



REFERENCES



REFERENCES

- ❖ Abdallah, M. and Atia, A.M., (1997), "Amino acids as corrosion inhibitors for corrosion of admiralty brass in sulphuric acid solution", *Journal of Electrochemical Society of India*, 46:4, 185-190.
- ❖ Abdel-Gaber, A.M., Abd-El Nabey, B.A., Khamis, E. and Abd El-khalek, D.E., (2005), "Environmentally Friendly plant Extract as Anti-scale and corrosion inhibitor". The 24th Annual Conference Corrosion Problems in Industry 5-8 December 2005.
- ❖ Abdel-Gaber, A.M., Abd-El Nabey, B.A., Sidahmed, I.M., El-Zayady, A.M. and Saadawy, M., (2006), "Inhibitive action of some plant extracts on the corrosion of steel in acidic media", *Corrosion Science*, 48:9, 2765-2779.
- ❖ Abdel-Gaber, A.M., Khamis, E., Abo-ElDahab, H., and Sh.Adeel. (2008) "Inhibition of aluminium corrosion in alkaline solutions using natural compound", *Materials Chemistry and Physics*, 109: 297-305.
- ❖ Abd El-Rehim, S.S., Refaey, S.A.M., Taha, F., Saleh, M.B and Ahmed, R.A., (2001), "Corrosion inhibition of mild steel in acidic medium using 2-amino thiophenol and 2-cyanomethyl benzothiazole", *Journal of Applied Electrochemistry*, 31:429-435.
- ❖ Adeyemi, O.O., and Olubomehin, O.O., (2010), "Corrosion of aluminium in water-ethanol mixture in the presence of *Anthocleista vogelii* extract", *The Pacific Journal of Science and Technology*, 11:1, 390-398.
- ❖ Agrawal, R. and Namboodhiri, T.K.G., (1997) "Inhibition of corrosion and hydrogen embrittlement of a HSLA steel in 0.5M H₂SO₄ by nitrile compounds". *Journal of Applied Electrochemistry*, 27, 1265-1274.
- ❖ Al-Turkustani, M., Arab, S.T., and Al-Qarni, L.S.S., (2011), "*Medicago sativa* plant as safe inhibitor on the corrosion of steel in 2.0 M H₂SO₄ solution", *Journal of Saudi Chemical Society*, 15:1, 73-82.
- ❖ Ambrish Singh, Singh, V.K., and Quraishi, M.A., (2010 a), "Effect of fruit extracts of some environmentally benign green corrosion inhibitors on corrosion of mild steel in hydrochloric acid solution", *Journal of Materials and Environmental Science*, 1:3, 162-174.

- ❖ Ambrish Singh, Ishtiaque Ahamad, Singh,V.K., and Mumtaz Ahamad Quraishi, (2010 b), “Inhibition effect of environmentally benign Karanj (*Pongamia pinnata*) seed extract on corrosion of mild steel in hydrochloric acid solution”, *Journal of Solid State Electrochemistry*, 15:6, 1087-1097.
- ❖ Ambrish Singh, Singh,V.K., and Quraishi,M.A., (2010 c), “Aqueous extract of Kalmegh (*Andrographis paniculata*) leaves as green inhibitor for mild steel in hydrochloric acid solution”, *International Journal of Corrosion*, Article ID 275983.
- ❖ Ammar, I.A., and El Khorafi, F.M., (1973), *Werkstoffe and Korrosion*, 24, 356-360.
- ❖ Anand,B., and Balasubramanian,V., (2011), “Corrosion behavior of mild steel in acidic medium in presence of aqueous extract of *Allamanda blanchetii*”, *E-Journal of Chemistry*, 8:1, 226-230.
- ❖ Ananda Louise Sathiyathan,R., Maruthamuthu,S., Selvanayagam,M., Mohanan,S. and Palaniswamy,N., (2005), “Corrosion inhibition of mild steel by ethanolic extracts of *Ricinus communis* leaves, *Indian Journal of Chemical Technology*”, 12, 356-360.
- ❖ Arockia Selvi,J., Susai Rajendran, Ganga Sri,V., John Amalraj,A., and Narayanasamy,B., (2009), “Corrosion inhibition by Beet root extract”, *Portugaliae Electrochimica Acta*, 27:1, 1-11.
- ❖ Arora,P., Kumar,S., Sharma,M.K., and Mathur,S.P., (2007), “Corrosion inhibition of aluminium by *Capparis decidua* in acidic media”, *E-Journal of Chemistry*, 4:4, 450-456.
- ❖ Ashassi-Sorkhabi, H and Seifzadeh,D., (2006), “ The inhibition of steel corrosion in hydrochloric acid corrosion by juice of *Prunus cerasus*”, *International Journal of Electrochemical Science*, 1, 92-98.
- ❖ Atia,A.A., and Saleh,M.M., (2003), “Inhibition of acid corrosion of steel using cetylpyridinium chloride”, *Journal of Applied Electrochemistry*, 33, 171-177.
- ❖ Atul Kumar, (2008), “Corrosion inhibition of mild steel in hydrochloric acid by Sodium lauryl sulphate”, *E-Journal of Chemistry*, 5:2, 275-280.
- ❖ Ayo Samuel Afolabi, (2007), “Synergistic inhibition of potassium chromate and sodium nitrite on mild steel in chloride and sulphide media, *Leonardo electronic*” *Journal of practices and Technologies*, 11, 143-154.

- ❖ Bastidas,J.M., De Damborenea,D. and Vazquez,A.J., (1997), “Butyl substituents in n-butylamine and their influence on mild steel corrosion inhibition in hydrochloric acid”, *Journal of Applied Electrochemistry*, 27: 345-349.
- ❖ Bastidas,J.M., Polo,J.L., Cano,E., and Torres,C.L., (2000), “Tributylamine as corrosion inhibitor for mild steel in hydrochloric acid”. *Journal of Materials Science*, 35, 2637-2642.
- ❖ Bahorun, T., Vidushi S Neerghen and Okezie I Aruoma, (2005), “Phytochemical constituents of *Cassia fistula*”, *African Journal of Biotechnology*, 4:13, 1530-1540.
- ❖ Belkheir Hammouti, Sekkou Kertit and Ahmed Melhaoui, (1995), “Bgugaine: A natural pyrrolidine alkaloid product as corrosion inhibitor of iron in acid chloride solution, *Bulletin of Electrochemistry*, 11:12, 553-555.
- ❖ Bendahou,M., Benabdellah,M., and Hammouti,B., (2006) “A study of rosemary oil as a green corrosion inhibitor for steel in 2M H₃PO₄”, *Pigment and Resin Technology*, 35:2, 95-100.
- ❖ Bentiss,F., Lagranee,M., Traisnel,M., and Hornez,J.C., (1999), “The corrosion inhibition of mild steel in acidic media by a new triazole derivative”, *Corrosion Science*, 41:4, 789-803.
- ❖ Bhajiwala, H.M., and Vashi, R.T., (2001), “Ethanolamine, diethanolamine and triethanolamine as corrosion inhibitors for zinc in binary acid mixture (HNO₃ + H₃PO₄)”, *Bulletin of Electrochemistry*, 17, 441-448.
- ❖ Bockris,J.O.M., Drazic,D., and Despica,A.R., (1961), “The electrode kinetics of the deposition and dissolution of iron”, *Electrochimica Acta*, 4:2-4, 325-361.
- ❖ Bothi Raja,P., and Mathur Gopalakrishnan Sethuraman, (2007), “Studies on the inhibitive effect of *Datura stramonium* extract on the acid corrosion of mild steel”, *Surface Review and Letters*, 14:6, 1157-1164.
- ❖ Bothi Raja,P., and Sethuraman,M.G., (2009 a), “*Strychnos nux-vomica* an eco-friendly corrosion inhibitor for mild steel in 1M sulphuric acid medium”, *Materials corrosion*, 60:1, 22-28.
- ❖ Bothi Raja,P., and Sethuraman,M.G., (2009 b), “Inhibition of corrosion of mild steel in sulphuric acid medium by *Calotropis procera*”, *Pigment and Resin Technology*, 38:1, 33-37.

- ❖ Bothi Raja,P., and Sethuraman,M.G., (2009 c), “Studies on the inhibition of Mild steel corrosion by *Rauwolfia serpentina* in acid media”, Journal of Materials Engineering and Performance, 19:5,761-766.
- ❖ Bouklah,M., Hammouti,B., Benkaddour,M., and Benhadda,T., (2005), “Thiophene derivatives as effective inhibitors for the corrosion of steel in 0.5 M H₂SO₄”, Journal of Applied Electrochemistry, 35, 1095-1101.
- ❖ Bouklah,M., and Hammouti,B., (2006), “Thermodynamic characterization of steel corrosion for the corrosion inhibition of steel in sulphuric acid solutions by *Artemisia*”, Portugaliae Electrochimica Acta, 24, 457-468.
- ❖ Bouklah,M., Hammouti,B., Lagrenee, M., and Bentiss, F., (2006), “Thermodynamic properties of 2,5-bis(4-methoxyphenyl)-1,3,4- oxadiazole as a corrosion inhibitor for mild steel in normal sulphuric acid medium”, Corrosion Science, 48:9, 2831-2842.
- ❖ Bouyanzer,A., Hammouti,B., and Majidi,L., (2006), “Pennyroyal oil from *Mentha pulegium* as corrosion inhibitor for steel in 1M HCl”, Materials Letters, 60:23, 2840-2843.
- ❖ Buchweishaija,J., and Mhinzi,G.S., (2008), “Natural products as a source of environmentally friendly corrosion inhibitors: The case of gum exudate from *Acacia seyal* via *seyal*”, Portugaliae Electrochimica Acta, 26, 257-265.
- ❖ Chaudhary,R.S., and Santhosh Sharma., (1997), “ Effect of methyl red on the corrosion behaviour of mild steel in acids”, Transactions of the SAEST, 32:4, 99-105.
- ❖ Chauhan,L.R., and Gunasekaran,G., (2007), “Corrosion inhibition of mild steel by plant extract in dilute HCl medium”, Corrosion Science, 49:3, 1143-1161.
- ❖ Chaieb,E., Bouyanzer,A., Hammouti,B., Benkaddour,M., and Berrabah,M., (2004), “Corrosion inhibition of steel in hydrochloric acid solution by Rosemary oil”, Transactions of the SAEST, 39, 58-60.
- ❖ Chetouani,A., Aouniti,A., Hammouti, B., Benchat,N., Benhadda,T and Kertit,S., (2003), “Corrosion inhibitors for iron in hydrochloride acid solution by newly synthesized pyridazine derivatives”, Corrosion Science, 45, 1675-1684.
- ❖ de Souza,F.S., and Spinelli,A., (2009), “Caffeic acid as a green corrosion inhibitor for mild steel”, Corrosion Science, 51:3, 642-649.
- ❖ Damaskin,B.B., Petrii,O.A. and Batrakov,V.V, (1971), “Adsorption of organic compounds on Electrodes”, Plenum press, New York, 309.

- ❖ Divakara Shetty,S., Prakash Shetty., and Sudhaker Nayak,H.V., (2005), “Inhibition of corrosion of mild steel in hydrochloric acid by N-cyclohexyl-N’ – phenyl thiourea”, Indian Journal of chemical technology, 12, 462-465.
- ❖ Dubey,R.S., and Upadhyay,S.N., (1994), “ Some dyes as corrosion inhibitor for 1100 Al in Trichloroacetic acid”, Journal of Electrochemical Society of India, 43:2, 73-80.
- ❖ Durnie,W., Mario,R.D., Jefferson,A., and Kinsella,B.P., (1999), “Development of a structure activity relationship for oil field corrosion inhibitors”, Journal of Electrochemical Society, 146, 1751-1756.
- ❖ Ebenso,E.E., Ibok,U.J., Ekpe,U.J., Umoren,S., Ekerete Jackson, Abiola,O.K., Oforka,N.C., and Martinez,S., (2004), “Corrosion inhibition studies of some plant extracts on aluminium in acidic medium”, Transactions of the SAEST, 39, 117-123.
- ❖ Ebenso,E.E., Eddy,N.O., and Odiongenyi,A.O., (2008), “Corrosion inhibition properties and adsorption behavior of ethanol extract of *Piper guinensis* as a green corrosion inhibitor for mild steel in H₂SO₄”, African Journal of Pure and Applied Chemistry, 2:11, 107-115.
- ❖ Ebenso,E.E., Eddy,N.O., and Odiongenyi,A.O., (2009), “Corrosion inhibition and adsorption properties of menthocarbamol on mild steel in acidic medium”, Portugaliae Electrochimica Acta, 27:1, 13-22.
- ❖ Eddy,N.O., and Ebenso,E.E., (2008), “Adsorption and inhibitive properties of ethanol extracts of *Musa sapientum* peels as a green corrosion inhibitor for mild steel in H₂SO₄”, African Journal of Pure and Applied Chemistry, 2:6, 46-54.
- ❖ Eddy,N.O., Ekwumemgho,P., and Odoemelam,S.A., (2008 a), “Inhibition of the corrosion of mild steel in H₂SO₄ by 5 amino-1-cyclopropyl – 7- [(3R,5S) 3,5-dimethyl piperazin- 1-yl] – 6,8- difluoro -4- oxo- uinoline- 3- carboxylic acid(ACPDQC)”, International Journal of Physical Sciences, 3:11, 275-280.
- ❖ Eddy,N.O., Odoemelam, S.A., and Odiongenyi,A.O., (2008 b), “Ethanol extract of *Musa acuminata* peel as an eco-friendly inhibitor for the corrosion of mild steel in H₂SO₄”, Advances in Natural and Applied Sciences, 2:1, 35-42.
- ❖ Eddy,N.O., and Odoemelam,S.A., (2009), “Inhibition of corrosion of mild steel in acidic medium using ethanol extract of *Aloe vera*”, Pigment and Resin Technology, 38:2, 111-115.

- ❖ Eddy,N.O., Odoemelam,S.A., and Ekwumemgbo, (2009 a), “Inhibition of the corrosion of mild steel in H₂SO₄ by Penicillin G”, Scientific Research and Essay, 4:1,33-38.
- ❖ Eddy,N.O., Patricia,A., Ekwumemgbo, and Paul,A.P.Mamza, (2009 b), “Ethanol extract of *Terminalia catappa* as a green inhibitor for the corrosion of mild steel in H₂SO₄”, Green Chemistry Letters and Reviews, 2:4, 223 – 231.
- ❖ Eddy,N.O., Odoemelam,S.A., Odiongenyi,A.O., (2009 c), “Inhibitive, adsorption and synergistic studies on ethanol extract of *Gnetum Africana* as green corrosion inhibitor for mild steel in H₂SO₄”, Green Chemistry Letters and Reviews, 2:2, 111 – 119.
- ❖ Eddy,N.O., Odoemelam,S.A., and Odiongenyi,A.O., (2009 d), “Joint effect of halides and ethanol extract of *Lasianthera Africana* on inhibition of corrosion of mild steel in H₂SO₄”, Journal of Applied Electrochemistry, 39:6, 849-857.
- ❖ Eddy,N.O., Ebenso,E.E., (2010), “Corrosion inhibition and adsorption properties of ethanol extract of *Gongronema latifolium* on mild steel in H₂SO₄”, Pigment and Resin Technology, 39:2, 77-83.
- ❖ Eddy,N.O., and Odiongenyi,A.O., (2010), “Corrosion inhibition and adsorption properties of ethanol extract of *Heinsia crinata* on mild steel in H₂SO₄”, Pigment and Resin Technology, 39:5, 288-295.
- ❖ Ehteram A. Noor., (2007), “Temperature effects on the corrosion inhibition of mild steel in acidic solutions by aqueous extract of Fenugreek leaves”, International Journal of Electrochemical Science, 2, 996-1017.
- ❖ Ekanem,U.F., Umoren,S.A., Udousoro,I.I., and Udoh,A.P., (2010), “Inhibition of mild steel corrosion in HCl using pineapple leaves (*Ananas comosus* L.) extract”, Journal of Materials Science, 45, 5558-5566.
- ❖ El bribri,A., Tabyaoui,M., El Attari,H., Boumhara,K., Siniti,M., and Tabyaoui,B., (2011), “Temperature effects on the corrosion inhibition of carbon steel in 1M HCl solution by methanolic extract of *Euphorbia falcate* L.”, Journal of Materials and Environmental Science, 2:2, 156-165.
- ❖ El-Etre,A.Y., and Abdallah,M., (2000), “Natural honey as corrosion inhibitor for metals and alloys. II. C-steel in high saline water”, Corrosion Science, 42, 731-738.
- ❖ El-Etre,A.Y., (2003), “Inhibition of aluminium corrosion using *opuntia* extract”, Corrosion Science, 45, 2485-2495.

- ❖ El-Etre,A.Y., Abdallah,M., and El-Tantawy,Z.E., (2005), “Corrosion inhibition of some metals using lawsonia extract”, *Corrosion Science*, 47:2, 385-395.
- ❖ El-Etre,A.Y., (2006), “Khillah extract as inhibitor for acid corrosion of SX 316 steel”, *Applied Surface Science*, 252:24, 8521-8525.
- ❖ El-Etre,A.Y., and El-Tantawy,Z.E., (2006), “Inhibition of metallic corrosion using Ficus extract”, *Portugaliae Electrochimica Acta*, 24, 347-356.
- ❖ El-Etre,A.Y., (2007), “Inhibition of acid corrosion of carbon steel using aqueous extract of olive leaves”, *Journal of Colloid and Interface Science*, 314, 578–583.
- ❖ El-Etre,A.Y., (2008), “Inhibition of C-steel corrosion in acidic solution using the aqueous extract of zallouh root”, *Materials Chemistry and Physics*, 108, 278-282.
- ❖ El-Sayed M. Sherif, Erasmus, R.M. Comins, J.D., (2007), “Corrosion of Copper in aerated synthetic sea water solutions and its inhibition by 3-amino-1,2,4 – triazole”, *Journal of Colloid and Interface Science*, 309, 470–477.
- ❖ Emeka E. Oguzie, (2008 a), “Evaluation of the inhibitive effect of some plant extracts on the acid corrosion of mild steel”, *Corrosion Science*, 50:11, 2993-2998.
- ❖ Emeka E. Oguzie, (2008 b), “Corrosion inhibitive effect and adsorption behavior of *Hibiscus sabdariffa* extract on mild steel in acidic media”, *Portugaliae Electrochimica Acta*, 26, 303-314.
- ❖ Fabrizio Zucchi and Ibrahim Hashi Omar, (1985), “Plant extracts as corrosion inhibitors of mild steel in HCl solutions”, *Surface Technology*, 24:4, 391-399.
- ❖ Farooqi,P.H., Quraishi,M.A., and Saini,P.A., (1999 a), “Corrosion prevention of mild steel in 3% NaCl water by some naturally occurring substances”, *Corrosion Prevention and Control*, 93-96.
- ❖ Farooqi,P.H., Aqbal Hussain, Quraishi,M.A., and Saini,P.A., (1999 b), “Study of low cost eco-friendly compounds as corrosion inhibitors for cooling systems”, *Anti-corrosion methods and materials*, 46:5, 328-331.
- ❖ Ferreira, E.S., Giacomelli,C., Giacomelli,F.C., and Spinelli,A., (2004), “Evaluation of the inhibitor effect of L-Ascorbic acid on the corrosion of mild steel”, *Applied Surface Science*, 252:24, 8521-8525.
- ❖ Flick, E.W., (1993) “Corrosion inhibitors: An industrial guide”, second edition, William Andrew Inc., 341.

- ❖ George Gardner, “Inhibitors in Acid systems”, Corrosion specialist, Elkins, Pa, 156-172.
- ❖ Gregory O. Avwiri, and Igho, F.O., (2003), “Inhibitive action of *Vernonia amygdalina* on the corrosion of aluminium alloys in acidic media”, Materials Letters, 57:22-23, 3705-3711.
- ❖ Gunasekaran, G., and Chauhan, L.R., (2004), “Ecofriendly inhibitor for corrosion inhibition of mild steel in phosphoric acid medium”, Electrochimica Acta, 49:25, 4387-4395.
- ❖ Guo Gao and Chenghao Liang, (2007), “Some β - amino alcohol compounds as green volatile corrosion inhibitors for Brass”, Journal of the Electrochemical Society, 154:2, C144-C151.
- ❖ Guy, D. Davis and Anthony Von Fraunhofer, J., (2003), “Tobacco plant extracts as environmentally benign corrosion inhibitors”, Materials Performance, Feb, 56-60.
- ❖ Habib Ashassi-Sorkhabi and Moosa Es’haghi, (2009), “Corrosion inhibition of mild steel in hydrochloric acid by betanin as a green inhibitor”, Journal of Solid State Electrochemistry, 13, 1297–1301.
- ❖ Ihebroke Maurice Meheja, Anthony Azubuike Uroh, Kelechukwu Bierechi Okeoma and Gregory Amajuoyi Alozie, (2010), “The inhibitive effect of *Solanum melongena* L. leaf extract on the corrosion of aluminium in tetraoxosulphate (VI) acid”, African Journal of Pure and Applied Chemistry, 4:8, 158-165.
- ❖ Ita, B.I., and Offiong, O.E., (2001), “The study of inhibitory properties of benzoin, benzyl, benzoin-(4- phenylthiosemicarbazone) and benzyl-(4-phenylthiosemicarbazone) on the corrosion of mild steel in hydrochloric acid”, Materials Chemistry and Physics, 70, 330-335.
- ❖ Ivanov, E.S., (1986), “Inhibitors of corrosion of metals in acid media”, Metallurgy, Hand book in accordance with the state service of Standard Reference Data, Moscow.
- ❖ Jain, B.L., and Gaur, J.N., (1978), “Alkaloids as corrosion inhibitors for Zinc in acid solution”, Electrochemical Society of India, 27:3, 165-166.

- ❖ James,A.O., and Akaranta,O., (2009), “Corrosion inhibition of aluminium in 2M hydrochloric acid solution by the acetone extract of red onion skin”, African Journal of Pure and Applied Chemistry, 3:12, 262-268.
- ❖ Janaina Cardozo da Rocha, Jose Antonio da Cunha Ponciano Gomes and Eliane D’Elia, (2010), “Corrosion inhibition of carbon steel in hydrochloric acid solution by fruit peel aqueous extracts”, Corrosion Science, 52:7, 2341-2348.
- ❖ Jayalakshmi,M., and Muralidharan,V.S., (1998), “Correlation between structure and inhibition of organic compounds for acid corrosion of transition metals”, Indian Journal of Chemical Technology, 5, 16-28.
- ❖ Jayaperumal,D., Muralidharan,S., Subramanian, P., Venkatachari,G., and Balakrishnan,K., (1996), “Formaldehyde as corrosion inhibitor for mild steel in Hydrochloric acid”, Transactions of the SEAST, 31:3, 67-71.
- ❖ Jayaperumal,D., Muralidharan,S., Subramanian, P., Venkatachari,G., and Senthilvel,S., (1997), “Propargyl alcohol as hydrochloric acid inhibitor for mild steel temperature dependence of critical concentration”, Anticorrosion Methods and Materials, 44:4, 265-268.
- ❖ Jayaperumal,D., (2010), “Effects of alcohol based inhibitors on corrosion of mild steel in hydrochloric acid”, Materials Chemistry and Physics, 119, 478-484.
- ❖ Jha,L.J, (1990), “Studies of the adsorption of amide derivative during acid corrosion of pure iron and its characterization”, Ph.D Thesis, Delhi University, Delhi.
- ❖ Jha,L., and Gurmeet singh, (1990), “Corrosion of mild steel in acidic media and surface characterization”, Bulletin of Electrochemistry, 6:2, 221-224.
- ❖ Kaji,N.N., Khorana,M.L., and Sanghvi,M.M., (1968), “Studies on *Cassia fistula* Linn.”, Indian Journal of Pharmacology, 30,8-11.
- ❖ Kalpana,M., and Mehta,G.N., (2003), “Evaluation of *Foenum graecum* as inhibitor for acid corrosion of mild steel”, Transactions of the SEAST, 38:1, 40-42.
- ❖ Kalpana Bhrara, Hansung Kim and Gurmeet singh, (2008), “Inhibiting effects of butyl triphenyl phosphonium bromide on corrosion of mild steel in 0.5M sulphuric acid solution and its adsorption characteristics”, Corrosion Science, 50, 2747-2754.

- ❖ Karchenko,U.V., Makarenko,N.V., Safronov,P.P., Karabstov,A.A., Kovekhova,A.V., and Zemnukhova,L.A., (2008), “Effect of wastes formed in processing of vegetable raw materials on the corrosion of steel in corrosive media”, *Zhurnal Prikladnoi Khimii*, 81:9, 1484-1489.
- ❖ Kashiwada,Y., Toshika,K., Chen,R., Nonaka,G., and Nishioka,I., (1996), “Tannins and related compounds.XCIII. Occurrence of enantiomeric proanthocyanidins in the Leguminosae plants, *Cassia fistula* L., *Cassia javanica* L., *Chemical Pharmaceutical Bulletin*, 38, 888-893.
- ❖ Kasthuri,N., Saratha,R., Meenakshi,R., and Meenakshi,H.N., (2010), “Inhibition of corrosion of mild steel in 0.5M H₂SO₄ by *Tectona grandis* leaves”, *Asian Journal of Research in Chemistry*, 3:3, 588-590.
- ❖ Khaled,K.F., Babic –Samardzija,K., and Hackerman,N., (2004), “Piperidines as corrosion inhibitors for iron in hydrochloric acid”, *Journal of Applied Electrochemistry*, 00, 1-8.
- ❖ Khaled,K.F., (2008), “New synthesized Guanidine derivative as a green corrosion inhibitor for mild steel in acidic solutions”, *International Journal of Electrochemical Science*, 3, 462-475.
- ❖ Larabi,L., Harek,Y., Traisnel,M., and Mansri,A., (2004), “Synergistic influence of poly(4-vinylpyridine) and potassium iodide on inhibition of corrosion of mild steel in 1M HCl”, *Journal of Applied Electrochemistry*, 34, 833-839.
- ❖ Libin Tang, Xueming Li, Guannan Mu, Guangheng Liu, Lin Li, Hongcheng Liu and Yunsen Si, (2006), “The synergistic inhibition between hexadecyl trimethyl ammonium bromide and NaBr for the corrosion of cold rolled steel in 0.5M sulfuric acid”, *Journal of Material Science*, 41,3063-3069.
- ❖ Lotto,C.A., and Mohammed,A.I., (2000), “The effect of cashew juice extract on corrosion inhibition of mild steel in HCl”, *Corrosion Prevention and Control*, June, 50-56.
- ❖ Mahesh,V.K., Sharma,R., and Singh,R.S., (1984), “Anthraquinones and kaempferol from *Cassia fistula* species”, *Journal of Natural products*, 47, 733-751.
- ❖ Maheswari,D., Rajalakshmi,R., Subhashini,S., Marikannu Viswanathan and Sivakamasundari,S., (2001), “Role of acid extracts of flowers and leaves of *Thespesia populnea* on corrosion inhibition of mild steel in hydrochloric acid”, *Proceedings of ENVIRO 2001, National Conference on Control of*

Industrial pollution and Environmental degradation, PSG College of Technology, Coimbatore, India, 534-539.

- ❖ Mansfeld, F., Kendig, M.W., and Tsai, S., (1982), "Recording and analysis of AC impedance data for corrosion studies II. Experimental approach and results", 38:11, 570-580.
- ❖ Martinez, S., and Stern, I., (2001), "Inhibitory mechanism of low-carbon steel corrosion by mimosa tannin in sulphuric acid solutions", Journal of Applied Electrochemistry, 31, 973-978.
- ❖ Martinez, S. and Stern, I., (2002), "Thermodynamic characterization of metal dissolution and inhibitor adsorption processes in the low carbon steel/ mimosa tannin/ sulfuric acid system", Applied Surface Science, 199:1-4, 83-89.
- ❖ McCafferty and Hackerman, (1972), "Double layer capacitance of iron and corrosion inhibitor with polymethylene diamines", Journal of Electrochemical Society, 119:2, 146-154.
- ❖ Meenakshi Bhat, Sandeepkumar K. Kothiwale, Amruta R. Tirmale, Shobha Y. Bhargava and Bimba N. Joshi, (2009), "Antidiabetic Properties of *Azadiracta indica* and *Bougainvillea spectabilis*: In Vivo Studies in Murine Diabetes Model", eCAM Advance Access, 1-8.
- ❖ Mernari, R., El Attari, H., Traisnel, M., Bentiss, F and Lagranee, M., (1998), "Inhibiting effects of 3,5- bis(n-pyridyl)-4-amino- 1,2,4-triazoles on the corrosion of mild steel in 1M HCl medium", Corrosion Science, 40:2/3, 391-399.
- ❖ Metikos-Hukovic, M., Babic, R., and Grubac, Z., (2002), "The study of aluminium corrosion in acidic solution with non toxic inhibitors", Journal of Applied Electrochemistry, 32, 35-41.
- ❖ Minhaj, A., Saini, P.A., Quraishi, M.A., and Farooqi, I.H., (1999), "A study of natural compounds as corrosion inhibitors for industrial cooling systems", Corrosion Prevention and Control, 32-38.
- ❖ Mobin, M., Khan, M.A., and Parveen, M., (2011), "Inhibition of mild steel corrosion in acidic medium using starch and surfactant additives", Journal of Applied Polymer Science, 121:3, 1558-1565.

- ❖ Mohammed A. Amin, (2006), “Weight loss, polarization, Electrochemical impedance spectroscopy, SEM and EDX studies of the corrosion inhibition of copper in aerated NaCl solutions”, *Journal of Applied Electrochemistry*, 36, 215-226.
- ❖ Mohammed A. Amin, Sayed S. Abd El-Rehim, El-Sherbini,E.E.F., Rady S. Bayoumi., (2007), “The inhibition of low carbon steel corrosion in hydrochloric acid solutions by succinic acid Part I. Weight loss, polarization, EIS, PZC, EDX and SEM studies”, *Electrochimica Acta* 52, 3588–3600.
- ❖ Mohamed Ismail Awad, (2006), “Eco friendly corrosion inhibitors: Inhibitive action of quinine for corrosion of low carbon steel in 1M HCl”, *Journal of Applied Electrochemistry*, 36, 1163-1168.
- ❖ Mohd. Hazwan Hussin and Mohd. Jain Kassim, (2010), “Electrochemical studies of mild steel corrosion inhibition in aqueous solution by *Uncaria gambir* extract”, *Journal of Physical Science*, 21:1, 1–13.
- ❖ Morad,M.S., Morvan,J., and Pagetti,J., (1995), “Proceedings of the 8th European Symposium on Corrosion Inhibitors”, *Ann. Univ. Ferrara, N.S., Sez V, Suppl. N. 10*, 159.
- ❖ Morad,M.S., and Kamal El-Dean,A.M., (2006), “2,2’- Dithiobis(3- cyano -4,6-dimethyl pyridine): A new class of acid corrosion inhibitors for mild steel”, *Corrosion Science*, 48:11, 3398-3412.
- ❖ Morad,M.S., (2007), “Some environmentally friendly formulations as inhibitors for mild steel corrosion in sulphuric acid solution”, *Journal of Applied Electrochemistry*, 37, 661-668.
- ❖ Morretti,G., Quartarone,G., Tassan,A., and Zingales,A., (1996), “Some derivatives of indole as mild steel corrosion inhibitors in 0.5M sulphuric acid”, *British corrosion Journal*, 31:1, 49-54.
- ❖ Moretti,G., Quartarone,G., Tassan,A., and Zingale,A., (1994), “Inhibition of mild steel in 1N sulphuric acid through indole”, *Materials and corrosion*, 45:12, 641-647.
- ❖ Muhamath, Basha Mubarak Ali, Kulanthai and Kannan, (2009), “Inhibition effect of *Parthenium hystophrous* L extracts on the corrosion of mild steel in sulphuric acid”, *Journal of Applied Sciences and Environmental management*, 13:1, 27-36.

- ❖ Muralidharan,S., Phani,K.L.N., Pitchumani,S., Ravichandran,S., and Iyer,S.V.K., (1995), “Polyamino-benzoquinone polymers: A new class of corrosion inhibitors for mild steel”, *Journal of Electrochemical Society*, 142:5, 1478-1483.
- ❖ Muzaffer O' zcana, Ramazan Solmazb, Gu' lfeza Kardas, I'lyas Dehri, (2008), “Adsorption properties of barbiturates as green corrosion inhibitors on mild steel in phosphoric acid”, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 325, 57-63.
- ❖ Nestor Perez, (2004), “Electrochemistry and Corrosion Science”, Kluwer Academic Publishers, Boston.
- ❖ Niketan Patel, Anamika Rawat, Smita Jauhari, Girish Mehta., (2010), “Inhibitive action of *Bridelia retusa* leaves extract on corrosion of mild steel in acidic media”, *European journal of Chemistry*, 1:2, 129-133.
- ❖ Nnabuk O.Eddy., Stevens A.Odoemelam and Ibiam N.Ama., (2010), “Ethanol extract of *Ocimum gratissimum* as a green corrosion inhibitor for the corrosion of mild steel in H₂SO₄”, *Green Chemistry Letters and Reviews*, 3:3, 165-172.
- ❖ Nnanna,L.A., Onwuagba,B.N., Mejeha,I.M., and Okeoma,K.B., (2010), “Inhibition effects of some plant extracts on the acid corrosion of aluminium alloy”, *African Journal of Pure and Applied Chemistry*, 4:1, 011-016.
- ❖ Nouredine Gherraf, Tidjani Yahia Namoussa, Segni Ladjel, Mohamed Ridha Ouahrani, Ramdane Salhi, AbdelKader Belmnine, Samir Hameurlain and Brahim Labeled., (2009), “Aqueous extract of *Zygophyllum album* as corrosion inhibitor for mild steel in sulphuric acid medium”, *American-Eurasian Journal of Sustainable Agriculture*, 3:4, 781-783.
- ❖ Obot,I.B., and Obi-Egbedi,N.O., (2010), “An interesting and efficient green corrosion inhibitor for aluminium from extracts of *Chlomolaena odorata* L. in acidic solution”, *Journal of Applied Electrochemistry*, 40, 1977-1984.
- ❖ Obot,I.B., Umoren, S.A., and Obi-Egbedi,N.O., (2011), “Corrosion inhibition and adsorption behavior for aluminium by extract of *Aningeria robusta* in HCl solution: Synergistic effect of iodide ions”, *Journal of Materials and Environmental Science*, 2:1, 60-71.
- ❖ Odoemelam,S.A and Eddy,N.O., (2008), “Inhibitory effect of pyridoxal hydrochloride 2,4-dinitrophenyl hydrazone on the corrosion of mild steel in hydrochloric acid”, *Journal of Surface Science Technology*, 24:1-2, 65-78.

- ❖ Oguzie,E.E., (2005), “Inhibition of acid corrosion of mild steel by *Telfaria occidentalis*”, Pigment and Resin Technology, 34:6, 321-326.
- ❖ Oguzie,E.E., (2006), “Adsorption and corrosion inhibitive properties of *Azadirachta indica* in acid solutions”, Pigment and Resin Technology, 35:6, 334-340.
- ❖ Oguzie,E.E., (2007), “Corrosion inhibition of aluminium in acidic and alkaline media by *Sansevieria trifasciata*”, Corrosion Science, 49:3, 1527-1539.
- ❖ Oguzie,E.E., Njoku,V.O., Enenebeaku, C.K., Akalezi, C.O and Obi,C., (2008), “Effect of hexamethylpararosaniline chloride (Crystal violet) on mild steel corrosion in acidic media”, Corrosion Science, 50, 3480-3486.
- ❖ Okafor,P.C., Ebenso,E.E., Ibok,U.J., Ekpe,U.J., and Ikpi,M.E., (2003), “Inhibition of 4-Acetamidoaniline on corrosion of mild steel in HCl solutions”, Transactions of the SAEST, 38, 91-96.
- ❖ Okafor,P.C., Ekpe,U.J., Ebenso,E.E., Oguzie,E.E., Umo,N.S., and Etor,A.R., (2006), “Extracts of *Allium cepa* and *Allium sativum* as corrosion inhibitors of mild steel in HCl solution”, Transactions of the SEAST, 41, 82-87.
- ❖ Okafor,P.C., and Ebenso,E.E., (2007), “Inhibitive action of *Carica papaya* extracts on the corrosion of mild steel in acidic media and their adsorption characteristics”, Pigment and Resin Technology, 36:3, 134-140.
- ❖ Okafor,P.C., Osabor,V.I., and Ebenso,E.E., (2007), “Eco-friendly corrosion inhibitors: inhibitive action of ethanol extracts of *Garcinia kola* for the corrosion of mild steel in H₂SO₄ solutions”, Pigment and Resin Technology, 36:5, 299-305.
- ❖ Okafor,P.C., Ikpi,M.E., Uwah,I.E., Ebenso,E.E., Ekpe,U.J., and Umoren,S.A., (2008), “Inhibitory action of *Phyllanthus amarus* extracts on the corrosion of mild steel in acidic media”, Corrosion Science, 50:8, 2310-2317.
- ❖ Oluyesi O. Ajayi, Olugbenga A. Omotosho and Vincent O. Ifepe, (2011), “Acid failure of mild steel in 2M sulphuric acid in the presence of *Vernonia amygdalina*”, Journal of Materials and Environmental Science, 2:2, 186-195.
- ❖ Orubite,K.O., and Oforika,N.C., (2004), “Inhibition of the corrosion of mild steel in hydrochloric acid solutions by the extracts of leaves of *Nypa fruticans wurmb*”, Materials Letters, 58:11, 1768-1772.

- ❖ Ostovari,A., Hoseinie,S.M., Peikari,M., Shadizadeh,S.R., Hashemi,S.J., (2009), “Corrosion inhibition of mild steel in 1 M HCl solution by henna extract: A comparative study of the inhibition by henna and its constituents (Lawsone, Gallic acid, α -d-Glucose and Tannic acid)”, Corrosion Science, 51:9, 1935-1949.
- ❖ Pandian Bothi Raja and Mathur Gopalakrishnan Sethuraman, (2008), “Inhibitive effect of black pepper extract on the sulphuric acid corrosion of mild steel”, Materials letters, 62:17-18, 2977-2979.
- ❖ Pandian Bothi Raja and Mathur Gopalakrishnan Sethuraman, (2009), “*Solanum tuberosum* as an inhibitor of mild steel corrosion in acid media”, Iranian Journal of Chemistry and Chemical Engineering, 28:1, 77-84.
- ❖ Parikh,K.S., and Joshi.K.J., (2004), “ Natural compounds onion(*Allium cepa*), Garlic(*Allium sativum*) and Bitter gourd(*Momordica charantia*) as corrosion inhibitors for mild steel in Hydrochloric acid”, Transactions of the SAEST, 39, 29-35.
- ❖ Patchaiah Kalaiselvi , Subbiah Chellammal, Seeni Palanichamy and Gopalan Subramanian, (2010), “*Artemisia pallens* as corrosion inhibitor for mild steel in HCl medium”, Materials Chemistry and Physics, 15, 643-648.
- ❖ Patel,N.S., Jauhari,S., and Mehta,G.N., (2009), “Mild steel corrosion inhibition by *Bauhinia purpurea* leaves extract in 1N sulphuric acid”, The Arabian Journal for Science and Engineering, 34:2C, 61-69.
- ❖ Paul Schweinsberg, D., Graeme A. George., Asanka Kuruppu Nanayakkara, Dale A. Steinert, (1988), “The protective action of epoxy resins and curing agents- Inhibitive effects on the aqueous acid corrosion of Iron and Steel”, Corrosion Science, 28:1, 33-42.
- ❖ Pierre R. Roberge., (2000), “Handbook of corrosion Engineering”, McGraw-Hill Publishers, New York.
- ❖ Pongsak Lowmunkhong, Dusit Ungtharak and Pakawadee Sutthivaiyakit, (2010), “Tryptamine as a corrosion inhibitor of mild steel in hydrochloric acid solution”, Corrosion Science, 52:1, 30-36.
- ❖ Poonam Srivastava and Kumkum Srivastava, (1983), “Inhibition of corrosion of mild steel in Nitric acid by Garlic”, Corrosion and Maintenance, 149-152.

- ❖ Popova,A., Sokolova,E., Raicheva,S., and Christov,M., (2003), “AC and DC study of the temperature effect on mild steel corrosion in acid media in the presence of benzimidazole derivatives”, *Corrosion Science*, 45: 33-58.
- ❖ Popova,A., (2007), “Temperature effect on mild steel corrosion in acid media in presence of azoles”, *Corrosion Science*, 49:5, 2144-2158.
- ❖ Praveen,B.M., and Venkatesha,T.V., (2009), “Metol as corrosion inhibitor for steel”, *International Journal of Electrochemical Science*, 4, 267-275.
- ❖ Praveen Kar, Ayman Husein, George Varkey and Gurmeet Singh, (1993), “Inhibition effect of aqueous extracts of *Eucalyptus* leaves on the acid corrosion of mild steel and copper”, *Transactions of the SAEST*, 28:1, 8-12.
- ❖ Priya,S.V., and Saratha,R., (2010), “*Crossandra infundibuliformis* leaves as an effective inhibitor for mild steel corrosion in 1M HCl”, *Asian Journal of Research in Chemistry*, 3:2, 434-441.
- ❖ Puja Singh, Kalpana Bhrara and Gurmeet Singh, (2008), “Adsorption and kinetic studies of L –leucine as an inhibitor on mild steel in acidic media”, *Applied Surface Science*, 254:18, 5927-5935.
- ❖ Putilova,I.N., BaliZin,S.A., and Barannik,V.P., (1960), *Metallic Corrosion inhibitors*, Pergamon Press, London.
- ❖ Quraishi,M.A., Rawat,J., and Ajmal,M., (2000), “Dithiobiurets: A novel class of acid corrosion inhibitors for mild steel”, *Journal of Applied Electrochemistry*, 30, 745-751.
- ❖ Quraishi,M.A and Danish Jamal, (2003), “Dianils as new and effective corrosion inhibitors for mild steel in acidic solutions”, *Materials Chemistry and Physics*, 78, 608-613.
- ❖ Quraishi,M.A., Saxena,N., and Jamal,D., (2005), “Inhibition of mild steel corrosion by oleochemical based hydrazides”, *Indian Journal of chemical technology*, 11, 220-224.
- ❖ Quraishi,M.A., and Sharma,H.K., (2005), “Thiazoles as corrosion inhibitors for mild steel in formic and acetic acid solutions”, *Journal of Applied Electrochemistry*, 35, 33-39.
- ❖ Quraishi,M.A., Bharadwaj,V., and Jamal,D., (2005), “Prevention of metallic corrosion by some salts of benzoic hydrazide under vapour phase conditions”, *Indian Journal of Chemical Technology*, 12, 93-97.

- ❖ Quraishi,M.A., Dileep Kumar Yadav and Ishtiaque Ahamad, (2009), “Green approach to corrosion inhibition by black pepper extract in hydrochloric acid solution”, *The Open Corrosion Journal*, 2, 56-60.
- ❖ Radojcic,I., Berkovic,K., Kovac,S., and Vorkapic'-Furac,J., (2008), “Natural honey and black radish juice as tin corrosion inhibitors”, *Corrosion Science*, 50, 1498–1504.
- ❖ Raj Narayanan, (1988), “An introduction to metallic corrosion and its prevention”, Oxford and IBH Publishing Co.Pvt.Ltd. New Delhi.
- ❖ Ramesh,S.P., Vinod Kumar,K.P., and Sethuraman.,M.G., (2001), “Extract of *Andrographis paniculata* as corrosion inhibitor of mild steel in acid medium”. *Bulletin of Electrochemistry*, 17:3, 141-144.
- ❖ Ramesh Saliyan,V., and Airody Vasudeva Adikary, (2008), “Quinolin-5-ylmethylene-3-[[8-(trifluoromethyl)quinolin-4-yl]thio} propanohydrazide as an effective inhibitor of mild steel corrosion in HCl solution”, *Corrosion Science*, 50, 55-61.
- ❖ Rinki Goel, Siddiqi,W.A., Bahar Ahmad and Hussan,J., (2010), “Corrosion inhibition of mild steel in HCl by isolated compounds of *Riccinus communis* (L.)”, *E-Journal of Chemistry*, 7:S1, S319-S329.
- ❖ Rondon Sabino, Denise Schermann Azambuja and Reinaldo Simoes Goncalves, (2010), “Electrochemical behavior of aluminium alloy AA2024 in aqueous solutions in the presence of caffeine”, *Journal of Solid State Electrochemistry*, 14, 1255-1260.
- ❖ Sakthivel,P., Nirmala,P.V., Umamaheswari, Alice Arve Antony,A., Paruthimal Kalaignan, Gopalan,A., and Vasudevan,T., (1999), “Corrosion inhibition of mild steel by extracts of *Pongamia glabra* and *Annona squamosa* in acidic media”, *Bulletin of Electrochemistry*, 15:2, 83-86.
- ❖ Saleh,R.M., Ismail,A.A., and El Hosary,A.A., (1982), “Corrosion inhibition by naturally – occurring substances: The effect of aqueous extracts of some leaves and fruit peels on the corrosion of steel, Al, Zn and Cu in acids”, *British Corrosion Journal*, 17:3, 131-135.
- ❖ Saleh,R.M., Mahasen,A., Abd El Alim and El Hosary,A.A., (1983), “Corrosion inhibition by naturally – occurring substances: Constitution and inhibiting property of aloe plants”, *Corrosion Prevention and Control*, 9-11.

- ❖ Saleh,R.M., Ismail,A.A., and El Hosary,A.A., (1984), “Corrosion inhibition by naturally – occurring substances: The effect of fenugreek, lupine, doum, beet and *Solanum melanogena* extracts on the corrosion of steel, Al, Zn and Cu in acids”, Corrosion Prevention and Control, 21-23.
- ❖ Salisbury, Frank, B., Cleon W. Ross., (1991), Plant physiology, 4th Edition, Belmont, California: Wadsworth Publishing, 325-326.
- ❖ Sanghvi,M.J., Shukla,S.K., Misra,A.N., Padh,M.R., and Mehta,G.N., (1997), “Inhibition of hydrochloric acid corrosion of mild steel by acid extracts of *Embilica officianalis*, *Terminalia bellirica* and *Terminalia chebula*”, Bulletin of Electrochemistry, 13:8-9, 358-361.
- ❖ Sanjay K. Sharma, Ackmez Mudhoo, Gargi Jain and Jyoti Sharma, (2007), “Inhibitory effects of *Ocimum tenuiflorum* (Tulsi) on the corrosion of zinc in sulphuric Acid: A Green Approach”, Surface Review and Letters, 14:06, 1157-1164.
- ❖ Sanjay K. Sharma, Ackmez Mudhoo, Gargi Jain and Jyoti Sharma, (2010), “Corrosion inhibition and adsorption properties of *Azadirachta indica* mature leaves extract as green inhibitor for mild steel in HNO₃”, Green Chemistry Letters and Reviews, 3:1, 7-15.
- ❖ Santhosh sharma, Rashmi Arora and Chaudhary,R.S., (1999), “ Inhibition of corrosion of mild steel by Rhodamine B in acid media”, Journal of Electrochemical Society of India, 48:3, 292-298.
- ❖ Saratha,R., Marikkannu,C., and Sivakamasundari,S., (2002), “Corrosion behavior of mild steel in sulphuric acid – Effect of halides”, Bulletin of Electrochemistry, 18:3, 141-144.
- ❖ Saratha,R., Savitha, R., and Sivakamasundari,S., (2003), “The influence of *Michelia champaca* extract on the corrosion inhibition of mild steel in Sulphuric acid medium”, Journal of Electrochemical Society of India, 52:2, 59-63.
- ❖ Saratha,R., and Vasudha,V.G., (2008), “Inhibition of mild steel corrosion in 1N H₂SO₄ medium by acid extract of *Nyctanthes arbotristis* leaves”, E-Journal of Chemistry, 6:4, 1003-1008.
- ❖ Saratha,R., and Vasudha,V.G., (2009), “Comparison with commercial inhibitor, stability and durability studies of plant extracts as corrosion inhibitors for mild steel in 1N HCl medium”, Ultra Chemistry, 5:2, 233-240.

- ❖ Saratha,R., Shyamala,R and Meenakshi, H.N., (2009), “Precluding effectiveness of *pisum sativum* on mild steel corrosion in acidic medium”, *Advanced Applied Research*, 1:2, 168-175.
- ❖ Saratha,R., and Meenakshi,R., (2010), “Corrosion inhibitor- A plant extract, *Der Pharma Chemica*, 2:1, 287-294.
- ❖ Saratha,R., Saranya Devi, M., Meenakshi,H.N and Shyamala,R., (2011), “Enhanced corrosion resistance of *Tecoma stans* extract on mild steel in 0.5M H₂SO₄ solution”, *International Journal of Current Research*, 2:1, 92-96.
- ❖ Sastri,V.S., (1998), “Corrosion Inhibitors; Principles and Applications”, John Wiley and Sons, New York, 43.
- ❖ Satapathy,A.K., Gunasekaran,G., Sahoo,S.C., Kumar Amit and Rodrigues,P.V., (2009), “Corrosion inhibition by *Justicia gendarussa* plant extract in hydrochloric acid solution”, *Corrosion Science*, 51:12, 2848-2856.
- ❖ Schmitt,G., and Sale, A.O., (2000), “Evaluation of environmentally friendly corrosion inhibitor for sour service”, *Corrosion*, paper No. 335 (Houston, TX:NACE/2000).
- ❖ Sethumadhavan,R., Murugupandian,V., and Muthusami,A., (1991), “1,10 Phenanthroline as corrosion inhibitor for mild steel in sulphuric acid”, *Transactions of the SAEST*, 26:4, 231-234.
- ❖ Sethuraman,M.G., Vadivel,P., and Vinod Kumar,K.P., (2001), “ Tea wastes as corrosion inhibitor for mild steel in acid medium”, *Journal of Electrochemical Society of India*, 50:3, 143-146.
- ❖ Shaheen Taj, Papavinasam,S., and Revie,R.W., (2006), “Development of green inhibitors for oil and gas applications”, 61st Annual Conference and Exposition, *Corrosion, NACE*, Paper No.06656.
- ❖ Sharma,M.K., Arora,P., Kumar,S., Mathur,S.P., and Ratnani,R., (2008), “Inhibitive effect of *Proscopis cineraria* on mild steel in acidic media”, *Corrosion Engineering Science and Technology*, 43:3, 213-218.
- ❖ Shashi Chawla, (2002), “Theory and Practicals of Engineering Chemistry”, Dhanpat Rai & Co. Pvt.Ltd. First edition.
- ❖ Shih and Mansfeld, (1989), “A fitting procedure for impedance data of system with very low corrosion rates”, *Corrosion Science*, 29:10, 1235-1240.

- ❖ Shyamala,M., and Arulanantham,A., (2009), “*Eclipta alba* as Corrosion pickling inhibitor on mild steel in hydrochloric acid”, Journal of Material Science Technology, 25:5, 633-636.
- ❖ Singh,A., and Chaudary,R.S., (1995), “Inhibition of 304 stainless steel corrosion by DL – Methionin in 1.0 M sulphuric acid solution”, Transactions of the SAEST, 30:3, 104-110.
- ❖ Sivaraju,M., and Kannan,K., (2010), “Inhibitive properties of plant extract (*Acalypha indica* L.) on mild steel corrosion in 1N Phosphoric acid”, International Joournal of ChemTech Research, 2:2, 1243-1253.
- ❖ Smita A. verma and Mehta,G.N., (1997 a), “Acid corrosion of mild steel and its inhibition by acid extracts of *Lawsonia inermis*”, Transactions of the SEAST, 32: 2-3, 58-63.
- ❖ Smita A. Verma and Mehta,G.N., (1997 b), “Effect of acid extracts of powdered seeds of *Eugenia jambolans* on corrosion of mild steel in HCl- study by DC polarisation techniques”, Transactions of the SAEST, 32:4, 89-93.
- ❖ Smita A. Verma and Mehta,G.N., (1998), “Effect of acid extracts of *Calotropis gigantea* latex on HCl corrosion of mild steel”, Transactions of the SAEST, 33:4, 160-162.
- ❖ Smita A. Verma and Mehta,G.N., (1999), “Effect of acid extracts of *Acacia Arabica* on acid corrosion of mild steel”, Bulletin of Electrochemistry, 15:2, 67-70.
- ❖ Subramanyan,N., and Ramakrishnaiah,K., (1971), Journal of the Electrochemical society of India, 20:3, 106 – 110.
- ❖ Subramanyam,N.C., Sheshadri,B.S., and Mayanna,S.M., (1993), “Substituted tertiary arsines, phosphines and stilbines as corrosion inhibitors for mild steel in hydrochloric acid”, Journal of Electrochemical Society of India, 42:2, 95-101.
- ❖ Sudesh Kumar, Surendra Arora, Manish Sharma, Paresh Arora and Suraj Prakash Mathur, (2009), “Synergistic effect of *Calotropis* plant in controlling corrosion of mild steel in basic solution”, Journal of Chilian Chemical Society, 54:1, 83-88.
- ❖ Szauer,T., and Brandt,A., (1981), “Adsorption of oleates of various amines on iron in acidic solution”, Electrochimica Acta, 26:9, 1253-1256.

- ❖ Tamilselvi,S., Raman,V. and Rajendran,N., (2003), “Corrosion inhibition of mild steel by benzotriazole derivatives in acidic medium”, Journal of Applied Electrochemistry, 33: 1175-1182.
- ❖ Tandel,P.B., and Oza,B.N., (1998), “Thermometric evaluation of inhibitive action of aniline and its derivatives for mild steel in binary acid mixture(HCl + HNO₃)”, Transactions of the SEAST, 33:1, 14-17.
- ❖ Touafri,L., Kadri,A., Khelifa,A., Aimeur,N., and Benbrahim,N., (2008), “The inhibition and adsorption processes of L-Cysteine against the corrosion of XC 18 carbon steel in 2N H₂SO₄”, Journal of Engineering and Applied Sciences, 3:9, 688-696.
- ❖ Umoren, S.A., Obot, I.B., Ebenso, E.E., Okafor, P.C., Ogbobe, O., and Oguzie, E.E., (2006), “Gum Arabic as a potential corrosion inhibitor for aluminium in alkaline medium and its adsorption characteristics”, Anticorrosion Methods and Materials, 53:5, 277-282.
- ❖ Umoren,S.A., Obot,I.B., and Obi – Egbedi,N.O., (2008), “*Raphia hookeri* gum as a potential eco-friendly inhibitor for mild steel in sulphuric acid”, Journal of Materials science, 44:1, 274-279.
- ❖ Umoren,S.A., Obot,I.B., Ebenso E.E., and Okafor,P.C., (2008 a), “Eco-friendly inhibitors from naturally occurring exudate gums for Aluminium corrosion inhibition in acidic medium”, Portugaliae Electrochimica Acta, 26, 267-282.
- ❖ Umoren,S.A., Obot,I.B., Ebenso E.E., and Obi – Egbedi,N.O., (2008 b), “Studies on the inhibitive effect of exudate gum from *Dacryodes edulis* on the acid corrosion of Aluminium”, Portugaliae Electrochimica Acta, 26, 199-209.
- ❖ Umoren,S.A., and Ebenso E.E., (2008), “Studies on the anticorrosive effect of *Raphia hookeri* exudate gum – halide mixtures for aluminium corrosion in acidic medium”, Pigment and Resin Technology, 37:3, 173-182.
- ❖ Umoru,L.E., Fawehinmi,I.A., and Fasasi,A.Y., (2006), “Investigation of the Inhibitive Influence of *Theobroma Cacao* and *Cola Acuminata* Leaves extracts on the Corrosion of a Mild Steel in Sea Water”, Journal of Applied Sciences Research, 2:4, 200-204.
- ❖ Valek,L., and Martinez,S., (2007), “Copper corrosion inhibition by *Azadirachta indica* leaves extract in 0.5M sulphuric acid”, Materials Letters, 61:1, 148-151.

- ❖ Vanessa Vasconcelos Torres, Roberto Salgado Amado, Camila Faia de Sa, Tatiana Lopez Fernandez, Carlos Alberto da Silva Riehl, Alexandre Guedes Torres and Eliane D'Elia., (2011), "Inhibitory action of aqueous coffee ground extracts on the corrosion of carbon steel in HCl solution", *Corrosion Science*, 53:7, 2385-2392.
- ❖ Vashi,R.T., and Champaneri,V.A., (1997), "Chloro-substituted anilines as corrosion inhibitors for zinc in sulfamic acid", *Transactions of the SEAST*, 32:1, 5-14.
- ❖ Vijayalakshmi,P.R., Rajalakshmi,R., and Subhashini,S., (2010), "Inhibitory action of *Borassus flabellifer* Linn. (Palmyra palm) shell extract on corrosion of mild steel in acidic media", *E-Journal of Chemistry*, 7:3, 1055-1065.
- ❖ Violet Dayabaran,V., Jeyaraj,T., Raja, C. And Shobana, N., (2003) "Corrosion and inhibition studies on commercial mild steel in presence of 2,4-Dinitrophenylhydrazone of cyclohexanone" , *Transactions of the SAEST*, 38:1, 7-10.
- ❖ Violet Dayabaran,V., Rajendran, A., Rosaline Vimala, J., and Anandhakumar, A., (2005), " Hexamine as Inhibitor for the corrosion of mild steel in Acid Medium", *Transactions of the SAEST*, 40, 134-138.
- ❖ Xiang-Hong Li., Shu-Duan Deng., Hui Fu and Guan-Nan Mu, (2009), "Inhibition by tween-85 of the corrosion of cold rolled steel in 1.0M hydrochloric acid solution", *Journal of Applied Electrochemistry*, 39, 1125-1135.
- ❖ Xianghong Li, Shuduan Deng, Hui Fu and Gaunnan Mu, (2009), "Inhibition effect of 6-benzylaminopurine on the corrosion of cold rolled steel in H₂SO₄ solution", *Corrosion Science*, 51, 620-634.
- ❖ Xiang-Hong Li., Shu-Duan Deng., Hui Fu and Guan-Nan Mu, (2010), "Inhibition by *Jasminum nudiflorum* Lindl. leaves extract of the corrosion of cold rolled steel in hydrochloric acid solution", *Journal of Applied Electrochemistry*, 40, 1641-1649.
- ❖ Yan Li, Peng Zhao, Qiang Liang and Baorong Hou, (2005), "Berberine as a natural source inhibitor for mild steel in 1M H₂SO₄", *Applied Surface Science*, 252:5, 1245-1253.
- ❖ Yurchenko,R.I., Pogrebova,I.S., Pilipenko,T.N., Shubina,T.E., (2004), "N-Phenacylpyridinium Bromides as acid corrosion inhibitors", *Russian journal of applied chemistry*, 77, 1117-1120.

- ❖ Yurt,A., Bereket,G., Kivrak,A., Balaban,A and Erk,B., (2005), “Effect of Schiff’s bases containing pyridyl group as corrosion inhibitors for low carbon steel in 0.1M HCl”, Journal of Applied Electrochemistry, 35, 1025-1032.
- ❖ Zakvi, and Mehta., (1988), “Inhibition of corrosion of mild steel in acid extracts of mahasudharsana Churna”, Journal of Electrochemical Society of India, 37:3, 237-239.
- ❖ Zerga,B., Sfaira,M., Rais,Z., Ebn Touhami,M., Taleb,M., Hammouti,B., Imeloune,B., and Elbachiri., (2009), “Lavender oil as an ecofriendly inhibitor for mild steel in 1M HCl”, Materials and Techniques, 97:5, 297-305.
- ❖ Znini,M., Bouklah,M., Majidi,L., Kharchouf,S., Aouniti,A., Bouyanzer,A., Hammouti,B., Costa,J., and Al-Deyab,S.S., (2011), “International Joournal of Electrochemical Science, 6, 691-704.

- ❖ www.academicjournals.org/IJPS
- ❖ www.electrochemsci.org
- ❖ www.info.com/Corrosion
- ❖ <http://start.managementfirst.com>
- ❖ [http://en.wikipedia.org/wiki/Pickling \(metal\)](http://en.wikipedia.org/wiki/Pickling_(metal))
- ❖ <http://en.wikipedia.org/wiki/Bougainvillea>