

## **RESUME**

Name : **Dr. R. RAJKUMAR**  
Department : Chemistry  
Designation : Assistant Professor  
Category : SF  
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Date of Birth : 18-08-1988  
Date of Joining : 07-12-2020



### **Qualification:**

<b>Sr.</b>	<b>Category</b>	<b>Name of the Degree</b>	<b>Specialization</b>	<b>Year of Passing</b>	<b>Name of the College/University</b>	<b>% of Marks / Grades Obtained</b>	<b>Class Obtained</b>
1	Regular	B.Sc.	Chemistry	2009	Aditanar College of Arts and Science, Tiruchendur/ MS University	82.15	First
2	Regular	M.Sc.	Chemistry	2011	V.O. Chidambaram College, Thoothukudi/ MS University	74.28	First
3	Regular	M.Phil.	Chemistry	2012	Aditanar College of Arts and Science, Tiruchendur/ MS University	73.40	First ( <b>Gold Medalist</b> )
4	Part time	Ph.D.	Chemistry	2020	V.O. Chidambaram College, Thoothukudi/ MS University	-	Awarded

**Academic Experience:**

Sr	Name of the College	Whether Aided/SF	Designation	Joining Date	Relieving Date	Experience		
						Years	Months	Days
1.	Aditanar College of Arts and Science, Tiruchendur	SF	Assistant Professor of Chemistry	10/07/2012	14/09/2012	-	2	4
2.	Aditanar College of Arts and Science, Tiruchendur	SF	Assistant Professor of Chemistry	19/12/2012	31/10/2020	7	10	12
3.	Kamaraj College, Thoothukudi	SF	Assistant Professor of Chemistry	07/12/2020	Till date	1	10	-
<b>Total Experience</b>						<b>9</b>	<b>10</b>	<b>16</b>

**Minor / Major Projects completed:**

Sr.	Project Title	Duration	Funding Agency	Total Cost
1.	Preparation and Characterization of Polypyrrole/CaCO <sub>3</sub> composite and its application as anticorrosive coating on mild steel	1 year	Tamilnadu State Council for Science and Technology (TNSCST)	10,000/-

**Papers Published:**

Sr.	Name of the Author	Title of the Paper	Name of the Journal/ Proceedings	Year	Vol. No. Issue No.	Page No	Impact of Factor
1.	<b>R. Rajkumar,</b> M. Karuppuraja, C. Vedhi	Investigations on the performance of poly(o-toluidine)/silicon dioxide nanocomposites coatings for the corrosion protection of mild steel	Anticorrosion Methods and Materials	2022	In-press	In-press	<b>1.117</b>
2.	<b>R. Rajkumar,</b> C. Vedhi	Preparation, Characterization and Anticorrosion Behaviour of Poly(o-anisidine)-SiO <sub>2</sub> Nanocomposites on Mild Steel	Materials Today Proceedings	2022	Vol. 48, Part 2	169-173	<b>1.46</b>

3.	<b>R. Rajkumar,</b> C. Vedhi	Study of the Corrosion Protection Efficiency of polypyrrole/metal oxide nanocomposites as Additives in Anticorrosion Coating	Anticorrosion Methods and Materials	2020	67 (3)	305 - 312	<b>1.117</b>
4.	<b>R. Rajkumar,</b> C. Vedhi	A study of corrosion protection efficiency of Silica nanoparticles acrylic coating on mild steel electrode	Vacuum	2019	161	1 – 4	<b>3.627</b>
5.	<b>R. Rajkumar,</b> C. Vedhi	Synthesis and Characterization of Zinc Oxide Nanoparticles by a solution-free mechanochemical reaction	International Journal of Science, Engineering and Management (IJSEM)	2018	3	686 - 689	<b>3.083</b>
6.	<b>R. Rajkumar,</b> C. Vedhi	Green Synthesis of Silica nanoparticles from Rice Husk and its characterization”, National Conference on Energy Materials – 2018 (NCEM-2018)	National Conference on Energy Materials – 2018 (NCEM-2018)	2018	-	170 - 171	-
7.	<b>R. Rajkumar,</b> E. Nimrod Vijay, M. Santhana Kumar	Comparative Adsorption Studies for the removal of heavy metal ions on Polyindole and Polyindole/SiO <sub>2</sub> nanocomposites	A Treatise on Recent Advances in Bioinorganic and Medicinal Chemistry (RABAMCHEM-17)	2017	-	151 – 157	-
8.	P.K. Ganesan, <b>R. Rajkumar,</b> M. Kasthuri, A. Angeline Divya, K. Manokari, M. Mariammal, K. Abishek	Photocatalytic degradation of Textile dyes from waste water using nanocomposites under Solar and UV light source	New Advances in Chemistry and Materials (ICNCM -16)	2016	-	156 – 164	-
9.	<b>R. Rajkumar,</b> P. Nishanthini, V. Ashok and T. Nanthini Devi	Investigation on Corrosion and Electrical Conductivity of Silver nanoparticles embedded in Poly(o-toluidine) Nanocomposites	New Advances in Chemistry and Materials (ICNCM -16)	2016	-	187 – 195	-

10.	<b>R. Rajkumar,</b> T.M. Shiji, D. Suba Kohila, M. Petchimuthu	Anticorrosive properties of Poly(aniline)/MgO nanocomposite coated mild steel	A Treatise on Emerging Trends in Bio-inorganic Chemistry	2015	-	109 – 117	
11.	<b>R. Rajkumar,</b> U. Venisha Banumathi, D. Vinslin, L. Suyambu Durai,	Synthesis, Characterization and dielectric properties of CdS doped with polypyrrole nanocomposite	A Treatise on Emerging Trends in Bio-inorganic Chemistry	2015	-	118– 125	
12.	<b>R. Rajkumar,</b> I. Maria Arul, B. Sangeetha, K. P. Padma Malini, A. Ragavan Kebin	Preparation and Characterization of Polypyrrole/CaCO <sub>3</sub> composite and its application as anticorrosive coating on mild steel	The International Journal of Science and Technoledge	2014	2 (10)	79 - 83	
13.	P.K. Ganesan, <b>R. Rajkumar</b>	Synthesis, Characterization and Anticorrosion Efficiency of Novel Polythiophene and its nanocomposites on mild steel using Epoxy resin by Electrochemical studies	The International Journal of Science and Technoledge	2014	2 (10)	122- 128	
14.	<b>R. Rajkumar,</b> P. K. Ganesan	Synthesis and Characterization of Polypyrrole/Metal oxide nanocomposites and evaluation of their corrosion performance by electrochemical studies on mild steel in epoxy coating	A Treatise on Modern Trends in Chemical Sciences	2014	-	104 – 110	-
15.	S. Sheeba Thavamani, <b>R. Rajkumar</b>	Removal of Cr(VI), Cu(II), Pb(II) and Ni(II) from Aqueous Solutions by Adsorption on Alumina	Research Journal of Chemical Sciences	2013	3 (8)	44- 48	

#### Books Chapter Published:

Sr.	Title	Year	Publisher	Place
1.	Chapter 25 – Sustainable carbon nanomaterial – based sensors: Future vision for the next 20 years	2022	Carbon nanomaterials – Based Sensors Emerging Research Trends in Device and Applications 2022, Pages: 429-443	-

**List of Paper Presentation in Seminars/Conferences/Symposia/Workshop:**

<b>Sr.</b>	<b>Theme</b>	<b>Place</b>	<b>International / National / State Level</b>	<b>Year</b>	<b>Resource Person / Paper Presentation / Participation</b>
1	Synthesis and Characterization of Polypyrrole/Metal oxide nanocomposites and evaluation of their corrosion performance by electrochemical studies on mild steel in epoxy coating	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar.	National	July 18-19, 2014	Presentation
2	Preparation and characterization of polypyrrole/CaCO <sub>3</sub> composite and its application as anticorrosive coating on mild steel	Sarah Tucker College (Antonomous), PG and Research Department of Chemistry, Tirunelveli.	International	August 27, 2014	Presentation
3	Anticorrosive properties of Poly(aniline)/MgO nanocomposite coated mild steel	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar.	National	January 23-24, 2015	Presentation
4	A study on the Dielectric Properties of Cadmium Sulphide doped polypyrrole nanocomposites	A.P.C. Mahalakshmi College for Women, Department of Chemistry, Thoothukudi.	National	February 04-05, 2015	Presentation
5	Synthesis, Characterization and Anticorrosion performance of Novel Polythiophene and its nanocomposites on mild steel using Epoxy resin	Sarah Tucker College (Antonomous), PG and Research Department of Chemistry, Tirunelveli.	National	December 15, 2016	Presentation
6	Comparative Adsorption Studies for the removal of heavy metal ions on Polyindole and Polyindole/SiO <sub>2</sub> nanocomposites	Virudhunagar Hindu Nadar's Senthikumara Nadar College, Virudhunagar.	National	February 15, 2017	Presentation
7	Harnessing Magnetite Chitosan Nanocomposites for the Adsorption of Heavy Metal Ions from Aqueous Medium	Aditanar college of Arts and Science, PG Department of Chemistry, Tiruchendur.	State	February 15, 2018	Presentation

8	Synthesis and Characterization of Zinc Oxide Nanoparticles by a solution-free mechanochemical reaction	V.O.Chidambaram College, Department of Chemistry, Tuticorin.	International	April 19-20, 2018	Presentation
9	Green Synthesis of Silica nanoparticles from Rice Husk and its characterization	Department of Physics Manonmaniam Sundaranar University, Tirunelveli.	National	June 28-29, 2018	Presentation
10	Preparation, Characterization and Anticorrosion Behavior of Poly(o-anisidine)/SiO <sub>2</sub> Nanocomposites on Mild Steel	Department of Chemistry, The Standard Fireworks Rajaratnam College For Women, Sivakasi.	International	September 03, 2018	Presentation
11	Effect of TiO <sub>2</sub> Nanoparticles on the Corrosion Behavior of Acrylic coating on Mild Steel	Research Department of Chemistry, Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli.	National	October 10-11, 2018	Presentation
12	Preparation of Poly(o-toluidine)/SiO <sub>2</sub> /Acrylic Nanocomposites coating and Evaluation of its Corrosion Resistance on Mild Steel	PG and Research Department of Chemistry, V.O.Chidambaram College, Tuticorin.	International	December 27, 2018	Presentation
13	Characterization of Cadmium Sulphide Nanoparticles synthesized by Chemical Precipitation method	Aditanar college of Arts and Science, PG Department of Chemistry, Tiruchendur.	State	January 22, 2019	Presentation
14	Use of Poly(o-anisidine)/TiO <sub>2</sub> nanocomposites coatings for the corrosion protection of mild steel	Department of Chemistry & Research Centre, Aditanar College of Arts and Science, Tiruchendur	National	February 22, 2019	Presentation
15	Investigation of the Corrosion Behavior of Poly(o-anisidine)/ZnO nanocomposites coating on mild steel	School of Chemistry & School of Biotechnology, Madurai Kamaraj University, Madurai	International	February 25 & 26, 2019	Presentation
16	Enhanced Anti-corrosive Performance of Poly(o-toluidine)/ZnO Nanocomposites Coatings on Mild Steel	Department of Chemistry, VHNSN College (Autonomous), Virudhunagar	National	February 27 & 28, 2019	Presentation

17	Electrochemical, Thermodynamic and Adsorption studies for the corrosion inhibition of Mild steel by Henna extract in Acid medium	Department of Industrial Chemistry, Alagappa University, Karaikudi.	International	July 25 & 26, 2019	Presentation
18	Fabrication of Polyindole/metal oxide nanocomposites coating and Evaluation of their Corrosion Resistances	Department of Physics, Aditanar College of Arts and Science, Tiruchendur	International	August 26, 2019	Presentation
19	Evaluation of the Corrosion Inhibiting Capacity of Silica/Polypyrrole nanocomposites in Acrylic coatings	Department of Chemistry, Arulmigu Palaniandavar Arts College for Women (Autonomous), Palani	International	September 6, 2019	Presentation
20	Chitosan-Cadmium Sulphide Nanocomposites: Synthesis, Characterization and Anticorrosion Properties	PG Department of Chemistry, Aditanar College of Arts and Science, Tiruchendur	State	September 19, 2019	Presentation
21	Green Approach to Corrosion Inhibition of Mild Steel using Coconut Coir	Department of Commerce, Aditanar College of Arts and Science, Tiruchendur	State	September 24, 2019	Presentation
22	Protection of Mild steel by Polypyrrole-silica Nanocomposites coating in acidic medium	PG and Research Department of Chemistry, V.O. Chidambaram College, Tuticorin.	International	December 13, 2019	Presentation
23	Preparation and Corrosion Resistance of Poly(o-toluidine)/TiO <sub>2</sub> /acrylic Nanocomposites coating	PG and Research Department of Chemistry, Government Arts College, Dharmapuri.	International	December 20, 2019	Presentation
24	Preparation and Characterization of Polypyrrole-ZnO nanocomposites and study of their corrosion resistances blended with acrylic resin	Department of Chemistry and Research Centre, Pope's College (Autonomous), Sawyerpuram.	National	March 12, 2020	Presentation
25	Citrus Aurantium Leaves Extract as the Eco-friendly Corrosion Inhibitor for Mild steel	Department of Physics, Manonmaniam Sundaranar University, Tirunelveli.	International	March 24-26, 2021	Presentation

**Other Relevant Information:**

It is certified that all the information provided are true to the best of my knowledge.

(Endorsement by the Principal)