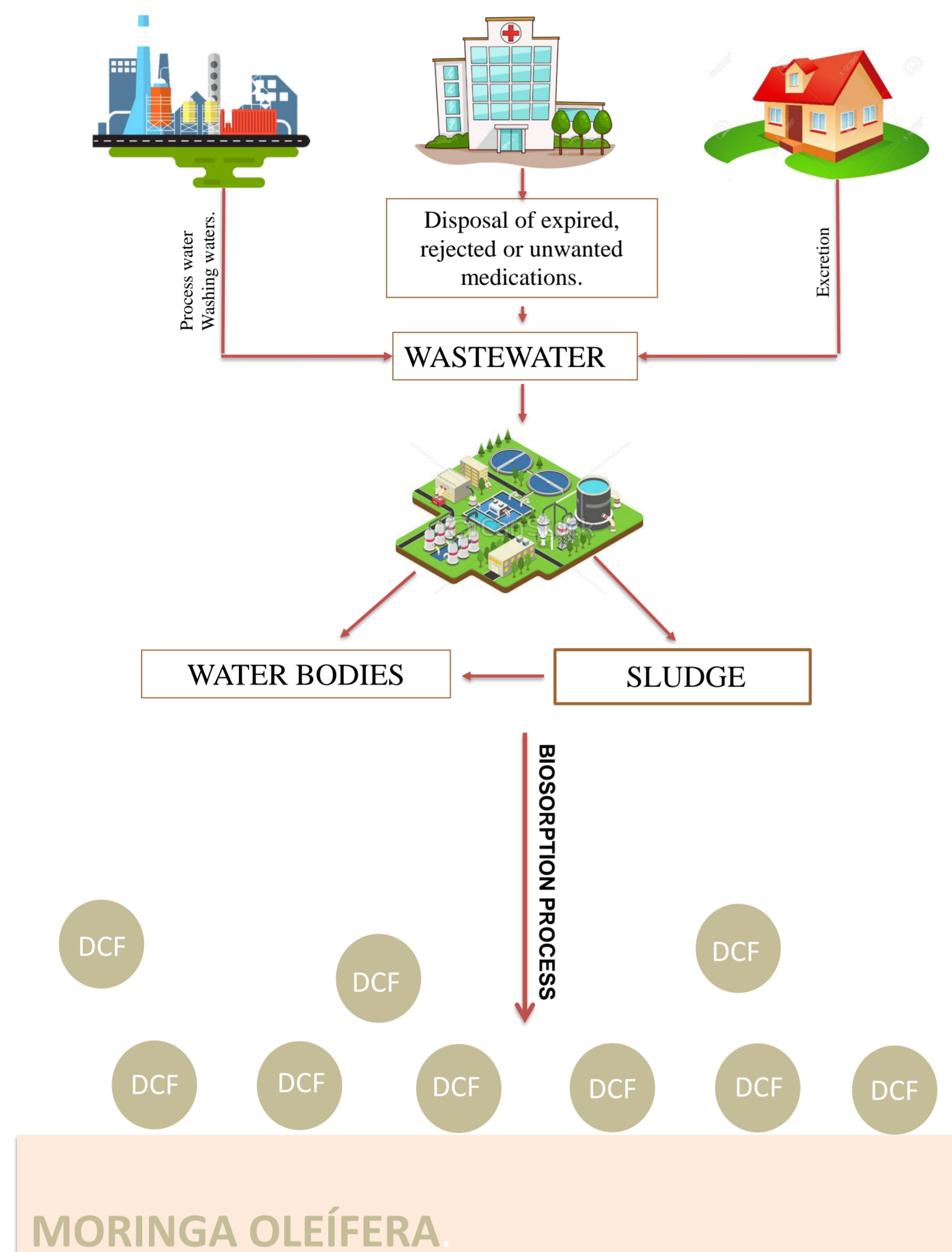
pH EFFECT IN BIOSORPTION OF DICLOFENAC IN WATER USING MORINGA OLEÍFERA SHELLS.

De Olivera Agustina¹, Kreutz Cristiane², Martins Ramiro³

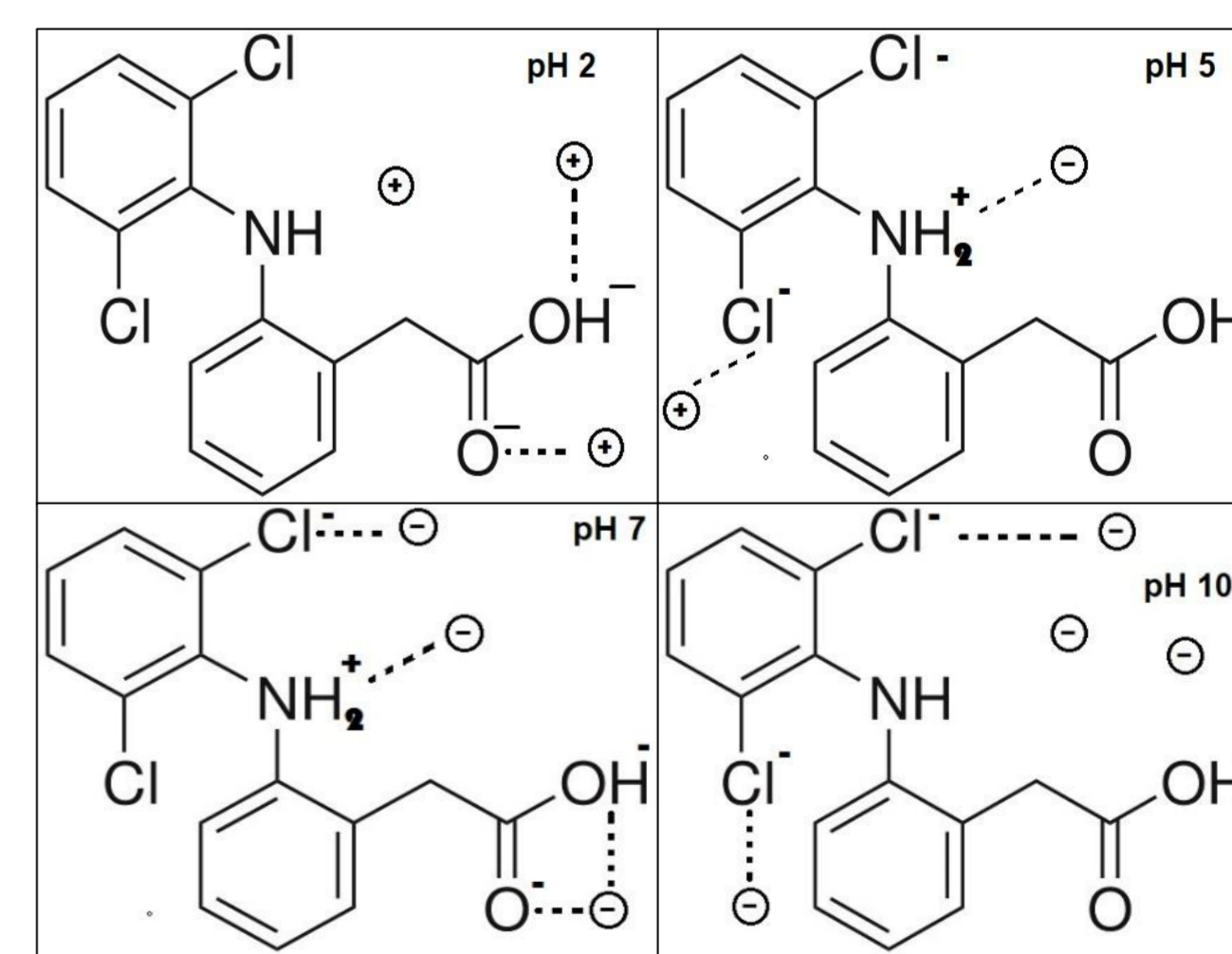
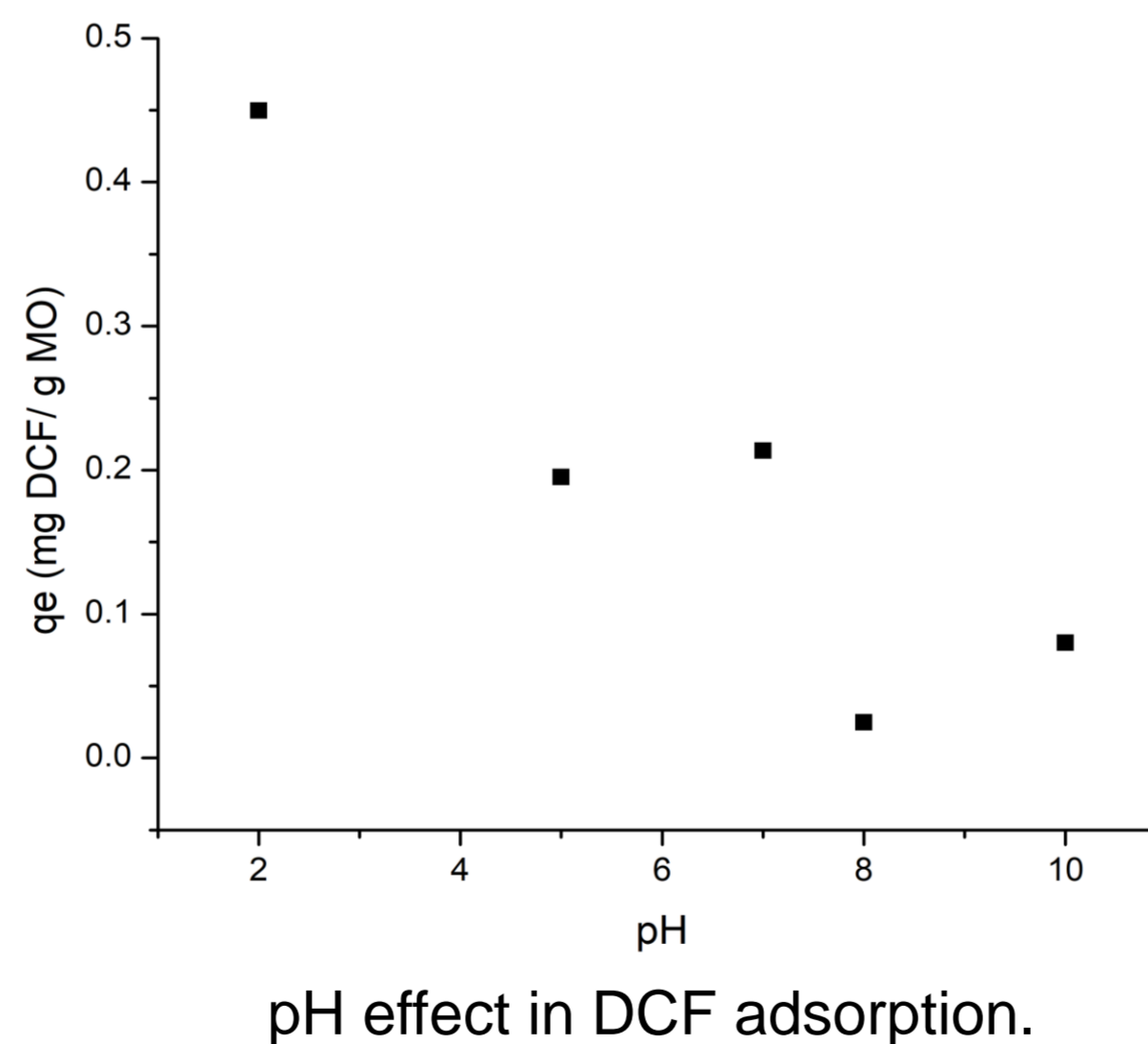
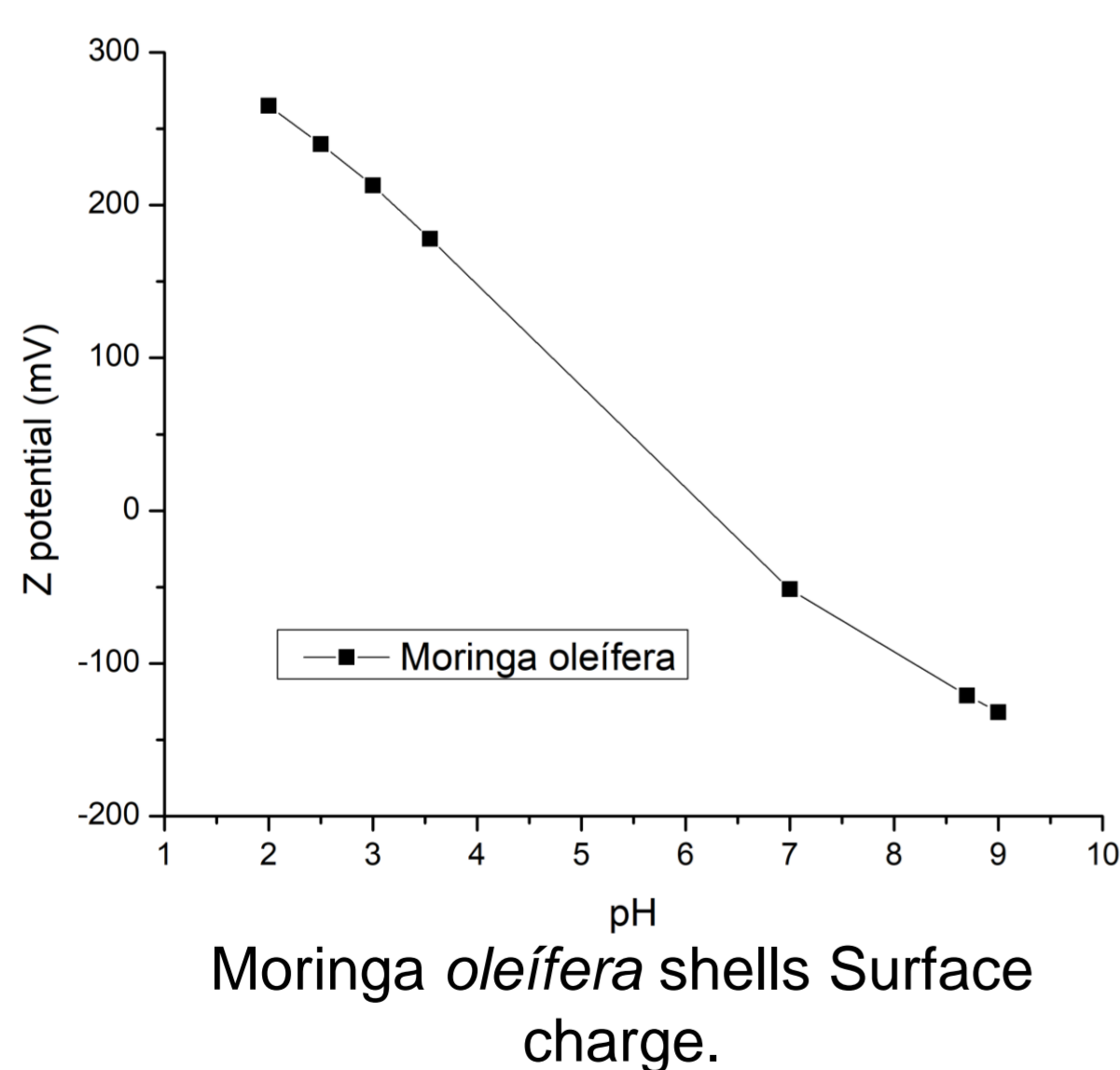
¹ Universidad Nacional de Misiones (UNaM), Misiones, Argentina. ² Federal University of Technology-Paraná, Campo Mourão, Brazil. ³ Polytechnic Institute of Bragança (IPB), Bragança and LSRE-LCM, FEUP, Porto, Portugal.

INTRODUCTION.

MATERIAL AND METHODS.



RESULTS.



Possible adsorption mechanism of DCF using *Moringa oleifera* shells.

CONCLUSIONS.

The adsorbent surface charge was assessed by varying the pH of the solution. *Moringa oleifera* is positively charged for pH values < 6 and negatively for alkaline zone. Furthermore, it has been confirmed that the removal process is highly dependent on pH. It was evaluated within a range of pH 2-10 and it was observed that, as the pH increased, the percentage of adsorption decreased, obtaining a maximum percentage of removal of DCF at a pH of 2. These tests allowed us to establish a possible mechanism of action responsible for the drug biosorption process using *Moringa oleifera* shells as biosorbent.