**ABSTRACT**

Gum exudates of Eucalyptus globles (GEG) was identified as green inhibitor for MS dissolution in 1N HCl using gravimetric method at 303-323K. Efficiency of GEG was synergistically increased with addition of 2,6-diphenyl-3methyl-piperidin-4-one (3MDPP). The binary combination of GEG and 3MDPP shows maximum inhibition potency and their Sθ value is >1 indicating that synergism exists between GEG and 3MDPP. Mechanism of inhibition of inhibitors on MS is physisorption and it obeys Langmuir’s isotherm. Polarization and impedance measurements confirm that inhibitors act as mixed type