

BIO-DATA

Name : Dr. V. Ramasamy Raja
Designation : Assistant Professor
Department : Chemistry
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ramasamychem1989@gmail.com



Objective:

Employ my knowledge and skills acquired through education and experience to serve the student and the scientific community. Strive for continuous growth and development of the organization by seeking new opportunities and responsibilities.

Research Interest:

Catalysis and fine chemical synthesis and Material development for industrial application, Corrosion inhibition by green and organic inhibitor, developing the chemosensor for cations and anions.

Education:

Ph.D. – Madurai Kamaraj University in Aug 2018 – Area: Photocatalysis

Thesis Title: Synthesis, characterization and evaluation of nanocomposite for photocatalytic degradation of organic pollutants under visible light.

Masters in Philosophy – Chemistry

- The American College, affiliated to Madurai Kamaraj University in July 2013.

Masters Degree in Science - Chemistry

- Thiagarajar College, affiliated to Madurai Kamaraj University, in May 2012.

Graduation in Education-Physical Science

- N.P.R College of Education affiliated to Tamil Nadu Teachers Education University Chennai in July 2010.

Graduation in Science - Chemistry

- Government Arts and Science College, affiliated to Madurai Kamaraj University in July 2009.
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Research & Working Experience:

- June 2019 – Till date : Assistant Professor of Chemistry, Mannar Thirumalai Naicker College, Madurai-625 004.
- June 2018 – June 2019 : Assistant Professor, Department of Chemistry, KPN Arts and Science College, Batlagundu-624 202.
- Sep 2018 – April 2017 : Research Scholar under the guidance of Dr.A.Suganthi, Head & Associate Professor of Chemistry, Thiagarajar College, Madurai-625 009.
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Skills:

- Heterogeneous catalyst development
 - Conduct air and moisture free reaction
 - Separation of products from reaction mixture by column chromatography
 - Electrochemical sensor
 - Adsorption of environmental hazardous compounds
 - Interpreting XRD, FESEM, HRTEM and TGA.
 - Handling of UV-Vis, FT-IR, Fluorescence spectrophotometer
 - Writing original manuscript and reviewing the manuscript for publishing.
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Academics:

- Member of IQAC (Criteria-III) at Mannar Thirumalai Naicker College.
 - Member of Research Promotion & Grants Proposal Committee at Mannar Thirumalai Naicker College.
 - Staff-Co-Ordinator -Department Club (Chem Spectra Association) at Mannar Thirumalai Naicker College.
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Project Received:

- **MTNC College (Institution Sponsored Student Research Project)** for a sum of **Rs. 12,500/-** from Mannar Thirumalai Naicker College Madurai for the Project entitled **“Synthesis, characterization and optical properties of semiconductor nanocomposites for the enhanced photocatalytic and antibacterial activity”** from a period of June 2022 to April 2023.
- **MTNC College (Institution Sponsored Faculty Research Project)** for a sum of **Rs. 20,000/-** from Mannar Thirumalai Naicker College Madurai for the Project entitled **“Development of novel photocatalytic nanocomposites and their environmental application”** from a period of June 2021 to April 2022.

- **MTNC College (Institution Sponsored Faculty Research Project)** for a sum of **Rs. 20,000/-** from Mannar Thirumalai Naicker College Madurai for the Project entitled **“Fabrication of visible light photocatalytic degradation for organic pollutants and using heterogeneous nanocomposites”** from a period of June 2019 to April 2020.

Project Applied:

- **“Sonophotocatalytic Degradation of Organic Pollutants in water using semiconductor nanocomposites”** submitted to Tamil Nadu State council for Science and Technology, DOTE campus, Chennai in Feb 2020.
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Reviewer for International journals:

- Materials Today: Proceedings-Elsevier publication
- Journal of Nanostructure-University of Kashan
- International Journal of Analytical Chemistry-Hindawi publication
- Journal of Nanomaterials-Hindawi publication.
- Ionics-Springer Publication

Publications:

- 1) **V. Ramasamy Raja**, K.Muthupandi, L.Nithya, “Preparation and Characterization of NiO-WO₃ nanocomposite with enhanced photocatalytic activity under visible light irradiation” Journal of Nanostructures, 12 (2022) 353-365.
- 2) **V. Ramasamy Raja**, K.Muthupandi, L.Nithya, “Facile synthesis of heterogeneous CdO-NiO nanocomposite with efficient photocatalytic activity under visible light irradiation” Environmental Chemistry and Ecotoxicology, 3 (2021) 76-84.
- 3) A.Karthika, **V.Ramasamy Raja**, A.Suganthi, M.Rajaraman, “A novel electrochemical sensor for determination of hydroquinone in water using FeWO₄/SnO₂ nanocomposite immobilized modified glassy carbon electrode” Arabian Journal of Chemistry, 13 (2020) 4065–4081.
- 4) **V.Ramasamy Raja**, A.Karthika, A.Suganthi, M.Rajaraman, “Sonochemical synthesis of Novel ZnFe₂O₄/CeO₂ Heterojunction with Highly Enhanced Visible Light Photocatalytic activity” Solid State Ionics, 332 (2019) 55-62.
- 5) A.Karthika, **V.Ramasamy Raja**, A.Suganthi, M.Rajaraman, “Electrochemical behaviour and voltammetric determination of mercury (II) ion in cupric oxide/poly vinyl alcohol nanocomposite modified glassy carbon electrode” Microchemical Journal, 145 (2019)737-744.

- 6) K.Rajasulochana, **V.Ramasamy Raja**, A.Suganthi, M.Rajajaran, "Fabrication of Hetero junction p-LaNiO₃ modified n-TiO₂ as visible light active catalyst for photocatalytic degradation of 4-Chlorophenol" International Journal of Research and Analytical Reviews, 5 (2018) 374z-386z.
- 7) **V.Ramasamy Raja**, A.Karthika, A.Suganthi, M.Rajajaran, "Facile synthesis of MnWO₄/BiOI nanocomposites and its efficient photocatalytic and photoelectrochemical activity under visible-light irradiation" Journal of Science: Advanced Materials and Devices, 3 (2018) 331-341.
- 8) **V.Ramasamy Raja**, D.Rani Rosaline, A.Suganthi, M.Rajajaran, "Ultrasonic assisted synthesis with enhanced visible-light photocatalytic activity of NiO/Ag₃VO₄ nanocomposite and its Antibacterial activity" Ultrasonics- Sonochemistry, 44 (2018) 73-85.
- 9) **V.Ramasamy Raja**, D.Rani Rosaline, A.Suganthi, M.Rajajaran, "Facile sonochemical synthesis of Zn₂SnO₄-V₂O₅ nanocomposite as an effective photocatalyst for degradation of Eosin Yellow" Ultrasonics-Sonochemistry, 44 (2018) 310-318.
- 10) **V.Ramasamy Raja**, D. Rani Rosaline, A. Suganthi, M. Rajajaran, Facile fabrication of PbS/MoS₂ nanocomposite photocatalyst with efficient photocatalytic activity under visible light, Solid State Sciences, 67 (2017) 99-108.

Conference/ Seminars / Workshop – organized:

- 1) Organizing Committee Member of **Second International Conference on Frontiers in Chemistry and Material Science, (ICFCMS 22)**, organised by The Department of Chemistry, Mannar Thirumalai Naicker College, Madurai held on 19 and 20 December 2022.
 - 2) Co-Convenor of **International Conference on Frontiers in Chemistry and Material Science, (ICFCMS 21)**, organised by The Department of Chemistry, Mannar Thirumalai Naicker College, Madurai held on 21 and 22 December 2022.
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Awards and Honours:

- The Best Researcher Award (Science) for the Year 2022-2023 in “Trio Fiesta” Felicitation Ceremony for the Honourable Secretary Teachers Day & Awards Ceremony on 5th September 2023 Organized by Mannar Thirumalai Naicker College, Madurai-04.

Research Articles presented/participated in Conference Proceedings:

- 1) Presented a paper entitled “**Facile Synthesis of MnWO₄/BiSbO₄ Nanocomposites and their Efficient Photocatalytic Activities Under the Visible Light Irradiation**” in the One Day International Conference on Emerging Trends in Materials Science (ETMS- 2024) held on 23rd February 2024 at Saraswathi Narayanan College, Madurai-22
- 2) Participated in the One Day International Conference (online mode) On **Functional Nanomaterials and Nanodevices** (ICFNN 2023) held on 26th September, 2023 at Chettinad Academy of Research and Education, Kelambakkam, Chennai.
- 3) Presented a paper entitled “**Solar facile, Novel synthesis of iron-doped ZnO-Graphitic carbon nitrite under photocatalytic degradation of organic effluents**” in the Second International Conference on Frontiers in Chemistry and Material Science (ICFCMS- 2022) held on 19th &20th Dec 2022 at Mannar Thirumalai Naicker College, Madurai-04
- 4) Presented a paper entitled “**Anthracene derived Schiff base Co (II) as selective colorimetric and fluorescent sensor with cytotoxicity studies and real sample analysis**” in the Second International Conference on Frontiers in Chemistry and Material Science (ICFCMS- 2022) held on 19th &20th Dec 2022 at Mannar Thirumalai Naicker College, Madurai-04.
- 5) Presented a paper entitled “**Fabrication of CuO-CeO₂ nanocomposites and its photocatalytic activity under visible Light irradiation**” in the Emerging Trends in Engineering Science (ETES-2022) held on 27th May 2022at Karpagam University, Coimbatore-21.
- 6) Presented a paper entitled “**Synthesis and characterization of novel ZnFe₂O₄/CeO₂ heterojunction Nanocomposite with enhanced visible-light-driven photocatalytic degradation of malachite green.**” in the International Conference on Functional Materials (ICFM- 2017) held on 07th & 08th Sep-2017 at Thiagarajar College, Madurai-09.
- 7) Presented a paper entitled “**Novel NiO/Ag₃VO₄ Composite for Efficient Degradation of Organic Pollutants under visible-light**” in the Frontier Areas in Chemical Technologies – (FACTs-2017) held on 06th&08th July-2017at Alagappa University, Karaikudi-03.

- 8) Presented a paper entitled **“Fabrication of Novel Zn₂SnO₄/V₂O₅ Composite for degradation of Eosin Yellow under visible light irradiation”** in the Frontier Areas in Chemical Technologies -2016 (FACTs- 2016) held on 21st &23rd Mar-2016 at Alagappa University, Karaikudi-03.
- 9) Presented a paper entitled **“BiOI/CeO₂ Nanocomposites as high-performance photocatalysts for the degradation of Ciprofloxacin Hydrochloride”** in the International Conference Nanomaterials for Energy, Environment, Catalysis and Sensors (ICNEECS– 2015) held on 11th &12th Dec 2015at Madurai Kamaraj University, Madurai-21.
- 10) Presented a paper entitled **“Efficient photocatalytic degradation of Methylene Blue by PbS/MoS₂composite under visible light irradiation”** in the Frontier Areas in Chemistry (FAC-2015) held on 26th &27th Feb 2015 at Thiagarajar College, Madurai-09.

Other Experience: FDP/Conference/Workshop Attended:
Faculty Development Programmes (FDP) attended:

S. No	Name of the Professional Development Programme	Date and No of Days	Name and address of the Institution imparting training
1.	Faculty Enhancement Programme on Insights of National Educational Policy (NEP-2020)	18 th March 2023 & 1 Day	Mannar Thirumalai Naicker College, Madurai-04
2.	Faculty Enhancement Programme on Consultancy and Corporate Training	17 th March 2023 & 1 Day	Mannar Thirumalai Naicker College, Madurai-04
3.	FDP on Blooms Taxonomy in Teaching and Learning	16 th February 2023	SanSnow ‘s Nobel Professional Foundation
4.	FDP on Research Methodology	2 nd to 7 th May2022 & 7 Days	Amar Sewa Mandal’s Kamla Nehru Mahavidyalaya-Nagpur
5.	NPTEL-AICTE-FDP- Industrial Inorganic Chemistry	January-April-2022 & 4 Months	Indian Institute of Technology Kharagpur
6.	FDP on Emerging Trends in Chemistry	13 th to 15 th December2021& 3 Days	Kongu Engineering College-60
7.	FDP on Emerging Trends in Nanotechnology	09 th to 13 th November 2021& 5 Days	Vishnu Institute of Technology, Bhimavaram-202

8.	FDP on Advanced Materials for future Science	6 th to 13 th September 2021 & 8 Days	Jeppiar Engineering College, Chennai-19
9.	FDP on Effective Teaching Techniques and Skills for Career Advancement	23 rd to 28 th June 2021 & 6 Days	Sao Chang College-Nagaland-12
10.	Faculty enrichment programme on chemical sciences	12 th March 2021 & 1 Day	Vivekananda College, Trichy
11.	FDP on Contemporary Amelioration in Nano Structured Materials	21 st to 27 th August 2020 & 7 Days	Jeppiaar Engineering College, Chennai
12.	FDP on Materials Science & Nanotechnology	03 rd - 17 th August 2020 & 15 Days	B.S.Abdur Rahman Crescent Institute of Science and Technology, Vandalur
13.	FDP on Research in Energy Technologies	6 th – 11 th July 2020 & 6 Days	Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune
14.	FDP on Research Opportunities in Advanced Manufacturing Processes	22 nd – 28 th June 2020 & 7 Days	Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune
15.	FDP on Future Materials: Nanocomposite	15 th – 21 st June 2020 & 7 Days	Bharati Vidyapeeth (Deemed to be University) College of Engineering, Pune
16.	FDP on Advancements in Materials Science	5 th – 6 th June 2020 & 2 Days	Jeppiaar Institute of Technology, Chennai
17.	FDP on Advanced Molecular Chemistry	1 st - 3 rd June 2020 & 3 Days	Arulmigu Palaniandavar College, Palani
18.	Faculty Enrichment Programme	13 th – 19 th May 2020 & 2 Days	Mannar Thirumalai Naicker College Madurai-04

Workshops / Seminars / Conference attended:

S.No	Name of the Programme	Name of the Institution	Date
1.	Smart Materials and its Applications	Sethu Institute of Technology	29 th December 2023
2.	Intellectual Property Rights	Mannar Thirumalai Naicker College, Maduari-04	16 th - 17 th October 2023

3.	Faculty Research Programme on Dynamics of Research Publications	Mannar Thirumalai Naicker College, Maduari-04	15 th -16 th September 2022
4.	Education 4.0 for sustainable Economic Development	Mannar Thirumalai Naicker College , Maduari-04	27 th April 2022
5.	Raman Spectroscopy and its applications in Material Science	Sethu Institute of Technology- Virudhunagar	28 th January 2022
6.	Emerging Trends in Chemistry	Kongu Engineering College-Erode	13 th -15 th December 2021
7.	Emerging Materials in Chemistry	Kamaraj College-Thoothukudi	23 rd October 2021
8.	Copolymer based metal catalyst application for environmental protection	Kumaraguru College of Technology- Coimbatore	12 th October 2021
9.	Recent Advances in Chemistry	Govt. G.N.A. PG College-Bhatapara	26 th July 2021
10.	Effective Teaching Techniques and Skills for Career Advancement	Sao Chang College, Tuensang, Nagaland.	23 rd – 28 th June 2021
11.	Climate Change and Human Health Implications	B. S. Abdur Rahman Crescent Institute of Science and Technology- Chennai	5 th June 2021
12.	Outcome – Based Education (OBE) and National Assessment and Accreditation Council (NAAC)	G.S.Mandal's Maharashtra Institute of Technology-Nagpur	14 th & 15 th May 2021
13.	Implementation of NEP 2020 Under AICTE Training and Learning (ATAL) Theme Reinvigorating Human Capital through Excellence in Education and Multilingualism	Kalinga University-Chhattisgarh	1 st May 2021
14.	Future Generation Solar Cells	Nehru Institute of Technology, Coimbatore	04 th July 2020
15.	New Product Design & Development	Samarth Group of Institutions College of Engineering-Pune-10	01 st July 2020
16.	Recent Trends in Chemistry	ASC College, Ramanandnagar, Sangli, Maharashtra	27 th June 2020
17.	Recent Trends in Sustainable Chemistry-2020	Pachaiyappa's College, Chennai	17 th June 2020
18.	Metal Free Photocatalysts for	Thiagarajar College, Madurai-04	27 th May

	Environment Enhancing		2020
19.	Quality Assessment in Higher Education: A Comparison of International Frameworks	Nadar Mahajana Sangam S.Vellaichamy Nadar College, Madurai	25 th May 2020
20.	Materials for energy, Environment and Healthcare Applications	The Gandhigram Rural Institute- ,Gandhigram	21 st -22 nd May 2020
21.	Functional Novel Materials for Electrochemical Sensors and Energy Storage Devices	Thiagarajar College, Madurai-04	15 th May 2020

Workshop/Conference/FDP Attended in MTNC:

S. No	International/ National/ State Level	Title of the Workshop/Conference	Name of the Institution/University	dt/mm/yr
1.	State level	Faculty Enhancement Programme on Insights of National Educational Policy (NEP-2020)	MTNC, Madurai- 04	18 th March 2023
2.	State level	Faculty Enhancement Programme on Consultancy and Corporate Training	MTNC, Madurai- 04	17 th March 2023
3.	State level	Faculty Research Programme on Dynamics of Research Publications	MTNC, Madurai- 04	15 th -16 th September 2022
4.	Faculty Enhancement Programme	Education 4.0 for Sustainable Economic Development	MTNC, Madurai-04	27 th April 2022
5.	Faculty Enhancement Programme	Enhancing Quality by Unearthing Innovative Practices-EQUIP-2022	IQAC Cluster MTNC and A.P.C Mahalaxmi College	18 th to 24 th April 2022
6.	National Webinar	Bio diversity – life insurance for our changing world	MTNC, Madurai- 04	26 th May 2021
7.	State Webinar	Bio Diversity	MTNC, Madurai- 04	22 nd May 2020
8.	National Webinar	Online National Faculty Enrichment Programme	MTNC, Madurai- 04	13 th - 19 th May 2020
9.	State level	Quality Assurance and Sustenance in Higher	MTNC, Madurai- 04	11 th March 2020

		Education		
10.	State level	21st Century Skills	MTNC, Madurai- 04	5 th March 2020
11.	State level	e-Content Development and Digital Tools Usage	MTNC, Madurai- 04	29 th February 2020
12.	State level	Research Writing and Publications: Theory and Practice	MTNC, Madurai- 04	19 th October 2019
13.	State level	Outcome Based Education	MTNC, Madurai- 04	28 th August 2019

Personal Details:

Name : Dr.V.Ramasamy Raja
Father Name : R.Viruthachalam
Sex : Male
Date of birth : 15.06.1989
Nationality : Indian
Marital status : Married
Languages Known : English and Tamil
Permanent Address : 22.2 Mankatti Theppa kulam Road-625 106.
Mobile No : 9047052614

DECLARATION

I hereby declare that the above information is factually correct to the best of my Knowledge and belief.

V. Ramasamy Raja

(Dr. V. RAMASAMY RAJA)