1. PERSONAL DETAILS
2. 

1. Name of Teaching Faculty    : Dr. Resmi M. R.
2. Designation     :Associate Professor in Chemistry
3. Department   :Department of Chemistry
4. Address   : Prasanthi, Pulamanthole (PO), Malappuram, Kerala Pin: 679323
5. Contact No & email ID   : 9446547724, resmiraveendran.mr@gmail.com
6. Date of Birth   : 24.05.1972

II. EDUCATION BACKGROUND

Academic Qualifications

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Examinations*  | *Name of the* *Board/University*  | *Year of Passing*  | *% of marks obtained*  | *Division/ Class/ Grade*  | *Subject*  |
| Graduation  | University of Calicut  | 1992  | 89.8 | Distinction  | Chemistry  |
| Post-Graduation  | University of Calicut | 1994 | 76.5  | First Rank  | Chemistry  |
| CSIR-JRF  | CSIR  | 1994 | Qualified  | Qualified  | Chemical Science  |

Research Degrees

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Degree*  | *Title of Thesis/ Dissertation*  | *Date of Award with Reg. No.*  | *Discipline/ Subject*  | *University*  |
| Ph.D.  | Vibrational spectroscopic investigations of orientational ordering in fullerene-based materials  |  27-07-2001 | Chemistry  | Indian Institute of Technology, Madras (Supervisor: Prof. T. Pradeep) |
| Post Doctoral Fellowship  | Photocatalytic oxidation of n-octanol by hydrophobic TiO2 in supercritical carbon dioxide.  |  2001-2002 | Chemistry  | North Carolina State University (Supervisor: Prof. Mary Anne Fox)  |

**III. PROFESSIONAL DETAILS**

1. Date of Entry in to service   30.01.2002
2. Early Career   Nil
3. Academic /Teaching Experience 16 years
4. Area of Specialization Nano Chemistry and Spectroscopy
5. Courses Taught B. Sc., M. Sc.
6. Research Experience 22 years, Completed two major research projects and one minor research project guided 2 students to their PhD and currently guiding 2 students for their PhDs.
7. Professional Affiliations  NA
8. Academic Honors & Awards   NA
9. Conference/Seminar/ Workshop Presentations

**Conference Papers**

1. Rajeena U and Resmi M.R. (2017) "The synthesis of sodium doped fluorographene nanosheets

and their application for hydrogen storage". Proceedings of the International conference Emerging

frontiers in chemical science, Department of Chemistry, Farook college. Kozhikode, kerala,

September 23-25,2017, 64.

2. Uruniyengal Rajeena, Resmi M. Ramakrishnan, (2019) “Electrochemical detection of nitrite based

on glassy carbon electrode modified with graphene”, International conference on materials on

millennium, Department of Chemistry, Cochin University. March 14-16, 2019, 132.

3. Sreeja K., Swathy K.J., Amrutha K., Rajeena U. and Resmi M. Ramakrishnan (2018) “The

Selective Oxidation of Cyclohexene Over G-C3N4 /RGO Metal Free Catalysts” International

conference Chemistry and Physics of materials, St. Thomas College. Trissur, Kerala, December

19-21, 2018.

4. Rajeena U and Resmi, M.R. (2018) “Nucleophilic Substitution and Simultaneous Exfoliation of

Fluorographite: An Alternative Pathway for the Bulk Preparation of Chemically Functionalized

Graphene” 30th kerala scienece congress, held at Government Brennen college, Thalassery,

January 28 -30, 2018, 101.

5. Thasni T., Rajeena U. and Resmi M.R. (2017) “Boron doped Graphene: A metal free catalyst for 4-

Nitrophenol Reduction” Emerging trends in nanoscience and technology, National seminar, Sree

Neelakanta Govt. Sanskrit College, Pattambi, Kerala, December 19-20, 2017.

6. Rajeena U, Rajmohan P. R., Raveendran P. and Resmi M. R. (2018) “Solvent induced

defluorination in flurographene: a solution F-19nmr study” Proceedings of National seminar

frontiers in chemical science, Department of Chemistry, University of Calicut, Kerala, February 26-

28, 2018, 39.

7. Rajeena U. and Resmi M.R. (2019) “Simultaneous Voltammetric Sensing of Lead and Cadmium

on Poly (methylene blue)/Graphene Modified Glassy Carbon Electrode” Chemistry past present

future (CPPF), National seminar, Sree Neelakanta Govt. Sanskrit College, Pattambi, Kerala,

November, 21-22, 2019.

1. Conferences attended details-year wise
2. Two-day National Seminar on “**Chemistry: Past, Present and Future**” held at the Department of Chemistry, SreeNeelakanta Government Sanskrit College Pattambi sponsored by The Department of Collegiate Education, Government of Kerala, Thiruvananthapuram, on 21-22 **November, 2019**.
3. Two-day National Seminar on “**Recent Trends in Material Science and Technology**” held at Department of Chemistry, SreeNeelakanta Government Sanskrit College, PattambiThe Department of Collegiate Education, Government of Kerala on 27-28 **November, 2018.**
4. Two-day National Seminar on “Emerging Trends in nanomaterials science and Technology” held at the Department of Chemistry, SreeNeelakanta Government Sanskrit College Pattambi sponsored by The Department of Collegiate Education, Government of Kerala, Thiruvananthapuram, on **19-20 December, 2017**.
5. Two-day Workshop on “**Computational Quantum Chemistry** " held at the Department of Chemistry, SreeNeelakanta Government Sanskrit College Pattambi sponsored by The Department of Collegiate Education, Government of Keral**a, ,** on04-05 **February, 2016.**
6. UGC sponsored National seminar on RECENT ADVANCES IN NANOTECHNOLOGY (RAN – 2015) organized by Post Graduate Department of Chemistry, Sree Neelakanta Govt. Sanskrit College Pattambi during **29-30 January 2015.**
7. Selected Publications

1. Jyothi P Ramachandran, Ajila P Kottammal, Anu Antony, Resmi M Ramakrishnan, Scott L Wallen, Poovathinthodiyil Raveendran, Green processing: CO2-induced glassification of sucrose octaacetate and its implications in the spontaneous release of drug from drug-excipient composites, Journal of CO2 Utilization, 2021, 47, 101472.

2. U Rajeena, P Raveendran, RM Ramakrishnan, Stepwise defluorination of fluorographene: How do the structural features govern the rates of heterogeneous electron transfer?, Journal of Fluorine Chemistry, 109555, 2020

3. U Rajeena, M Akbar, P Raveendran, RM Ramakrishnan, Graphene reduction of P25 titania: Ti3+-doped titania/graphene nanohybrids for enhanced photocatalytic hydrogen production

International Journal of Hydrogen Energy 45 (16), 9564-9574, 2020

4. Cheriyathvalappil Shaniba, Mohammed Akbar, Kuttikkattil Ramseena, Poovathinthodiyil Raveendran, Binitha N Narayanan, Resmi M Ramakrishnan, Sunlight-assisted oxidative degradation of cefixime antibiotic from aqueous medium using TiO2/nitrogen doped holey graphene nanocomposite as a high performance photocatalyst, Journal of Environmental Chemical Engineering 8 (1), 102204, 2020.

5. A Antony, JP Ramachandran, RM Ramakrishnan, P Raveendran, Sizing of paper with sucrose octaacetate using liquid and supercritical carbon dioxide as a green alternative medium, Journal of CO2 Utilization 28, 306-31

2018

6. Anu Antony, Anila Raj, Jyothi P Ramachandran, Resmi M Ramakrishnan, Scott L Wallen, Poovathinthodiyil Raveendran Sizing and Desizing of Cotton and Polyester Yarns Using Liquid and Supercritical Carbon Dioxide with Nonfluorous CO2-Philes as Size Compounds, ACS Sustainable Chemistry & Engineering 6 (9), 12275-12280, 2018

7. Defect-Rich Brown TiO2–x Porous Flower Aggregates: Selective Photocatalytic Reversibility for Organic Dye Degradation

SG Ullattil, RM Ramakrishnan, ACS Applied Nano Materials 1 (8), 4045-4052, 2018

1. Fluorographite to hydroxy graphene to graphene: a simple wet chemical approach for good quality graphene, U Rajeena, M Akbar, P Raveendran, RM Ramakrishnan, New Journal of Chemistry 42 (12), 9658-9665, 2018
2. S Balasubramanyan, S Sasidharan, R Poovathinthodiyil, Resmi M Ramakrishnan, Binitha N Narayanan, Sucrose-mediated mechanical exfoliation of graphite: a green method for the large scale production of 3.069 graphene and its application in catalytic reduction of 4-nitrophenol, New Journal of Chemistry 41 (20), 11969-11978, 2017
3. V Vadery, SK Cherikkallinmel, RM Ramakrishnan, S Sugunan, BN Narayanan, Green production of biodiesel using waste borosilicate glass derived catalyst and the process up-gradation in pilot scale, Renewable Energy, 141, 1042-1053, 2019

IV. Other Activities

1. Additional Responsibilities: Convener of Women Cell, Member of Stock verification Committee
2. Chairperson, Board of Examiners, BSc Chemistry, odd Semesters ( Palakkad Region), University of Calicut