Personal Details	KATHIRESAN A/L V.SATHASIVAM
Academic Qualifications	B.App. Sc (Hons), MSc, PhD (USM)
Administrative Duties	Registrar Commander, Malaysian Civil Defense Services (Honorary Colonel Rank)
Publications (last 5 years)	1. Kasi Marimuthu, Anne David Geraldine , <b>Sathasivam Kathiresan</b> , Rathinam Xavier, Jesu Arockiaraj , Subramaniam Sreeramanan. <i>Journal of Aquatic Food Product Technology</i> 2015, 23, 468-474.
	<b>2.</b> M. Hakim Ibrahim, S. Shahnaz S. Bakar, Luqman Musa, S. Yahud, S. Zaharah Ahmad, M. Baidi Bahari, Yu Chye Wah, <b>Kathiresan V. Sathasivam</b> , Simulation Using Finite Element Analysis in the Optimization of Inflatable Bedpan Wall Thickness, <i>Materials Science and Engineering</i> 2015, 747-751.
	<b>3.</b> Sayedur Rahman & <b>Kathiresan V. Sathasivam</b> , "Heavy Metal Adsorption onto Kappaphycus sp. from Aqueous Solutions: The Use of Error Functions for Validation of Isotherm and Kinetics Models," BioMed Research International, 2015. doi:10.1155/2015/126298.
	<b>4.</b> Winson Koe Wei Sheng, Jeevandran Sundarasekar, <b>Kathiresan Sathasivam</b> and Sreeramanan Subramaniam, "Effects of plant growth regulators on seed germination and callus induction of <i>Hylocereus costaricensis</i> " <i>Pakistan Journal of Botany</i> , 2016, 977-982.
	<b>5</b> . Sayedur Rahman & <b>Kathiresan V. Sathasivam</b> , "Heavy metal biosorption potential of a Malaysian Rhodophyte (Eucheuma denticulatum) from aqueous solutions" <i>International Journal of Environmental Science and Technology</i> 13(8), 2016.
	<b>6.</b> Neeraj K. Fuloria, Shivkanya Fuloria, Kaveti Balaji, Sundram Karupiah, <b>Kathiresan Sathasivam</b> , Ajay Jain, Ugrappa Sridevi, Malipeddi Himaja. Synthesis, Characterization And Antimicrobial Evaluation Of 2-Phenyl Proponoic Acid Derived Novel Oxadiazoles. <i>Indian Journal Of Heterocyclic Chemistry</i> : Vol. 26, 37-42, 2016,
	7. Shivkanya Fuloria, Neeraj K. Fuloria, Kaveti Balaji, Sundram Karupiah, Kathiresan Sathasivam, Ajay Jain, Ugrappa Sridevi, Malipeddi Himaja. Synthesis And Discerning Of Antimicrobial Potential Of Novel Azomethines Derived From Chloroxylenol. <i>Indian Journal of Heterocyclic Chemistry</i> : Vol. 26; 95-99; 2016.
	8. Neeraj K. Fuloria, Shivkanya Fuloria Kaveti Balaji, Sundram Karupiah, Kathiresan Sathasivam, Ajay Jain, Ugrappa Sridevi, Malipeddi Himaja. Synthesis and Evaluation Of Antimicrobial Potential Of Novel Oxadiazoles Derived From Tolyloxy Moiety. <i>Indian Journal of Heterocyclic Chemistry</i> : Vol.26, 101-105, 2016.
	9. Jagannathan Madhanagopal, Om Prakash Singh, Sundaram Sornambikai,

Abdul Hafidz Omar, **Kathiresan V. Sathasivam**, S. J. Fatihhi, Mohammed Rafiq Abdul Kadir. Enhanced wide-range monotonic piezoresistivity, reliability of Ketjenblack/deproteinized natural rubber nanocomposite, and its biomedical application. Journal of Applied Polymer Science; 2017 DOI: 10.1002/app.44981

- **10.** Neeraj Kumar Fuloria, Shivkanya Fuloria, **Kathiresan Sathasivam**, Sundram Karupiah, Kaveti Balaji, Lee Wan Jin, Ong Dee Jade And Ivy Chieng Jing Jing. Synthesis and Discerning Of Antimicrobial Potential Of Novel Oxadiazole Derivatives Of Chloroxylenol Moiety. Acta Poloniae Pharmaceutica- Drug Research, Vol. 74 No. 4 1125- 1130, 2017
- **11.** Jagannathan Madhanagopal, Om Prakash Singh, Vikram Mohan, **Kathiresan V. Sathasivam**, Abdul Hafidz Omar and Mohammed Rafiq Abdul Kadir. New Device for Intrinsic Hand Muscle Strength Measurement: An Alternative to Strain Gauge Handheld Dynamometer. Evaluation & the Health Professions. 2017. DOI: <a href="https://doi.org/10.1177/0163278717727568">https://doi.org/10.1177/0163278717727568</a>
- **12.** Shivkanya Fuloria, Neeraj Kumar Fuloria, Sundram Karupiah, **Kathiresan Sathasivam**, Saurabh Singh, Khushboo Gupta, Ajay Jain & Ugrappa Sridevi, Malipeddi Himaja and Shiva Shanker. Synthesis and discerning of antibiotic potential of PCMX based novel azetidinones. Acta Poloniae Pharmaceutica ñ Drug Research, 2017, Vol. 74 (6), 171-1715.
- **13.** Jasvin Singh, Subramani Parasuraman, **Sathasivam Kathiresan**, Antioxidant and Antidiabetic Activities of Methanolic Extract of Cinnamomum Cassia, Pharmacognosy Research 2018, Vol. 10 (3), 237-242
- 14. Selvaraju KishanRaj, Samuggam Sumitha, Balakrishnan Siventhiran, Othayakumar Thiviyaa, Kathiresan V.Sathasivam, Rathinam Xavier, Thean-Hock Tang, Marimuthu Citartan, Suresh V. Chinni, In silico 'fishing' using known small regulatory RNA (sRNA) candidates as the decoy from *Escherichia coli, Salmonella typhi* and *Salmonella typhimurium* manifested 14 novel sRNA candidates in the orthologous region of *Proteus mirabilis*, Molecular Biology Reports. 2018. DOI <a href="https://doi.org/10.1007/s11033-018-4397-z">https://doi.org/10.1007/s11033-018-4397-z</a>
- **15.** Tahmina Monowar, Md. Sayedur Rahman, Subhash J. Bhore, Gunasunderi Raju and **Kathiresan V. Sathasivam**. Silver Nanoparticles Synthesized by Using the Endophytic Bacterium *Pantoea ananatis* are Promising Antimicrobial Agents against Multidrug Resistant Bacteria. Molecules 2018, 3220; Doi:10.3390/molecules23123220
- **16.** Samuggam Sumitha, Sethu Vasanthi, Sivadasan Shalini, Suresh V. Chinni, Subash C.B. Gopinath, Periasamy Anbu, Mohammed Baidi Bahari, Rajak Harish, **Sathasivam Kathiresan** and Veerasamy Ravichandran. Phyto-Mediated Photo Catalysed Green Synthesis of Silver Nanoparticles Using Durio Zibethinus Seed Extract: Antimicrobial and Cytotoxic Activity and Photocatalytic Applications.

Molecules 2018, 23(12), 3311; doi:10.3390/molecules23123311

- **17.** Samuggam Sumitha, Sethu Vasanthi, Sivadasan Shalini, Suresh V. Chinni, Subash C.B. Gopinath, **Sathasivam Kathiresan**, Periasamy Anbu, and Veerasamy Ravichandran. *Durio zibethinus* Rind Extract Mediated Green Synthesis of Silver Nanoparticles: Characterization and Biomedical Applications. Pharmacognosy Research 2019, Vol. 15 (60), 52-58
- **18.** Tahmina Monowar, Md. Sayedur Rahman, Subhash J. Bhore, Gunasunderi Raju and **Kathiresan V. Sathasivam.** Secondary Metabolites Profiling of *Acinetobacter baumannii* Associated with Chili (*Capsicum annum L.*) Leaves and Concentration Dependent Antioxidant and Prooxidant Properties. Biomed Research International 2019 (<a href="https://doi.org/10.1155/2019/6951927">https://doi.org/10.1155/2019/6951927</a>)
- **19. Kathiresan V.Sathasivam**, N.K. Fluroia, S. Fluroia, P.J. Darshenee, R.Xavier, K. Marimuthu, K.M. Sundram. Kinetic, Equilibrium and Thermodynamic Studies on Removal of Cu(II) and Pb(II) by Activated Carbon Prepared from Macro-Algae (*Kappaphycus alvarezii*). Asian Journal of Chemistry 2019, 31(6):1343-1348
- **20. Kathiresan Sathasivam**, Neeraj Kumar Fuloria, Shivkanya Fuloria, Sundram Karupiah. Removal of Methylene Blue from Aqueous Solution Using Artocarpus Integer Agrowaste: Equilibrium, Kinetic and Thermodynamic Studies. Bulletin of Environment, Pharmacology and Life Sciences, 8[3] February 2019: 117-127
- **21.** Shivkanya Fuloria, Neeraj Kumar Fuloria, Choo Jin Yi, Tang Mei Khei, Tan Ann Joe, Law Tiew Wei, Sundram Karupiah, Neeraj Paliwal, **Kathiresan Sathasivam.** Green Synthesis of Silver Nanoparticles Blended with Citrus Hystrix Fruit Juice Extract and their Response to Periodontitis Triggering Microbiota. Bulletin of Environment, Pharmacology and Life Sciences. Vol 8 (7), 2019: 112-123.
- **22.** Fuloria NK, Fuloria S, Chia KY, Karupiah S, **Sathasivam K**. Response of green synthesized drug blended silver nanoparticles against periodontal disease triggering pathogenic microbiota. J Appl Biol Biotech. 2019;7(04): 46–56. DOI: 10.7324/JABB.2019.70408.
- **23.** Venkateskumar Krishnamoorthy, Leow Yu Chuen, Vengadan Sivayogi, **Sathasivam Kathiresan**, Mohd Baidi Bahari, Gunasunderi Raju, Subramani Parasuraman. Exploration of antioxidant capacity of extracts of *Perna viridis*, a Marine Bivalve, Pharmacognosy Magazine 2019 15 (66) 402-409.
- **24.** S. Fuloria, O.J. Hong, C.B. Kim, B.Y.S. Ting, S. Karupiah, N. Paliwal, U. Kumari, K. Sathasivam, S. Vetriselvan And N.K. Fuloria. Synthesis of Silver Nanoparticles of Corn Silk Agrowaste and Their Bioactivities, Asian Journal of Chemistry; Vol. 32, No. 6 (2020), 1497-1504.

	25. Shivkanya Fuloria, Chiam Sin Ru, Neeraj Paliwal, Sundram Karupiah, Kathiresan Sathasivam, Sameep Singh, Khyati Gupta, Neeraj Kumar Fuloria. Response of biogenic zinc oxide nanoparticles against periimplantitis triggering non periodontal pathogen. International Journal of Research in Pharmaceutical Sciences 2020, 11(3), 1-8.
	<b>26</b> . Jasvin Singh, Rasvin Singh, Subramani Parasuraman & <b>Sathasivam Kathiresan</b> . Antimicrobial Activity of Extracts of Bark of <i>Cinnamomum cassia</i> and <i>Cinnamomum zeylanicum</i> . Int. J. Pharm. Investigation, 2020;10(2):141-145.
	<b>27</b> . N.K. Fuloria, M.Y. Ko, C.S. Rui, C.Z. Hang, S. Karupiah, N. Paliwal, U. Kumari, K. Gupta, K. Sathasivam and S. Fuloria. Green Synthesis and Evaluation of <i>Dimocarpus longan</i> Leaves Extract Based Chitosan Nanoparticles against Periodontitis Triggering Bacteria. Asian Journal of Chemistry; Vol. 32, No. 7 (2020), 1660-1666.
	28. Rasvin Singh, Subramani Parasuraman & Sathasivam Kathiresan. Antioxidant and Antidiabetic Activities of Methanolic extract of Bark of Cinnamomum zeylanicum in Diabetic Rats. Free Radicals and Antioxidants, 10 (1), 2020.
	<b>29</b> . Koe Wei Sheng Winsona, Bee Lynn Chewa, Kathiresan Sathasivam, Sreeramanan Subramaniama. The Establishment of Callus and Cell Suspension Cultures Of <i>Hylocereus Costaricensis</i> For The Production Of Betala.n Pigments With Antioxidant Potential. Industrial Crops & Products, 155 (2020). <a href="https://doi.org/10.1016/j.indcrop.2020.112750">https://doi.org/10.1016/j.indcrop.2020.112750</a> .
	<b>30</b> . Shivkanya Fuloria, Vetriselvan Subramaniyan, ,Sundram Karupiah, Usha Kumari, Kathiresan Sathasivam, Dhanalekshmi Unnikrishnan Meenakshi, Yuan Seng Wu, ,Rhanye Mac Guad, Kaviraja Udupa and Neeraj Kumar Fuloria. A Comprehensive Review on Source, Types, Effects, Nanotechnology, Detection, and Therapeutic Management of Reactive Carbonyl Species Associated with Various Chronic Diseases. Antioxidants 2020, 9(11), 1075; <a href="https://doi.org/10.3390/antiox9111075">https://doi.org/10.3390/antiox9111075</a>
On-going Research	<ol> <li>Evaluation of physical and chemical properties of bakery waste compost and its effect on growth, yield and nutrient content.</li> <li>Isolation of Mesenchymal stem cells isolated from Wharton's jelly</li> </ol>
Completed Research	Assessment of Biodiesel, Phytochemical, Composition, Pharmacological and Industrial Applications of <i>Eucheuma Denticulatum</i> and <i>Kappaphycus sp.</i> From Malaysia
	Production of Butter Flavor Concentrates From Butter Fat by Solid     Substrate Fermentation using Lactic Acid bacteria
	3. Optimization of L-Quebrachitol Extraction in Natural Rubber Wastewater by Using Box Behnken Design

4. Process optimization for the production of sophorolipid biosurfactant by <i>Candida bombicola</i> , fermentation, kinetics and scale up
5. In vivo and In vitro Antidiabetic Activity of <i>Tabernaemontana Divaricata</i>
Evaluation of Physical and Chemical Properties of Bakery Waste Compost and Its Effect on Growth, Yield and Nutrient
Fairy Bakery Sdn. Bjd.
a) Product Innovation Award for Shan Poornam Metal Sdn Bhd under Ministry of Trade and Industry, 24 March 2011.
b) Gold Medal – Bio-innovation Award during MABIC-AIMST-Biotech Corp Biotechnology Week 2011
c) <b>2</b> nd <b>Prize</b> for the best poster presentation at National Post Graduate Seminar; Poster titled The Occurrence Of <i>Bacillus Thuringiensis</i> Strains In Chemical Intensive Rice Growing Ecosystem. Kannan, P., Xavier, R., Reena Josephine, C.M., Marimuthu, K., <b>Kathiresan, S.</b> , Sreeramanan, S., Prazanna Lakxmy, A., Maheswaran, S. And Vinod, V. Proceedings of The National Postgraduate Seminar (NPS 2010), 30 <sup>th</sup> December, Universiti Kebangsaan Malaysia.
d) Malaysian Hibiscus Award for Shan Poornam Metal Sdn Bhd 2012.
e) Lead Researcher for AIMST, Innovative Project titled Removal of Lube from Glass Substrate and the Recovery of precious metals of its Waste, Malam Citra Inovasi, Kementerian Pengajian Tinggi, 5 March 2013.
f) Innovative Research titled "Recycling of Rejected Blank Glass Substrate (Principle Investigator) & Turning Chicken Feather into Cysteine (Co-Investigator)" is selected to in Agensi Inovasi Malaysia's Innovation Business Opportunity (IBO) publication, 2014.
g) Ezy Inflatable Bedpan With Biodegradable Disposable Bag: A Better Option For Immobilized Client With Elimination Needs" has won SILVER medal in 14th International Conference and Exposition on Inventions by Institutions of Higher Learning (PECIPTA 2015) on the 4th – 6th December 2015 at Kuala Lumpur Convention Centre.
h) Ezy Inflatable Bedpan With Biodegradable Disposable Bag: A Better Option For Immobilized Client With Elimination Needs" has won SILVER medal in 28th International Innovation & Technology Exibition (ITEX 2017) competition, 11-13 MAY KLCC
i) Institut Kimia Malaysia Citation Award for 2020

Professional Membership	Honorary Secretary (Northern Region Branch), Institut Kimia Malaysia
Supervision	Completed
	PhD (3 ), MSc (10)
	On-going On-going
	MSc (2)
Teaching	Biophysical Chemistry
	Bioinstrumentation
	Biomaterials
	Final Year Project Supervision
Areas of Expertise	Conversion of Waste into Wealth
	Natural fibers and polymer development
	E-waste technology
	Surface Science & Modification
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