## Dr.N.Karthiga

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# **Educational qualification**

Degree	Institution	Duration	Percentage of mark	Class
Ph.D(Chemistry)	Madurai Kamaraj University	2014-2019	-	Completed
M.Phil(Chemistry)	Bharathidasan University, Trichy	2006-2007	77	First
M.Sc (Chemistry)	G.T.N. Arts college, Dindigul	2002-2004	74	First
B.Sc (Chemistry)	M.V.M. Govt. Arts College , Dindigul	1999-2002	74	First

### **Awards and prizes:**

- College **second** in B.Sc Chemistry.
- College **first** in M.Sc Chemistry.
- University **fifth rank** in M.Sc Chemistry.

### **Working experience:**

- One year worked as a lecturer in G.T.N Arts College, Dindigul.
- Two months worked as a part time lecturer in Parvathy's Arts and Science College, Dindigul.
- Ten years experience in SBM College of Engineering and Technology, Dindigul.
- Five years experience in St.Antony's College of Arts and Sciences for women, Dindigul.

#### **Title of the thesis:**

"Inhibition of corrosion of mild steel by extracts of plant materials

#### List of Seminars, workshop, symposium and conferences attended/Presented

- 1. N.Karthiga, S. Rajendren, P.Prabhakar, The National Conference on Emerging Trends in Chemistry in Bishop Heber College, Trichy on 11<sup>th</sup> January 2012.
- 2. N.Karthiga, S. Rajendren, P.Prabhakar, The National conference on Recent Trends in Polymer and Green Chemistry in Rajah Serfoji Government College, Thanjavur on 2<sup>nd</sup> and 3<sup>rd</sup> February 2012.
- 3. N.Karthiga, S. Rajendren, P.Prabhakar, Utility of an aqueous extract of beets as corrosion inhibitor for carbon steel in well water, in International conference on chemical and environmental research in Jamal Mohamed College, Trichy on 17<sup>th</sup> December 2015.
- 4. N.Karthiga, S. Rajendren, P.Prabhakar, Electrochemical studies on corrosion inhibition of mild steel by aqueous extract of hibiscus flowers in international conference on advances in Engineering science and technology in SBM College of Engineering and Technology, Dindigul on 4<sup>th</sup> march 2016.
- 5. N.Karthiga, S. Rajendren, P.Prabhakar, Inhibition of corrosion of mild steel in well water by an aqueous extract of green inhibitor-leaves of justicia adhatoda in the seminar on environment and sustainable development in SRM University, Chennai on 3<sup>rd</sup> June 2016, Abstract no: A12, pp.36.
- 6. N.Karthiga, S. Rajendren, P.Prabhakar, Application of UV- visible absorption spectroscopy in corrosion inhibition study in the National seminar on New Perspectives in Science and Technology in St.Antony's College of Arts and Sciences for Women, Dindigul on 7<sup>th</sup> October 2016.
- 7. N.Karthiga, P.Prabhakar, S. Rajendren, Corrosion inhibition by an aqueous extract of garlic (Allium sativam) in the international conference on Recent Advances in Material Chemistry in SRM University, Chennai on 15-17<sup>th</sup> February 2017, Abstract no: A037, pp.78.

- 8. N.Karthiga, S. Rajendren, P.Prabhakar, Corrosion inhibition of mild steel in well water by an aqueous extract of waste tea dust in the International seminar on new perspectives in science and technology in St.Antony's College of Arts and Sciences for Women, Dindigul on 11<sup>th</sup> October 2017.
- 9. N.Karthiga, S. Rajendren, P.Prabhakar, Corrosion inhibition of mild steel by an Aqueous extract of allium sativum in the National Conference on Recent Developments in Chemistry in Jamal Mohamed College, Trichy on 20<sup>th</sup> January 2018.
- 10. N.Karthiga, S. Rajendren, P.Prabhakar, National technical symposium in RVS School of Engineering and Technology on 16<sup>th</sup> march 2018.
- 11. N.Karthiga, S. Rajendren, P.Prabhakar, the work shop on Introduction to research outcomes and opportunities at SBM College of Engineering and Technology, Dindigul on 17<sup>th</sup> march 2018.
- 12. N.Karthiga, S. Rajendren, P.Prabhakar, Electrochemical studies on corrosion inhibition of mild steel by plant materials, in international conference on advances in Engineering science and technology in SBM College of Engineering and Technology, Dindigul on 31<sup>th</sup> march 2018.
- 13. N.Karthiga, S. Rajendren, P.Prabhakar, Corrosion inhibition of mild steel in well water using Adhatoda vasica leaves extract, Corcon 2018, Jaipur, India on 30<sup>th</sup> September to 3<sup>rd</sup> October, 2018.

### List of Papers Published

- 1. N.Karthiga, S.Rajendran, P.Prabhakar, R.Joseph Rathish, "Corrosion inhibition by plant extracts-An overview", Int J Nano Corr Sci and Engg, 2 (4), (2015), pp.31-49, ISSN: 2395-7018.
- 2. N.Karthiga, S.Rajendran, P.Shanthy, A.Krishnaveni, J.Jeyasundari, RM Joany, A. Christy Catherine Mary and T. Umasankareswari, "Utility of an aqueous extract of Beets (Beta vulgaris L) as corrosion inhibitor for carbon steel in well water", Int J Nano Corr Sci and Engg, 2(5), (2015), pp.255-269, ISSN: 2395-7018.
- 3. N.Karthiga, S.Rajendran and P.Prabhakar, "Applications of UV-Visible Absorption Spectroscopy in Corrosion Inhibition Study", Int J Nano Corr Sci and Engg, (2016), 3(4), pp.504-520, ISSN: 2395-7018.
- 4. N.Karthiga, S.Rajendran, P.Prabhakar, Abdulhameed Al-Hashem and S.Shanmugapriya, "Corrosion inhibition of mild steel by an aqueous extract of allium sativum", European Journal of Biomedical and Pharmaceutical Sciences, (2018), 5(2), pp.838-843, ISSN: 2349-8870.
- 5. N.Karthiga, P. Prabhakar, S.Rajendran, "Corrosion Inhibition by an Aqueous Extract of Waste Tea Dust", Journal of Applied Science and Computations, (2018), 5(12), pp.2194-2203, ISSN: 1076-5131.

- 6. N.Karthiga, P.Prabhakar, S.Rajendran, "Inhibition of Corrosion of Mild Steel In Well Water By An Aqueous Extract of Lawsonia Inermis Leaves", International Journal of Research and Analytical Reviews, (2018), 6(1), pp. 437-444, E-ISSN 2348-1269, P- ISSN 2349-5138.
- 7. N.Karthiga, S.Rajendran, P.Prabhakar, S.Shanmugapriya and Abdulhameed Al-Hashem "Corrosion inhibition of mild steel in well water by an aqueous extract of Adhatoda vasica (justicia adhatoda) leaves", Journal of Emerging Technologies and Innovative Research, (2018), 5(12), pp. 314-322, ISSN: 2349-5162.
- 8. P.Prabhakar, N.Karthiga, S.Rajendran, "Inhibition of corrosion of mild steel using an aqueous extract of hibiscus flower in neutral medium", Journal of Applied Science and Computations, (2019), 6(1), pp.899-904, ISSN: 1076-5131.
- 9. P.Prabhakar, N.Karthiga, S.Rajendran, Surface morphology of protective film formed on the mild steel surface using contact angle measurement, (2019), 9(6), pp.780-786, ISSN: 2249-2976.
- 10. Influence of Roseday-5 tablet on corrosion resistance of SS 316L in artificial saliva, N. Karthiga, J.M. Praveena, A. Deepika, A.J.A. Fathima, R. Bhuvaneshwari, G.D. Christina, V.D. Mary, N. Renuga Devi, T. Umasankareswari and S. Rajendran, Int. J. Corros. Scale Inhib., 2020, 9, no. 2, pp. 595–606, ISSN: 2305-6894.
- 11. Corrosion resistance of orthodontic wire made SS316L alloy in artificial saliva in presence of Amlodipine tablet by electrochemical studies, N.Karthiga, J.M,Praveena, S.Rajendran, Zastita Materijala, 2020, 61(3). pp. 251-258, ISSN: 0351-9465.