


Name of the Teaching Staff	Dr. K. Parameswari			
Designation	Associate Professor			
Department / School	CHEMISTRY / SSAMM			
Date of Joining the Institution	30-07-2011			
Qualification with Class / Grade	UG	PG	Ph.D.	
	B.Sc, I	M.Sc, I	I	
Area of Specialization	Electroorganic Synthesis using TiO ₂ /Ti electrode			
Research Interests	Modified Electrodes, Textile dyeing wastewater treatment Electrocatalysts			
Subjects Teaching	Under Graduate		Post Graduate	
	<p>Applied chemistry, Environmental sciences, Elective Subject – Evolution of Materials, Applied Chemistry Lab Free Elective Subject- Chemistry in Everyday Life, Value Education, Soft Skills</p>		<ul style="list-style-type: none"> • Reaction Mechanism and Steochemistry, Chemical bonding and Nuclear Chemistry, • Materials Chemistry, Physical Chemistry, Coordination Chemistry, Fuel Cells and Energy Storage Devices, Basic Inorganic Chemistry and Nuclear Chemistry for Basic Inorganic Chemistry M.Sc (Integrated NanoScience) • Electrochemical Water Processing and Water Treatment - M.Tech (IWRM) • Qualitative Inorganic Analysis Lab, Modern Instrumentation Lab, Preparative Inorganic Lab (I M.Sc Chemistry) • Qualitative Organic Analysis Lab (I M.Sc Inte. Nano Science) 	

Total Experience in Years	Teaching	Industry	Research	
	17	7	14	
Papers Published	National	03	International	07
Papers Presented in Conference	National	04	International	17
Conferences / Symposiums / Seminars / Workshops Participated	National	07	International	17
FDP / STTP / MDP / Summer / Winter School attended	<ol style="list-style-type: none"> 1. Training cum Workshop on Assessing Communicative Competence of Learners Organized by National Testing Service India CIIL, Mysore MHRD, GOI, in collaboration with English Department, Karunya University from 29th 31st October 2012. 2. Mission 10X workshop on High Impact Teaching Skills conducted by Wipro at Karunya University from 25th to 29th April 2011. 3. Faculty Development programme on Improving Effectiveness and Quality of Engineering Education at Karunya University from 30th to 31st March 2016. 			
M.Phil. / Ph.D. Guide ship	Field		University	
	Electrochemistry		Karunya University	
Ph.D. Projects Guided	Ph.D.s	nil	Project at Master's Level	M.Phil: 01 M.Sc: 06
Professional Memberships	Member in Nanoscience and Nanotechnology Society - Mahatma Gandhi University, Kottayam, Kerala			
Consultancy Activities	-			
Awards & Honours	<ol style="list-style-type: none"> 1. Best Teacher Award for the year 2012 in Karunya University 2. Aqua Foundation Excellence Award for the year 2016 under the category of Development of Technology from Aqua Foundation, New Delhi.. 3. Achiever's Award 2016-17 from Karunya University for obtaining Funded project from the Ministry of Science and Technology (DST WRI) 4. Best Paper Award for the title "Performance Evaluation Of Electrodes TiO₂/Zn By The Thermal Decomposition Of TiCl₃ And TTIP In The Treatment Of Textile Dyeing Wastewater By Electrocoagulation Process – A Comparative Study, International Conference on Wastewater Management - (ICWW-2017), 17 to 19th August 2017, Kumaraguru College of Technology, Coimbatore 			
Grants Fetched	1. Rs 40,000/ under 'Karunya Seed Money Grant'- Photodegradation			

	<p>of organic dyestuff on the composite material of TiO₂/cyclodextrin and carbon nanotubes</p> <p>2. Project “A Novel TiO₂ coated Aluminium Electrode (TiO₂/Al) for treatment of textile dyeing wastewater using real time controlled multichannel electrocoagulation process” of Rs 37,09,600 Lakhs. DST/TM/WTI/2K16//237/(G) from May 2017 to April 2020.</p>
Interaction with Professional Institutions	-
Educational Details	<p>Karunya University Ph.D Department of Chemistry, 2011 Thesis: ‘Preparation, Characterization and Application of Ti/TiO₂ in Electroorganic Synthesis’</p> <p>Bharathiyar University, M.Phil Chemistry 2005 Coimbatore, India</p> <p>Bharathiyar University, M.Sc Chemistry 1999 Coimbatore, India</p> <p>Madurai Kamaraj B.Sc Chem, Phy, 1987 University, Madurai, Maths, India</p>
Experience	
Contact Details	Room No : 009 Building: SSAAM Mobile: 9787337589 Intercom: 4001 E-mail: parameswari@karunya.edu Webpage(if any)
<p><u>Papers Published</u></p> <ol style="list-style-type: none"> 1. K.Parameswari, V.Chinnusamy et al ‘Synthesis, characterization, electro chemistry, catalytic and biological activities of ruthenium(III) complexes with bidentate N, O/S donor ligands’ Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy Nov 2006;65(3-4): p 678- 83. (cited by 79) 2. K.Parameswari, C.Joseph Kennady ‘Structural and Electrochemical Properties of Ti/TiO₂ Electrode Prepared from TiCl₃ by Thermal Decomposition Method’ Journal of the Electrochemical Society of India, vol No 59 No ½ Jan & April 2010 p 24-28. 3. K.Parameswari, C.Joseph Kennady ‘Crystalline structure and electro organic application of Ti/TiO₂’ Karunya Journal of Research, Vol 1 Iss 3 Sep 2011. 	

4. **K.Parameswari**, C.Joseph Kennady 'Properties and Electro-Organic Applications of Nano crystalline Ti/TiO₂ Electrode Prepared by Anodizing Method' Journal of the Electrochemical Society of India, Vol. No. 61 -1 - January 2012, p 12-17.
5. **K.Parameswari**, C.Joseph Kennady 'Surface Morphology, Electrocatalytic Activity, Corrosion Resistance and Electro-organic Application of Ti/TiO₂ prepared by Thermal Decomposition of TTIP' International Journal of Applied Sciences and Nanotechnology, Issue 1, 2013, p 67-73.
6. **K.Parameswari**, C.Joseph Kennady, 'Comparative Study of Preparation, Phase formation and Application of Ti/TiO₂ electrode prepared by thermal decomposition of TiCl₃ with HNO₃/H₂O₂' Chem Sci Rev Lett, 2014, 3(11) 224-230.
7. Simon Wicki, Jegathambal.P, **Parameswari.K**, James EJ, "Continuous Flow Column Study on Biosorption of Reactive Dyes Using Cationic Protein from Moringa Oleifera Seeds" Journal of Organic and Inorganic Chemistry Vol 1 No 1:7, p 1-5 2015
8. R. R. Nisha, P. Jegathambal, **K. Parameswari**, K. Kirupa "Biocompatible water softening system using cationic protein from *moringa oleifera* extract" Applied Water Science July 2017, pp 1 – 9. DOI 10.1007/s13201-017-0591-8 (Springer)
9. U.Pramodh Kumar, S.Saranya, **K.Parameswari**, C.Joseph Kennady 'Influence of p-hydroxy benzaldehyde on the corrosion properties of Ni–W coating on mild steel" Voprosy khimii i khimicheskoi tekhnologii, (Issues of Chemistry and Chemical Technology) 2017, No. 5 pp 11-18.
10. Geenu Kurian, K,Parameswari, P.Jegathambal "Performance Evaluation of Electrodes TiO₂/Zn and zinc in the Treatment of disperse dye by Electrocoagulation Process – A Comparative Study". Research Journal of Chemistry and Environment Vol. 22 (10) October (2018). P 27-33.

Papers Presented in Conference

1. **K. Parameswari**, C.Joseph Kennady 'Novel route for the preparation of thermally coated Ti/TiO₂ electrode' National Conference on Corrosion Assessment and its Control, Dec 21-22, 2009 Thiyyagaraja Eng. College, Madurai.
2. **K.Parameswari**, C.Joseph Kennady 'Preparation and Characteristics of Ti/TiO₂ by Anodizing method' 15th National Convention of Electrochemists (NCE-15) Feb 18, 19th 2010 VIT, Vellore.

3. **K.Parameswari**, C.Joseph Kennady ‘Surface morphology, electrocatalytic activity, corrosion resistance and electro-organic application of Ti/TiO₂ electrode prepared by thermal decomposition of titanium trichloride and H₂O₂, **International Conference on Macro- and Supramolecular Architecture and Materials MAM-12**, November 21-25 2012.
4. **K.Parameswari**, C.Joseph Kennady ‘Comparative study of Ti/TiO₂ electrode from TiCl₃ with HNO₃/H₂O₂’ **International Conference on Emerging Trends in Chemical Sciences (IETC2013)** Dec 5- 7th 2013.
5. **K.Parameswari**, C.Joseph Kennady “Phase Manipulation in TiO₂ for Better Electro and Photocatalytic Effect” **Second International Conference on Nanostructured Materials and Nanocomposites (ICNM 2014)**, Mahatma Gandhi University, Kottayam, Kerala. Dec 19 **21 2014**.
6. Ms.Nisha .R.R , Jegathambal.P, **Parameswari. K** ‘Water Purification Using f-sand (nano) with Moringa Oleifera Cationic Protein in Rural Communities’ Periyar Maniammai University, International Conference on Disaster Mitigation and Management Towards Sustainable Development - IDMS Dec 2013.
7. Ms.Nisha .R.R, Jegathambal.P, **Parameswari. K**, Ochiche Andrew Lilus Biosynthesis of Silver nanoparticles from leaf extract of Moringa Oleifera for water purification. National Conference on Recent Advances in Civil Engineering Research, Karunya University, April 2014.
8. **K.Parameswari**, Praveena “ Photodegradation of amino aromatic on the composite material of TiO₂/Chitosan National Conference on “Recent Advances in Chemistry” organized by Royal Alfred Nobel Association, PG and Department of Chemistry, E.R.K Arts and Science College held on 7th August 2015.
9. **K.Parameswari**, C.Joseph Kennady “Phase Manipulation in TiO₂ Coating on Titanium Substrate by Thermal Decomposition Method for Better Electrocatalytic and Photocatalytic Effect” **International Conference on Nanomaterials and Nanotechnology (NANO-2015) KSR rangasamy College of Technology, Thiruchengodu, Tamilnadu, Dec 07-10, 2015**.
10. P.Jegathambal, K.Parameswari, K.Vinodha, T.Shylu, M.Surya and Katharina Lehne “Treatment of Textile Dyeing Waste Water using TiO₂/Al Electrode in Electrocoagulation Process” in International Conference Water from Pollution to Purification (ICW 2016 Mahatma Gandhi University, Kottayam, Kerala. Dec 12-15 2016.
11. P. Jegathambal, T. Preeti, Rabeb and K. Parameswari “Impact of Engineered Nanoparticles on Water Quality Parameters in the Aqueous Environment” in **International Conference Water from Pollution to Purification (ICW 2016) Mahatma Gandhi University, Kottayam Kerala. Dec 12-15 2016**.
12. R. Karthika, **K . Parameswari**, Geenu Kurian, Paul P. Alias and P.Jegathambal “Decolourization of Textile Dyeing Wastewater using TiO₂/Zn by the Thermal Decomposition of TTIP by Electrocoagulation Process” on Fifth National Conference on Advanced Materials and Applications NCAFMA 2017 March 30-31st 2017 in Kalasalingam

University, TN.

13. Paul P. Alias., **K. Parameswari**, R. Karthika Geenu Kurian, and P. Jegathambal “Treatment of Textile Dyeing Wastewater using TiO_2/SS by Electrocoagulation Process” on Fifth National Conference on Advanced Materials and Applications NCAFMA 2017 March 30-31st 2017 in Kalasalingam University, TN.
14. Geenu Kurian **K. Parameswari**, R. Karthika, Paul P. Alias., and P. Jegathambal Treatment of Textile Dyeing Waste Water using TiO_2/Zn Electrode from TiCl_3 in Electrocoagulation Process” on Fifth National Conference on Advanced Materials and Applications NCAFMA 2017 March 30-31st 2017 in Kalasalingam University, TN.
15. P. Jegathambal, Khoulood. Dridi, Krifa. Arij, **K. Parameswari** and Ruban, High Performance Membrane based Capacitive Deionization Unit (MCDI) with Nano Graphene Oxide Coated Electrodes in Treatment of Textile Dyeing Effluent, International Conference on Wastewater Management - (ICWW-2017), 17th to 19th August 2017, Kumaraguru College of Technology, Coimbatore.
16. **K. Parameswari**, P. Sopna, S. Abdul Gafoor and P. Jegathambal Performance Evaluation Of Electrodes TiO_2/Zn By The Thermal Decomposition Of TiCl_3 And TTIP In The Treatment Of Textile Dyeing Wastewater By Electrocoagulation Process – A Comparative Study, International Conference on Wastewater Management - (ICWW-2017), 17th to 19th August 2017, Kumaraguru College of Technology, Coimbatore.
17. “**Removal Of Disperse Dye Using Zn And SS Electrode In Electrocoagulation Process.– A Comparative Study**” **K. Mano Magdalin Rubella**, K. Parameswari and P. Jegathambal Scoping Workshop and **National Conference** on Challenges And Opportunities In Textile Wastewater Management conducted on 19—20 September 2017, Karunya University.
18. Poster Presentation “**Novel TiO_2/Al Electrodes in Textile Dyeing Waste Water Treatment**” in the department of Pre-Engineering Programme-Division of Chemistry, Karunya University on 29th Sep 2017.
19. Poster Presentation **Treatment of Textile Dyeing Waste Water using TiO_2/Al Electrode by Spray Pyrolysis in Electrocoagulation Process** K. Mano Magdalin Rubella¹, K. Parameswari¹ and P. Jegathambal² on International Conference on Engineering and Advancement in Technology 2018(ICEAT-2018) on March 22, 23rd in SriKrishna Engineering College of Technology, Coimbatore.
19. Poster Presentation **Electrocoagulation Process using TiO_2/Zn electrodes for the treatment of disperse dye** M.Sangeetha², K. Parameswari¹, S. Abdul Gafoor³ and P. Jegathambal³ on International Conference on Engineering and Advancement in Technology 2018(ICEAT-2018) on March 22, 23rd in SriKrishna Engineering College of Technology, Coimbatore.
20. Poster Presentation on **Treatment of Textile Dyeing Waste Water Laded with Disperse dye using TiO_2/Al by Electrocoagulation** R. Shanmugapriya², K. Parameswari¹, P. Sopna³ and P. Jegathambal³ International Conference on Engineering and Advancement in Technology 2018(ICEAT-2018) on March 22, 23rd in SriKrishna Engineering College of Technology, Coimbatore.
21. Paper Presentation on **Treatment of Textile Dyeing Synthetic Wastewater in EC process**

using TiO₂/Al prepared by Thermal Decomposition and Spray Pyrolysis - A comparative Study K. Mano Magdalin Rubella¹, **K. Parameswari**¹ and P. Jegathambal² National seminar on Innovations in Chemical Sciences and Green Technology 6,7th Sep 2018, PSGR Krishnammal College for Women, Coimbatore.

Patents

A method for decolourization of dyeing waste water by electrocoagulation using titanium dioxide coated Aluminium electrode” Ref. No./Application No. 2474/CHE/2015, C.B.R No. 9704.

Books / Book Chapters

1. Surface morphology, Electrocatalytic activity, Corrosion resistance and Electro-organic application of Ti/TiO₂ electrode prepared by thermal decomposition of Titanium Trichloride and H₂O₂” **K.Parameswari and C. Joseph Kennady, Advanced Nano Materials for Industrial Applications,** pp. **317-324** (2012)
© **Bloomsbury Publishing India Pvt. Ltd.-ISBN: 978- 93- 85436- 93- 2**
2. “Phase Manipulation in TiO₂ Coating on Titanium Substrate by Thermal Decomposition Method for Better Electrocatalytic and Photocatalytic Effect” **K.Parameswari and C. Joseph Kennady, Advanced Nano Materials: Synthesis and Applications, pp. 231-236 (2015)**
© **Bloomsbury Publishing India Pvt. Ltd.- ISBN:978-93-85436-74-1**
3. Phase Manipulation in TiO₂ for Better Electrocatalytic and Photocatalytic Effect Part II (Nanomaterials as Catalyst) Chapter 11 **K.Parameswari and C. Joseph Kennady, Nanomaterials, Apple Academy Press.**

Research Group Members