## 4. Conclusion

The extract of DM acts as good and efficient inhibitor for the corrosion of mild steel in1 M hydrochloric acid medium. The inhibition efficiency increases with concentration, the maximum inhibition efficiency is 98.7 % at 0.7 inhibitor concentration.The inhibition efficiency increases with temperature,it indicates that DM act as a effective inhibitor at high temperature also.The adsorption of inhibitor on surface is spontaneous process.The adsorption of the extract of DM on mild steel obeys Temkin and freumdlich adsorption isotherm. A polarization study indicates that indicate the inhibitor to be of a mixed type inhibiting both cathodic as well as anodic reactions.

## 5. Scope for Future Research

- Surface examination of mild steel specimen may be carried out using Atomic Force Microscopy (AFM) and X-ray Diffraction (XRD) studies.
- The plant extracts studied under investigation may be applied in industries for acid pickling, acid descaling and oil well acidizing purposes.
- Studies may be performed with the plant extracts as well as purely synthesized phytochemical constituents to know the difference in cost of corrosion, the economic importance and also would be helpful in predicting the exact mechanism of inhibition of corrosion.

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