

Editor's comment:

comments for 29288

P. 1 "Natural products have been studied extensively as corrosion inhibitors both in product mixtures extracted from natural sources such as plants or essentially pure products derived from animals or plants." Unclear meaning. Re-write this sentence.

P. 2 "Chakrabarty *et al.*, studied the effect of carbohydrates on corrosion of aluminum in nitric acid at 35 °C." Were these sentences "Glucose is a better inhibitor than fructose. Lactose is found to be the most efficient than sucrose. Sucrose showed a very poor inhibitive effect at low concentration [4]." concluded from Chakrabarty *et al* or from citation [4]? Maria and More in the sentence "Maria and More have reported that saccharides have a moderate efficiency towards copper in nitric acid [5]." was not listed in the reference. Where was this sentence "Glucose and sucrose show good inhibitors for corrosion of aluminum." cited from?

P. 2 The aim of this paper was to give more theoretical insights to the glucose, fructose, lactose, maltose and sucrose in order to search a relationship between the molecular structure of these compounds and the corrosion inhibitions of aluminum. Also, this paper was to compare these calculated results with the previous work on the corrosion inhibition of iron [6].

P. 5 The interactions of Al with the inhibitors were found to be stronger than that of Fe [6] which may be due to the smaller energy gap ($E_{\text{LUMO}} - E_{\text{HOMO}}$) of Al (5.5529 eV) as compared to that of Fe (7.7514 eV).

P. 6 From Table 3, it can be observed that fructose and glucose have larger values of electrophilicity than lactose, maltose and sucrose.

P. 7 It can be seen that fructose and glucose exhibit the highest value of electrophilicity as compared to those of lactose, sucrose and maltose, which confirms to their high capacity to accept electrons.

Author's feedback:

P.2 These sentences concluded from Chakrabarty *et al.* / Ref. [4b].

All other valuable remarks have been made.

Thank you so much for your comments.