


Name of the Teaching Staff	Dr. A. OBADIAH			
Designation	ASSISTANT PROFESSOR (7000)			
Department	Department of Applied Chemistry			
School	School of Sciences, Arts, Media and Management			
Date of Joining the Institution	06.07.2012			
Qualification with Specialization	UG	PG	Ph.D.	
	I	II	Commended	
Value Additions	Completed the PCT (Patent Cooperation Treaty) Distance Learning Course			
Research Expertise	Alternative fuel, Natural Products, Organic Synthesis			
Subjects Teaching	Under Graduate		Post Graduate	
	<ol style="list-style-type: none"> 1. Applied Chemistry 2. Applied Engineering Chemistry 3. Environmental Studies 4. Analytical Chemistry and Spectroscopy 5. Basic Organic Chemistry 6. Basic Inorganic Chemistry 7. Chemical Bonding and concepts of Acids and Bases 8. Organic reaction intermediates and stereochemistry 9. Atomic Structure, Thermodynamics and Electrochemistry 10. Physical Chemistry 11. Applied Chemistry for Food Processing Technology. 12. Engineering Chemistry 13. Waste to Energy 14. Fundamentals of Forensic Science Laboratory 15. Forensic Science Laboratory 16. Crime and Society 		<ol style="list-style-type: none"> 1. Analytical Chemistry II 2. Organic Chemistry II 3. Polymer Chemistry 4. Waste to Energy 5. Qualitative and Quantitative Organic Analysis lab 6. Synthetic Organic Chemistry Lab 7. Essentials of Forensic Chemistry. 8. Nuclear Chemistry and Solid State Chemistry 	
Total Experience in Years	Teaching	Industry	Research	
	9 Years	1 Year	14 Year	
Papers Published	National	4	International	22
Papers Presented in Conference	National	12	International	8
Conferences / Symposiums / Seminars / Workshops Participated	National	13	International	10

FDP / STTP / MDP / Summer / Winter School attended	1			
M.Phil. / Ph.D. Guide ship	Field		University	
	Alternative fuel, Natural Products, Organic Synthesis		Guideship in Karunya University	
Ph.D. Projects Guided	Ph.D.s	2	Project at Master's Level	7
Professional Memberships	<ol style="list-style-type: none"> 1. Life Member in Renewable Energy Society of India (RESI) 2. Life Member in Oil Technologist Association of India (OTAI) 3. Member in Indian Science Congress (ISC) 4. Student Member American Standard Testing Method (ASTM) 5. Member of International Association of Engineers (IAENG) 6. Life Member of International Society for Research and Development (ISRDR). 			
Consultancy Activities	-			
Awards & Honours	<ol style="list-style-type: none"> 1. TNSTSC Student Project award – 2007 2. Best Research paper award in Karunya University – 2012 3. Karunya Short – Term Research Grant – 2013 and 2018. 			
Grants Fetched	The Research Project sanctioned by DST – TDT – WM Rs. 69,47,144/- for the project entitled of “ Recovery of Value added Materials from non hazardous wastes of silkworm industries ” 2020 – 2023.			
Interaction with Professional Institutions	Collaborative Projects with other colleges and Research institute.			
Educational Details with Institute / University Name	<p>B.Sc. – 2002 - 2005 V. O. C. College, Manonmanium Sundaranar University, Thoothukudi, India</p> <p>M.Sc. – 2005 – 2007 V. O. C. College, Manonmanium Sundaranar University, Thoothukudi, India</p> <p>Ph.D. - 2008 – 2013 Department of Chemistry Karunya University, Coimbatore, India</p> <p>Thesis entitled “Extraction, characterization and application of certain antioxidants” (Thesis submitted in March 2013 and Awarded Ph.D. Degree in June 2013)</p>			
Experience	<ul style="list-style-type: none"> • Working as R&D Chemist in <i>Fischer Chemic limited, Research and Development</i> in Thiruvallur district (2007 - 2008). 			

- Working as **Junior Research Fellow**, DST project , Host institute is Karunya University, Coimbatore (2008 – 2012)
- Currently working as a **Assistant Professor**, Karunya Institute of Technology and Sciences, Coimbatore (2012 – Till date).

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 ResearcherID: N-1095-2016, Scopus Author ID: 54380594300

Papers Published

1. Subramanian Ramanathan, M. SasiKumar, N.Radhika, **Asir Obadiah**, Arulappan Durairaj, G.Helen Swetha, Palanisamy Santhoshkumar, I.Sharmila Lydia, Samuel Vasanthkumar, Musa paradisiaca reduced graphene oxide (BRGO) /MWCNT-Fe₃O₄ nanocomposite for supercapacitor and photocatalytic application, Materials today : Proceedings, 2021 In Press
2. Subramanian Ramanathan, M. Sasikumar, S. Prince Makarios Paul, **Asir Obadiah**, Abiram Angamuthu, Palanisamy Santhoshkumar, Arulappan Durairaj, Samuel Vasanthkumar , Low cost electrochemical composite material of paper cup waste carbon (P-carbon) and Fluorescein for supercapacitor application, Materials today : Proceedings, 2021 In Press
3. Romiyo Justinabraham. Arulappan Durairaj, Subramanian Ramanathan, **Asir Obadiah**, Ramachandran John wesley, XiaomengLv, Samuel Vasanthkumar, Synthesis of porous g-C₃N₄ doped vanadyl phosphate for supercapattery application, Journal of Energy Storage, Volume 40, August 2021, 102786
4. Ramachandran JohnWesley, ArulappanDurairaj, SubramanianRamanathan, **Asir Obadiah**, RomiyoJustinabraham, XiaomengLv, SamuelVasanthkumar, Potato peels biochar composite with copper phthalocyanine for energy storage application, Diamond and Related Materials, 2021, 115, 108360.
5. P. Santhoshkumar, K. Bharathkumar, **A. Obadiah**, R. Mohanpriya, A. Durairaj, S. Ramanathan, S. Vasanthkumar, Synthesis, Molecular docking, cytotoxicity and antioxidant activity evaluation of 4-(3-chloro-1,4-dioxo-1,4-dihydronaphthalen-2-ylamino)benzenesulfonamide derivatives, International Journal of Phamaceutical Research, 2020. 12 (1), 134 – 168.
6. P. Santhoshkumar, D. Premnath, **A. Obadiah**, A. Durairaj, S. Ramanathan, S. Vasanthkumar, Synthesis, Structure Characterization, and Biological Evaluation of3-Amino-5-(5-Oxo-5H-Benzo[a]Phenothiazin-6-ylamino)benzoicacid Derivatives via Molecular Docking, Cytotoxicity, and Antioxidant studies, Current Pharmacology Reports, 2019, 5 (6), 440 – 459.
7. S. Ramanathan, E. Elanthamilan, **A. Obadiah**, A. Durairaj, P. Santhoshkumar, J. Princy Merlin, S. Ramasundaram, S. Vasanthkumar, Electrochemical detection of Trace Amounts of Arsenic (III) in Poultry Usin a Graphene Oxide –Bis(2-(4,5-diphenyl-1H-imidazol-2-yl)phenoxy)cobalt Composite Modified Electrode,

2019, 48(7), 4498 – 4506.

8. S. Ramanathan, S. Paul Selvin, **A. Obadiah**, A. Durairaj, P. Santhoshkumar, S. Lydia, S. Ramasundaram, S. Vasanthkumar, Synthesis of reduced Graphene oxide/ZnO nanocomposites using grape fruit extract and Eichornia crassipes leaf extract and a comparative study of their photocatalytic property in degrading Rhodamine B dye, *Journal of Environmental Health Science and Engineering*, 2019, 17 (1), 195 – 207.

9. P. Santhosh Kumar, D. Premnath, **A. Obadiah**, A. Durairaj, S. Ramanathan, S. Vasanthkumar, Synthesis, Structural characterization and biological Evaluation of 3-Amino-5-(5-oxo-5H-benzo[a] phenoxazin-6-ylamino)benzoic acid Derivatives, *Asian Journal of Chemistry*, 2019, 31 (12), 2986-2994.

10. P. Santhosh Kumar, K. Bharath Kumar, **A. Obadiah**, S. Jagadish Kumar, R. Mohanapriya, A. Durairaj, S. Ramanathan, S. Vasanthkumar, Synthesis, Molecular Docking, Cytotoxicity and Antioxidant Activity evaluation of Isoindoline-1,3-dione Derivates, *Asian Journal of Chemistry*, 2019, 31 (11) 2548 – 2556.

11. A. Durairaj, T. Sakthivel, S. Ramanathan, **A. Obadiah**, S. Vasanthkumar, Hierarchical Cu₂Se nanostructures film for peroxymonosulfate activation and electro catalytic hydrogen evolution, *Journal of the Taiwan Institute of Chemical Engineers*, 2019, 99, 66 – 73.

12. A. Durairaj, T. Sakthivel, S. Ramanathan, **A. Obadiah**, S. Vasanthkumar, Conversion of laboratory paper waste into useful activated carbon: a potential supercapacitor material and a good adsorbent for organic pollutant and heavy metals, *Cellulose*, 2019, 26(5), pp. 3313–3324.

13. S. Ramanathan, E. Elanthamilan, **A. Obadiah**, S. Ramasundaram, S. Vasanthkumar, Development of a electrochemical sensor for the detection of 2,4-dichlorophenol using a polymer nanocomposite of rGO, *Journal of Materials Science: Materials in Electronics*, 2019, 30 (7), 7150 – 7162.

14. S. Ramanathan, E. Elanthamilan, **A. Obadiah**, S. Ramasundaram, S. Vasanthkumar, HRGO-Co@SnO₂ Nanocomposite for Electrochemical Detection of Hydrazine, *Journal of Electronic Materials*, 48 (1), 2019, 542 – 550.

15. A. Durairaj, D.L. Jennifer, T. Sakthivel, **A. Obadiah**, S. Vasanthkumar, Development of tungsten disulfide ZnO nanohybrid photocatalyst for organic pollutants removal, *Journal of Materials Science: Materials in Electronics*, 29 (22), 2018, 19413-19424.

16. A. Durairaj, T. Sakthivel, **A. Obadiah**, S. Vasanthkumar, Enhanced photocatalytic activity of transition metal ions doped g-C₃ N₄ nanosheet activated by PMS for organic pollutant degradation, *Journal of Materials Science: Materials in Electronics*, 29 (10), 2018, 8201-8209.

17. S.Ramanathan, E. Elanthamilan, **A.Obadiah**, S.Ramasundaram,S. Vasanthkumar, Aloe vera (L.) Burm.f. extract reduced graphene oxide for supercapacitor application, *Journal of Materials Science: Materials in Electronics* , 28(22), 2017, 16648-16657.

18. A. Durairaj, **A. Obadiah**, S. Ramanathan, S. Vasanthkumar, Synthesis, Characterization and Solvatochromic Studies Using the Solvent Polarity Parameter, E_NT, on 2-Chloro-3-Ethylamino-1,4-Naphthoquinone. *Journal of Fluorescence*, 27, 2017, 1505–1512.

19. **A. Obadiah**, G. Sahaana, S. Simon, Arun Dakshinamoorthy, S. Vasanth Kumar, Nano heterogeneous

- catalyst for the production of biodiesel from *Azadirachta indica* AND *Citrullus colocynthis*, *Int. J. Adv. Mat. Sci.*, 4 (1), 2013, 127 – 136.
20. **A. Obadiah**, G. Ajji Swaroopa, S. Vasanth Kumar, K.R. Jegannathan, Biodiesel Production using animal bone Derived solid oxide catalyst, *Bioresource Technology*, 116, 2012, 512-516. Impact factor 4.9
21. **A. Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, Studies on the Effect of Antioxidants on the Long-term Storage stability and Oxidation Stability of *Pongamia pinnata* (L.) Pierre Biodiesel, *Fuel Processing Technology*, 99, 2012, 56–63. Impact Factor : 3.4.
22. **A. Obadiah**, R. Kannan, P. Ramesh, A. Ramasubbu, S. Vasanth Kumar, Isolation of Bioactive Compounds from *Murraya koenigii* (L.) Spreng and study of their Anti oxidant Activity, *Chemistry of Natural Compounds*, 48 (1), 2012, 149 - 150. Impact Factor 1.02
23. **A. Obadiah**, R. Kannan, P. Ravichandran, A. Ramasubbu, S. Vasanth Kumar, Nano Hydrotalcite as a Novel catalyst for Biodiesel Conversion, *Digest Journal of Nanomaterials and Biostructures*, 7 (1), 2012, 321 – 327. Impact Factor 1.7
24. **A. Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, Mg–Al Hydrotalcite as Solid Base Catalyst for Biodiesel Production from *Pongamia* Oil, *Journal of Scientific and Industrial Research*. 71, 2012, 131 – 137. Impact Factor 0.57
25. **A. Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, Studies on the Effect of Antioxidants on the Long-term Storage stability and Oxidation Stability of *Jatropha* Biodiesel, *Int. J. Res. Chem. Environ.* 2 (1) 2012, 130-139.
26. R. Kannan, S. Gouse Peera, **A.Obadiah**, S. Vasanth Kumar, MnO₂ Supported POM–A Novel Nanocomposite for Dye Degradation, *Digest Journal of Nanomaterials and Biostructures*, Vol. 6, No 2, April - June 2011, p. 829 – 835. Impact Factor 1.7
27. **A.Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, Comparative Study of Conventional, Microwave and Ultrasonic Assisted method of Conversion of Biodiesel from *Pongamia* Oil, *Karunya Research Journal*, Vol.3 (1), 2011, pp. 34 -46.
28. **A. Obadiah**, P.Sudeepika, G. Nalini, A. Ramasubbu, S. Vasanth Kumar, Extraction of Isomeric Scillerene Compound from *Urginea Indica* Bulb and study of its Biological Activity, *Karunya Research Journal*, *Karunya Research Journal*, Vol.3 (1), 2011, pp. 83 -91.
29. **A. Obadiah**, V. Sathish, S. Vasanth Kumar, T. Bala Subramanian, Bio accumulation of some Heavy metals in fishes in Tuticorin coastal area, Gulf of Mannar, India, *Eco chronicle*, Vol.5, No 2, June 2010, 99 – 106.

Papers Presented in Conference

International Conferences:

1. A. Obadiah, A. Durairaj, S. Vasanthkumar, Comparative Study of *Pongamia* Oil Transesterification by Conventional and Ultrasonic Assisted Method, International conference on chemistry for renewable energy (ICCRE – 2016), 25 - 26 February 2016, Department of Chemistry, Bishop Heber College, Trichy -17.
2. A. Obadiah, S. Ramanathan, S. Vasanthkumar, Studies on the enhancement of Storage stability of

- Pongamia pinnata* biodiesel, International conference on chemistry for renewable energy (ICCRE – 2016), 25 - 26 February 2016, Department of Chemistry, Bishop Heber College, Trichy -17.
3. Arka Mandal, A. Obadiah, S. Vasanthkumar, Biodiesel Production from *Argemone mexicana* L. seeds and its characterization, International conference on Converging Biotechnological Innovations for Health, Food and Environmental welfare, 2 December to 4th December, 2015, Department of Biotechnology, Karunya University.
 4. Immanuel Premkumar, Ganesh @ Lenin.K, **A. Obadiah**, Yowan Nerthigan, Green synthesis and characterization of Silver quantum dots by aqueous leaf extract of *phyllanthus and amarus* leaves and its antibacterial activity, 3rd International Conferences on Drug Delivery, February 28 – March 1, 2014, PSG College of Pharmacy, Coimbatore.
 5. Immanuel Premkumar, Yowan Nerthigan, Lenin@Ganesh, **A. Obadiah**, Arun dakshinamurthy, Green Synthesis and Characterization of Quantum Dots synthesized by Aqueous Leaf Extract of *Phyllanthus amarus* and its Antibacterial Activity, 6th Bangalore Nano, December 4 – 6, 2013, Lalit Ashok, Bangalore.
 6. G. Sahaana, **A. Obadiah**, Arun Dakshinamurthy, S. Vasanth Kumar, An Investigation of Biodiesel synthesis from *Jatropha curcus* oil using $Ce_{0.9}Ca_{0.1}O_{1.9}$ Nanocomposite as Catalyst, International Conference on Recent Advances in Textile and Electrochemical Sciences, March 21 – 23, 2013, Department of Industrial Chemistry, Alagappa University, Karaikudi.
 7. **A. Obadiah**, Sahaana Gurusamy, Stanley Simon, Arun Dakshinamurthy, S. Vasanth Kumar, Biodiesel Production from *Citrullus colocynthis* using calcined waste animal bone as catalyst, 5th Bangalore Nano, December 5 – 7, 2012, The Lalit Ashok, Bangalore.
 8. **A. Obadiah**, V. Sathish, S. Vasanth Kumar, T. Bala Subramanian, Assessment of the impact of heavy metal contamination on Aquatic Ecosystem using fishes as Biomarkers, International conference on Science, Society and Sustainability, January 10th – 13th, 2012, Lady Doak College, Madurai.
 9. **A. Obadiah**, A. Ramasubbu, S. Vasanth Kumar, *Nigella sativa* and *Argemone mexicana* L. Seeds are Potential application for Biodiesel Production And characterization of Biodiesel, International conference on Science, Society and Sustainability, January 10th – 13th, 2012, Lady Doak College, Madurai.
 10. **A. Obadiah**, R. Kannan, P. Ravichandran, A. Ramasubbu, S. Vasanthkumar, Waste deoiled cakes of *Jatropha* and *Pongamia* seeds for Dye removal, International conference on Science, Society and Sustainability, January 10th – 13th, 2012, Lady Doak College, Madurai.
 11. **A. Obadiah**, R. Kannan, Cynthia. E. Theodore, S. Selvaraj, A. Ramasubbu, S. Vasanth Kumar, A Scillerene compound is extracted from *Urginea indica* Culb and studies of their Biological Activity, on International Conference on Drug Design & development, January 21, 2011, Nadar Saraswathi College of Arts & science Theni, Tamilnadu.
 12. **A. Obadiah**, R. Kannan, P. Ravichandran, A. Ramasubbu, S. Vasanth Kumar “Layered Double Hydroxide as a Novel Catalyst for the Transesterification of *Pongamia* Oil” International Conference on Bioresource technology – Its Applications & Achievements (7-8 October 2010), Nirmala College for

women, Coimbatore, India.

National Conferences:

1. G. Aiji Swaroopa, I. Reya Issac, K.R. Jeganathan, **A.Obadiah**, S. Vasanth Kumar, Animal waste as a source for biodiesel production, National level technical symposium [EVOGEN'11], 21st & 22nd March 2011, Karunya University, Coimbatore.
2. **A. Obadiah**, R. Kannan, S. Selvaraj, A. Ramasubbu, S. Vasanth Kumar, "Isolation of Bioactive Compounds from Menthe Peperita and Study of Their Anti oxidant Activity" National Seminar on Recent Trends in Chemistry (NSRTC - 2011), February 25 & 26 , 2011, A.V.C. College (Autonomous), Mayiladuthurai.
3. **A. Obadiah**, R. Kannan, Cynthia. E. Theodore, S. Vasanth Kumar, Isolation of Bioactive compounds from Mentha Peperita and study of their biological activity, on National conference on The challenges of Microbial technology "Technology and Microbes", 4th February 2011, Madras Christian college, Chennai.
4. R. Kannan, **A.Obadiah**, A. Ramasubbu, S. Vasanth Kumar, Microwave Assisted Synthesis of mushroom Like Nanofibres ZnO- SnO₂, on 98th Indian Science Congress 3 -7 January 2011, SRM University, Chennai.
5. A. Jegan, **A. Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, "Phytosynthesis of Silver nanoparticles using Achyranthes aspera L. and tectona grandis", National conference on Emerging trends in Nanoscience (ETN) – 21st & 22nd December 2010 at Sri Paramakalyani college, Tirunelveli, Tamilnadu.
6. Cynthia E. Theodore, S. Selvaraj, R. Kannan, **A.Obadiah**, S. Vasanth Kumar, Cu-Impregnated Manganese oxides- A Novel Nano material for Dye degradation, National level student's Symposium "Nano materials and its Application" on 3rd October 2010 at National institute of technology, Trichy
7. R. Kannan, **A.Obadiah**, P. Ravichandran, A. Ramasubbu, S. Vasanth Kumar, MnO₂- POM: A Novel Nanocomposite for Photocatalytic degradation Dye, National Conference on "Nanotechnology NCN-2010" on 24th & 25th September 2010 at SSM college of engineering Komarapalyam, India.
8. G. Nalini, P. Sudeepika, **A. Obadiah**, R. Kannan, A. Ramasubbu, S. Vasanth Kumar, Solid Phase adsorption of heavy metal using nano sized Jatropha activated carbon, on National conference on Environmental Pollution, March 31, 2010, at Karunya University, Coimbatore.

Patents

Indian Patent:

Patent title: A Portable water filter

Publication Number: 36/2020

Application Number: 202041035102

Application filling date : 14.08.2020

Field of Invention: Mechanical Engineering.

Books / Book Chapters

1. Nanostructured Manganese oxide materials for Energy and Environmental Applications, Nanotechnology – Energy and Environment, Volume 6, pp- 309 - 319 , Studium Press LLC, Houston – USA. ISBN – 1-62699-006-9.
2. Studies on the effect of antioxidants on the Long term storage stability and oxidation stability of Pongamia pinnata and Jatropha curcus biodiesel, Bio Energy – Oppotunities and Challenges, pp. 241-276, CRC Press, Taylor & Francis Group. ISBN – 13: 978-1-4987-2205-6.

Research Group Members

1. **Dr. S. Vasanthkumar – Professor, Department of Chemistry, KITS**
2. **Dr. C. N. Manoj – CEO, Pelican Biotech, Kerala**
3. **Mr. Ananda babu – Almighty silkworm Industry, Coimbatore.**
4. **Dr. P. Santhosh Kumar – Research Scholar, KITS**
5. **Dr. A. Durai Raj - Research Scholar, KITS**
6. **Dr. S. Ramanathan- Research Scholar, KITS**
7. **Mr. R. John Wesley RRK19CH004 – Research Scholar, KITS**
8. **Mr. Justin Abraham – Research Scholar, KITS.**

Any other additional details