

## BIODATA



**Dr. N. SUGANTHY**  
**ASSISTANT PROFESSOR**

### Contact

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### Academic Qualifications: M.Sc M.Phil, Ph.D

Degree	Year of Passing	University / Institute
M. Sc. (Biochemistry)	April 1999	University of Madras
M. Phil (Biochemistry)	October 2000	University of Madras
Ph. D (Biotechnology)	October 2013	Alagappa University

### Teaching Experience: 12 Years

Designation	Institution	Department	Duration
Assistant Professor	Alagappa University, Karaikudi	Nanoscience and Technology	Feb 2016 to till date
Dr.S.Kothari Post doctoral fellow	Bharathidasan University	Animal Science	May 2014 to Feb 2016

Teaching Assistant	Alagappa University, Karaikudi	Biotechnology	June 2004 to March2007
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### Research Experience: 16 Years

### Area of Research

- Fabricating Nanotheranostic agents for Alzheimer's disease and Cancer therapy
- Elucidating the toxicity profile of nanomaterials through *in vitro* and *in vivo* approach
- Fabricating nanomaterials for remediation of environmental pollution
- Nanomaterials for sustainable agriculture.

### Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
47	29	1	3	07

Cumulative Impact Factor (as per JCR)	:	196
Average impact factor	:	4
h-index	:	23
i10 index	:	32
Total Citations	:	2078

### Funded Research Projects

#### Completed/ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)	Status
		From	To			
1	UGC STG	2017	2019	Neuroprotective efficacy of nanoencapsulated multipotent phytodrug 7-methyl gallate and methoxycoumarin	10	Completed
2	AURF	2018	2019	Gallic Acid Encapsulated Zeolitic Imidazolate Framework (Nzif) As Potential Drug Delivery System For The Treatment Of Lung Cancer	1.00	Completed
3	RUSA Phase 2.0	2019	2021	Fucoidan Encapsulated Magnetic Europium Metal Organic Framework (Eu-Mof) For Potential	4.00	Completed

Cancer Drug Delivery and Bio-Imaging						
RUSA Phase 2.0	2023	2024	Advanced Nanomaterials for Sustainable Energy and Sensor Applications”	6.00	On going	

### Distinctive Achievements / Awards

1. Start-up grant for the newly appointed faculty by University Grants Commission, New Delhi, Jan-2016.
2. Dr. D.S. Kothari Post Doctoral fellow sponsored by University Grants Commission, Govt. Of India (2014-2017).
3. State Eligibility Test (SET) for Lectureship conducted by Government of Tamil Nadu, India.
4. Research excellence award by Alagappa University, Karaikudi, Sep-2022
5. Certificate of Appreciation for RUSA 2.0 - 2020
6. Best Paper Presentation award in ESTIC-2019 conference, Mahsa University, Malayasia held on 15.10.2019

### Fellowships Received

1. CSIR SRF (Direct), New Delhi, India (2011-2013)
2. Jawaharlal Nehru Fellowship for doctoral studies, New Delhi, India (2008-2010).

### Research Supervision/Guidance

Program of Study	Completed	Ongoing
Ph.D	1	3
M.Phil	2	-
P.G	16	4

### Editorial Board

### Guest editor special issue

Guest editors: **Suganthi Natarajan** (Alagappa University, Karaikudi), Srinivasan Ramanathan (Faculty of Hat Vai, Thailand), Xiangmin Lin (Fujian Agriculture and Forestry University, Fuzhou). Call for Papers for Special Issue: “Investigating the Role of Biological Pathways Involved in Brain Disorder and Infection”. *Frontiers in Pharmacology* [Frontiers], April 2021 [Impact factor 5.988]

## **Reviewer**

- Environmental Research
- Environmental Science and Pollution Research
- Journal of drug delivery system
- Frontiers in pharmacology
- Scientific reports
- Frontiers of microbiology
- Biomedicine and pharmacotherapy
- Molecules
- Journal of Applied Pharmaceutical Science
- Food Science and Technology
- BMC complementary and Alternative medicine

## **Abroad visit**

Thailand  
Malaysia  
Sultanate of Oman

## **Membership**

- 1 Life Member of Indian Science Congress, Kolkata
- 2 Life Member of Society of Biological Chemist, Bangalore

## **Additional Academics & Administrative Responsibilities**

1. Department level NIRF co-ordinator (Since Oct 2019 till date)
2. Department level village extension programme co-ordinator (2016 &2019)
3. Department level SWACHH BHARAT Co-ordinator (2018 to till date)

## **Membership in academic bodies**

4. Member of Board of studies for B.Sc., Biochemistry in Alagappa University from 2022
5. Member of Board of studies for M.Sc., Biochemistry in Alagappa University from 2022
6. Member of Board of studies for M.Phil., Biochemistry in Alagappa University from 2022
7. Member of Board of studies for M.Sc., Home science in Alagappa University from 2022
8. Member of Board of studies for M.Sc Nutrition and Dietetics in Alagappa University from 2022
9. Member of Ph. D Doctoral Committee, Department of Animal Science, Bharathidasan University from 2019 till date
10. Member of Board of Studies for M. Sc and M. Phil Nanoscience and Technology, Alagappa University, 2019 to till date
11. Member of Anveshan: Student Research Convention committee- South Zone, Nominated by Alagappa University 2021
12. Member of Ph. D doctoral committee, Department of Nanoscience and Technology, Alagappa University

## Special & Invited lectures Delivered Overseas

1. **6th International Workshop on “Food and Brain Health”** organised by Food Science & Nutrition Department and Ageing & Dementia Research Group, **Sultan Qaboos University, Oman** on 11th and 12th November 2019. Title: **Nutraceuticals For Healthy Brain: Beneficial Effect Of Flavonoids Against Alzheimer’s Disease**
1. **25th World Congress on Advanced Materials at Holiday inn Singapore Atrium**, 317 Outram Road Singapore 169075 on 21st and 22nd October 2019 entitled **“Encapsulation of gallic acid derivative with starch matrix- in vitro evaluation of antioxidant, antibiofilm and antioxidant potential”**
2. **Engineering, Medicine, Science & Technology International Conference 2019 (ESTIC’19)**, MAHSA University, Malaysia on 14<sup>th</sup> and 15<sup>th</sup> October 2019 entitled **“One pot fabrication of nanoscale hybrid – Phytodrug encapsulated metal organic framework as smart drug delivery system for lung carcinoma”**
3. **Innovation of Functional foods in Asia”** conducted by School of Medical Sciences, University of Phayao, jointly hosted by Society for free radical research -Thai, Thailand held during 22-24th January 2018 entitled **“Nutraceuticals for healthy brain: Focus on dietary polyphenols against Alzheimer’s disease”**

## Special & Invited lectures Delivered -National

1. Delivered invited lecture entitled Nanotechnology: New perspectives in Biomedical applications at PG & Research department of Zoology and Biotechnology, Lady Doak College, Madurai on 18.08.2017
2. Delivered invited lecture entitled “Recent trends in Life Science” on Life Science Association, Vidhyaa Giri College of Arts and Science, Pudhuvayal on 01.09.2017
3. Resource person at Science Exhibition competition conducted by 30<sup>th</sup> Karmela 2018, Rotary club of Karaikudi on 16.08.2018
4. Delivered invited lecture entitled "Covid -19 a scientific perspective” on CHEMISTRY WEBINAR LECTURE SERIES – III organized by Department of Chemistry & Research Centre, Aditanar College of Arts and Science, Thiruchendur on 30.05.2020
5. Delivered invited lecture entitled “Advanced Biochem Development – 2021” on Sri Sarada Niketan college for women on 26.02.2021
6. Delivered invited lecture entitled “Environmental awareness programme on Hygiene, Health and safety” on Dr. Umayal Ramanathan college for women, Karaikudi on 06.03.2021
7. Delivered invited lecture entitled “Outlook and Avenues in Biotechnology” on Bonsecours college for women, Thanjavur on 07.07.2020
8. Delivered invited lecture entitled “Recent Trends of Research in Life Sciences” on International Seminar on Recent Trends of Research in Life Sciences conducted by Department of Biochemistry, Idhaya College for Women, Sarugani on 21.09.2022

9. Delivered invited lecture entitled “Recent Trends in Nano Technology” on National Level Technical Symposium (Techifest – 2022)” conducted by Shanmuganathan Engineering College, Pudukkottai on 25.05.2022.
10. Delivered special lecture on “Nanotechnology A New Paradigm In Biomedicine – Big Wonders From Tiny World” in International seminar on Recent trends of research in Life Science, conducted by Department of Biochemistry, Idhaya college for Women, Sarugani on 21.09.2022.
11. Delivered special lecture on “Smart Nanomaterials In Biomedicine- Emerging Trends In Next Generation Therapy” conducted by Department of Biochemistry, J.J. College Pudukottai on 24.03.2023.

### Events organized

1. Organized Two days national seminar on nanomaterials for specialized applications (NMSA-2017) during 09/02/2017 to 10/02/2017 as **Organizing committee member**
2. Organized an World Standards Day -2017 on 10/02/2017 as **Organizing committee member**
3. Organized a Two days international conference on Advanced nanomaterials (ICAN-2018) during 26/02/2019 to 27/02/2019 as **Co-organizing secretary**
4. Organized 3<sup>rd</sup> International Conference on Applied Nanoscience & Nanotechnology (ICANN-2019) during 18/03/2019 to 19/03/2019 as **Organizing committee member**
5. Organized an Parents - Teachers Meet (PTM 2020 – 2021) on 07.03.2022 as **an Coordinator**
6. Organized an Parents - Teachers - Alumni Meet (PTAM 2021 – 2022) on 04.06.2022 as **an Coordinator**
7. Organized Swachhta Pakhwada – 2022 on 20.09.2022 as **a Coordinator**
8. Organized a 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2023) during 09/02/2023 to 11/02/2023 as **Co-organizing secretary**

### Publications in SCI Journals

#### Year 2023

1. Prakashkumar Nallasamy, Beema shafreen Rajamohamed, Jeyakanthan Jeyaraman, Brindhadevi Kathirvel, **Suganthi Natarajan** (2023). Regenerative marine waste towards CaCO<sub>3</sub> nanoformulation for Alzheimer's therapy, Environmental Research, 225(115631) doi.org/10.1016/j.envres.2023.115631 (**IF-8.4**)
2. Prakashkumar N, Pugazhendhi A, Brindhadevi K, Garalleh A.K.H, Garaleh, M, **Suganthi N** (2023). Comparative study of zinc oxide nanoparticles synthesized through biogenic and chemical route with reference to antibacterial, antibiofilm and anticancer activities. Environmental Research, 220(1), 115136 (**IF – 8.3**)
3. Sivamaruthi BS, Thangaleela S, Kesika P, Suganthi N, Chaiyasut C. Mesoporous Silica-Based Nanoplatfoms Are Theranostic Agents for the Treatment of Inflammatory Disorders. Pharmaceutics. 2023; 15(2):439. (**IF- 6.5**)

## Year 2022

4. Yuan Y, Wu Y, **Suganthy N**, Shanmugam S, Brindhadevi K, Sabour A, Alshiekheid M, Chi NTL, Pugazhendhi A, Shanmuganathan R (2022). Biosynthesis of zirconium nanoparticles (ZrO<sub>2</sub> NPs) by *Phyllanthus niruri* extract: Characterization and its photocatalytic dye degradation activity. *Food and Chemical Toxicology*, Volume 168, 2022, 113340, ISSN 0278-6915, <https://doi.org/10.1016/j.fct.2022.113340>. (IF- 5.54).
5. Vijay K, **Suganthy N**, Gangatharan M, Fahad Aldayel NA, Kavitha T (2022). Development of siderophore-based rhizobacterial consortium for the mitigation of biotic and abiotic environmental stresses in tomatoes: An *in vitro* and *in planta* approach. <https://doi.org/10.1111/jam.15625>. (IF - 4.049)
6. Prabhu R, Karthiyayini B, Monali M, Thirumurugan R, Suganthy N (2022). Fabrication of pH responsive FU@Eu-MOF nanoscale metal organic frameworks for lung cancer therapy, *Journal of Drug Delivery Science and Technology* 70,103223, doi.org/10.1016/j.jddst.2022.103223. (IF- 5.602)
7. Raju P, Suganthy N (2022). Investigation of Pesticidal and Anti-biofilm Potential of *Calotropis gigantea* Latex Encapsulated Zeolitic Imidazole Nanoframeworks. *Journal of Inorganic and Organometallic Polymers and materials*. doi.org/10.1007/s10904-022-02298-w. (IF- 3.58).
8. Parveez A.A.A., Suganthy N, Bennett T. A., Thajuddin N, Raghavendra V.B., Brindhadevi K, Pugazhendhi A, Phuong TN (2022). An empirical review on the risk factors, therapeutic strategies and materials at nanoscale for the treatment of oral malignancies. *Process Biochemistry*, 118, 283-293, doi.org/10.1016/j.procbio.2022.04.013 (IF- 4.885)

## Year 2021

9. Prakashkumar, N., Asik, R.M., Kavitha, T., Archunan G, **Suganthy N** (2021). Unveiling the Anticancer and Antibiofilm Potential of Catechin Overlaid Reduced Graphene Oxide/Zinc Oxide Nanocomposites. *Journal Of Cluster Science* doi.org/10.1007/s10876-021-02194-2 (IF-3.06)
10. Prakashkumar N, Sivamaruthi BS, Chaiyasut C, **Suganthy N** (2021). Decoding the Neuroprotective Potential of Methyl Gallate-Loaded Starch Nanoparticles against Beta Amyloid-Induced Oxidative Stress-Mediated Apoptosis: An In Vitro Study. *Pharmaceutics* 2021, 13, 299, doi.org/10.3390/pharmaceutics13030299 (IF- 6.231).
11. Raju P, **Suganthy N** (2021). Anticancer, anti-biofilm and antimicrobial activity of fucoidan-loaded zeolitic imidazole framework fabricated by one-pot synthesis method. *Applied Nanoscience*, 115, doi.org/10.1007/s13204-021-01881-w (IF-3.674).
12. Prakashkumar N, Vignesh M, Brindhadevi K, **Suganthy N** (2021). Enhanced antimicrobial, antibiofilm and anticancer activities of biocompatible neem gum coated palladium nanoparticles. *Progress in Organic Coatings*. 151, 106098, doi.org/10.1016/j.porgcoat.2020.106098 (IF- 5.161)
13. Raju P, **Suganthy N** (2021). Anticancer, anti-biofilm and antimicrobial activity of fucoidan-loaded zeolitic imidazole framework fabricated by one-pot synthesis method. *Applied Nanoscience*, 115, doi.org/10.1007/s13204-021-01881-w (IF-3.674).
14. Kesika P, Suganthy N, Sivamaruthi BS, Chaiyasut C (2021). Role of gut-brain axis, gut microbial composition, and probiotic intervention in Alzheimer's disease, *Life Sciences*, Volume 264, 2021, 118627, ISSN 0024-3205, doi.org/10.1016/j.lfs.2020.118627 (Impact factor: 5.037).

15. Pugazhendhi A, **Suganthy N**, Chau T-P, Sharma A, Unpaprom Y, Ramaraj R, Indira K, Brindhadevi K (2021). Cannabinoids as anticancer and neuroprotective drugs: Structural insights and pharmacological interactions—A review, *Process Biochemistry*, 11 (1): 9-31, doi.org/10.1016/j.procbio.2021.08.025 (**Impact factor: 4.885**).
16. Mohamed Asik R, Suganthy N, Aarifa MA, Kumar A, Szigeti K, Mathe D, Gulyás B, Archunan G, Padmanabhan P (2021). Alzheimer's Disease: A Molecular View of  $\beta$ -Amyloid Induced Morbific Events. *Biomedicines*. 2021; 9(9):1126. doi.org/10.3390/biomedicines9091126 (**Impact factor: 6.081**)
17. Sivamaruthi BS, Bharathi M, Kesika P, **Suganthy N**, Chaiyasut C (2021). The Administration of Probiotics against Hypercholesterolemia: A Systematic Review. *Applied Sciences*. 2021; 11(15):6913, doi.org/10.3390/app11156913 (**Impact factor: 2.67**).

#### Year 2020

18. Prakashkumar N, Thenmozhi R, Thajuddin N, Rajasree S, Pugazhendhi A, **Suganthy N** (2020). Polyherbal drug loaded starch nanoparticles as promising drug delivery system: Antimicrobial, antibiofilm and neuroprotective studies. *Process Biochemistry* 92, 355-364, doi.org/10.1016/j.procbio.2020.01.026 (**IF- 4.884**)
19. Prabhu R, Pugazhendhi A, **Suganthy N**. (2020). One-pot fabrication of multifunctional catechin@ ZIF-L nanocomposite: Assessment of antibiofilm, larvicidal and photocatalytic activities. *Journal of Photochemistry and Photobiology B: Biology*, 203, (2020), 111774, doi.org/10.1016/j.jphotobiol.2019.111774 (**IF- 6.252**)
20. Prabhu R, Thenmozhi R, Thajuddin N, **Suganthy N** (2020). In vitro assessment of antimicrobial, antibiofilm and larvicidal activities of bioactive nickel metal organic framework. *Journal of drug delivery science and technology*, 56 (2020), 101560, doi.org/10.1016/j.jddst.2020.101560 (**IF- 3.981**).
21. Sivamaruthi BS, **Suganthy N**, Kesika P, Chaiyasut C (2020). The Role of Microbiome, Dietary Supplements, and Probiotics in Autism Spectrum Disorder. *International Journal of Environmental Research and Public Health*, 17(8):2647. doi.org/10.3390/ijerph17082647 (**Impact factor: 3.39**).

#### 2019

22. Prabhu R, Mohamed Asik R., Anjali R, Archunan G, Prabhu N.M, Pugazhendhi A, **Suganthy N**. (2019). Ecofriendly one pot fabrication of methyl gallate@ZIF-L nanoscale hybrid as pH responsive drug delivery system for lung cancer therapy. *Process Biochemistry* 84 (2019) 39–52. (**IF – 3.757**)
23. Asik RM, Gowdhami B, Mohamed Jaabir MS, Archunan G, Suganthy N (2019). Anticancer potential of zinc oxide nanoparticles against cervical carcinoma cells synthesized via biogenic route using aqueous extract of *Gracilaria edulis*. *Materials Science & Engineering C* 103, 109840. (**IF- 7.328**)
24. Sivamaruthi B, Sri Ramkumar V, Archunan G, Chaiyasut C, **Suganthy N** (2019). Biogenic synthesis of silver palladium bimetallic nanoparticles from fruit extract of *Terminalia chebula* – In vitro evaluation of anticancer and antimicrobial activity. *Journal of Drug Delivery Science and Technology* 51, 139-15,1 doi. 10.1016/j.jddst.2019.02.024. (**IF – 3.981**)



25. Pugazhendhi A, Prabhu R, Kavitha M, Rajasree S, **Suganthi N** (2019). Anticancer, antimicrobial and photocatalytic activities of green synthesized magnesium oxide nanoparticles (MgONPs) using aqueous extract of *Sargassum wightii*. *Journal of Photochemistry & Photobiology, B: Biology* 190 (2019) 86–97 (**IF -6.252**)
26. Sivamaruthi BS, Kesika P, **Suganthi N**, Chaiyasut C (2019). A Review on Role of Microbiome in Obesity and Antiobesity Properties of Probiotic Supplements. *Biomed Research International*, Volume 2019, Article ID 3291367, 20 pages, doi.org/10.1155/2019/3291367. (**Impact factor: 3.414**).
27. **Suganthi, N.;** Devi, K.P.; Nabavi, S.F.; Braidy, N.; Nabavi, S.M. (2019). Bioactive effects of quercetin in the central nervous system: Focusing on the mechanisms of actions. *Biomedicine and Pharmacotherapy* 2016, 84, 892–908. (**Impact factor: 6.529**)

#### Year 2018

28. Jacob JM, John MS, Jacob A, Abitha P, Kumar SS, Rajan R, **Suganthi N**, Pugazhendhi A (2018). Bactericidal coating of paper towels via sustainable biosynthesis of silver nanoparticles using *Ocimum sanctum* leaf extract. *Material Research Express*, 6(4), doi.org/10.1088/2053-1591/aafaed (**IF-1.620**)
29. Pugazhendhi A, Beema Shafreen R, Pandima Devi K, **Suganthi N** (2018). Assessment of antioxidant, anticholinesterase and antiamyloidogenic effect of *Terminalia chebula*, *Terminalia arjuna* and its bioactive constituent 7-methyl gallic acid – An in vitro and in silico studies. *Journal of Molecular Liquids*, 257, 69-81, doi:10.1016/j.molliq.2018.02.081 (**IF- 6.165**)

#### Year 2017

30. **Suganthi N**, Muniasamy S, Archunan G. (2017). Safety assessment of methanolic extract of *Terminalia chebula* fruit, *Terminalia arjuna* bark and its bioactive constituent 7-methyl gallic acid: In vitro and in vivo studies. *Regulatory Toxicology and Pharmacology* 92 (2018) 347–357 (**IF- 3.271**)
31. Mohamed Asik R, **Suganthi N**, Premkumar P, Akbarsha MA (2017). Antioxidant and cholinesterase inhibitory activities of ethyl acetate extract of *Terminalia chebula*: Cell free in vitro and in silico studies. *Pharmacognosy Magazine*, 13 (51), S437-445 (**IF- 1.085**).
32. **Suganthi N**, Sri Ramkumar V, Pugazhendhi A, Benelli G, Archunan G (2017). Biogenic synthesis of gold nanoparticles from *Terminalia arjuna* bark extract: assessment of safety aspects and neuroprotective potential via antioxidant, anticholinesterase, and antiamyloidogenic effects. *Environmental Science and Pollution Research*, 1-16, doi: 10.1007/s11356-017-9789-4 (**IF-4.223**).

#### Year 2016

33. **Suganthi, N.;** Sheeja Malar, D.; Devi, K.P (2016). In vitro antiaggregation and deaggregation potential of *Rhizophora mucronata* and its bioactive compound (+)-catechin against Alzheimer's beta amyloid peptide (25–35). *Neurological Research*, 38(12), 1041-1051. (**IF-2.448**)
34. **Suganthi, N.;** Sheeja malar, D.; Devi, K.P. (2016). *Rhizophora mucronata* attenuates beta-amyloid induced cognitive dysfunction, oxidative stress and cholinergic deficit in Alzheimer's disease animal model. *Metabolic Brain Disease* 31(4), 937-949. (**IF – 3.584**)

35. **Suganthi, N.;** Devi, K.P (2016). Nutritional Evaluation Of Asiatic Mangrove Rhizophora Mucronata – Its Proximate Composition, Amino Acid. International Journal of Pharmaceutical Sciences and Research, 7(6), 2537-2545. **(IF- 0.6)**.
36. **Suganthi. N.;** Devi, K.P. (2016). Protective effect of catechin rich extract of Rhizophora mucronata against  $\beta$ -amyloid-induced toxicity in PC12 cells. Journal of Applied Biomedicine 14, 137-146. **(IF- 1.797)**.
37. **Suganthi, N.;** Devi, K.P. (2015). In vitro antioxidant and anti-cholinesterase activities of Rhizophora mucronata. Pharmaceutical Biology 2015, 9, 1-12. **(IF- 2.971)**.

#### Year 2014

38. **Suganthi, N.;** Karthikeyan, K.; Archunan, G.; Pandian, S.K.; Devi, K.P. (2014) Safety and toxicological evaluation of Rhizophora mucronata (a mangrove from Vellar estuary, India): assessment of mutagenicity, genotoxicity and in vivo acute toxicity. Molecular Biology Reports 41(3), 1355-1371. **(IF- 2.316)**

#### Year 2013

39. Devi, K.P.; Sakthivel, R.; Nisha, S.A.; **Suganthi, N.;** Pandian, S.K. (2013). Eugenol alters the integrity of cell membrane and acts against the nosocomial pathogen Proteus mirabilis. Archives of Pharmacal Research 2013, 36, 282–292. **(IF- 4.946)**.
40. **Suganthi, N.,** Arif Nisha, S., Pandian, S.K., Devi, K.P. (2013). Evaluation of Gelidiella acerosa, the red algae inhabiting South Indian coastal area for antioxidant and metal chelating potential. Biomedicine and Preventive Nutrition 3(4), 399-406.
41. **Suganthi, N.;** Pandian, S.K.; Devi, K.P. Plants traditionally used in age related brain disorders (Dementia) - An ethanopharmacological survey. Pharmaceutical Biology 2013, 51, 492-523. **(Impact factor: 2.97)**

#### Year 2010

42. **Suganthi, N.;** Pandian, S.K.; Devi, K.P. (2010). Neuroprotective effect of Seaweeds inhabiting South Indian coastal area (Hare Island, Gulf of Mannar Marine Biosphere Reserve): Cholinesterase Inhibitory effect of Hypnea valentine and Ulva reticulata. Neuroscience Letters 468, 216–219. **(IF- 3.046)**.

#### Year 2009

43. **Suganthi, N.;** Kesika, P.; Pandian, S.K.; Devi, K.P. (2009). Mangrove Plants Extract: Radical Scavenging Activities and Its Battle against Food Borne Pathogens. Forschende Komplementarmedizin 2009, 16, 41-48. **(IF- 1.4)**.
44. **Suganthi, N.;** Pandian, S.K.; Devi, K.P. (2009). Cholinesterase inhibitors from Sargassum and Gracilaria gracilis: Seaweeds inhabiting South Indian coastal area (Hare Island, Gulf of Mannar). Natural Product Research 2009, 23, 355-369. **(IF- 2.861)**.
45. **Suganthi, N.;** Pandian, S.K.; Devi, K.P. Cholinesterase inhibitors from plants: Possible treatment strategy for neurological disorders- A Mini Review. In: Ethnomedicinal Phytophores in Disease Management. Chattopadhyay D (Ed), *IJBPS* 2009, **3(1)**, 87-103.

#### Year 2008

46. **Suganthy, N.;** Pandian. S.K.; Devi, K.P. (2008). Cholinesterase inhibitory effects of *Rhizophora lamarckii*, *Avicennia officinalis*, *Sesuvium portulacastrum* and *Suevada monica*: Mangroves inhabiting Indian coastal area (Vellar Estuary). *Journal of Enzyme Inhibition and Medicinal Chemistry* 2008, 24 (3), 702-707. **(IF- 4. 3)**
47. Devi, K.P.; **Suganthy,N.;** Kesika, P.; Pandian, S.K. Bioprotective properties of seaweeds: In vitro evaluation of antioxidant activity and antimicrobial activity against food borne bacteria in relation to polyphenolic content. *BMC Complementary and Alternative Medicine* 2008, 8:38 **(IF- 3.659)**.

#### Review articles in Books

1. Devi, K.P.; **Suganthy, N.;** Kiruthiga, P.V.; Pandian, S.K. (2010). Liposome Technology and its Applications. In: Cellular and Biochemical Science Book, Tripathi (Ed). 2010, IK International Publishers, New Delhi. **ISBN: 9788188237852**
2. **Suganthy, N.;** Pandian, S.K.; Devi, K.P (2012). Anti-Amyloidogenic Effect of Natural Products: Implications for the Prevention and Therapeutics of Alzheimer’s disease. In: Natural Products: Research Reviews. Gupta, V.K. (Ed). 2012, 1, 371-408, M/S. Daya Publishing House, New Delhi.
3. **Suganthy, N.;** Pandian, S.K.; Devi, K.P (2013). Review of Multipotent Antioxidants from herbal drugs to combat Alzheimer’s disease. In: Natural Products: Research Reviews. Gupta, V.K. (Ed). 2013, 2, 77-117, M/S. Daya Publishing House, New Delhi.
4. **Suganthy, N., (2018)** Beneficial effects of Flavonoids as Neurodegenerative disorders – Old and New challenges. In: Recent Advances in the Molecular Mechanism of Flavonoids, Pandima Devi K (Ed.) 2018, 295-341, Studium press Pvt. Ltd (India), New Delhi
5. **Suganthy N. (2018)** Therapeutic Strategies for the Treatment of Alzheimer’s Disease-Recent Advances and Future Perspective. In: Alzheimer disease and treatment. 2018, 1-27, openaccessbooks, Las Vegas, NV 89107, USA, ISBN: 978-93-87500-26-6SE.
6. Prakashkumar, N., **Suganthy N.** (2021). Algal Nanotechnology: Scope and Limitations. In: Thangadurai, D., Sangeetha, J., Prasad, R. (eds) Bioprospecting Algae for Nanosized Materials. Nanotechnology in the Life Sciences. Springer, Cham. [https://doi.org/10.1007/978-3-030-81557-8\\_1](https://doi.org/10.1007/978-3-030-81557-8_1)
7. Rengarajan,R.L., Rathinam, A., **Suganthy, N.,** Balamuralikrishnan, B., Anand, A.V., Velayuthaprabhu, S. (2022). Perspectives of Metals and Metal Oxide Nanoparticles for Antimicrobial Consequence – An Overview. In: Krishnan, A., Ravindran, B., Balasubramanian, B., Swart, H.C., Panchu, S.J., Prasad, R. (eds) Emerging Nanomaterials for Advanced Technologies. Nanotechnology in the Life Sciences. Springer, Cham. [https://doi.org/10.1007/978-3-030-80371-1\\_13](https://doi.org/10.1007/978-3-030-80371-1_13)
8. Prakashkumar N, **Suganthy N. (2022)**. Starch based drug delivery system: A review on pharmaceutical and biomedical applications. In: Sougata Jana, Subrata Jana, Abraham J. Domb (eds). Polysaccharide-based Biomaterials. RSC, Cambridge, UK.

#### Conference/Symposium - International

1. Anticancer potential of the synthesized gold nanoparticles against A549 lung cancer cell lines” at International Conference on Frontier Areas in Chemical Technologies (FACTs

- 2016) conducted by Department of Industrial Chemistry, Alagappa University during 21.03.2016 to 23.03.2016.
2. Anticancer potential of green synthesized Zinc oxide nanoparticle using Red seaweed *Gracilaria edulis* at International Conference on Frontier Areas in Chemical Technologies (FACTs 2017) conducted by Department of Industrial Chemistry, Alagappa University during 06.07.2017 to 08.07.2017.
  3. Anticancer effects of Gallic acid encapsulated nano- Metal Organic Frameworks (n-MOFs) at International conference on Advanced Nanomaterials (ICAN-2018) conducted by Department of Nanoscience and Technology, Alagappa University during 26.02.2018 and 27.02.2018
  4. Antimicrobial and Antioxidant Activities of Starch Encapsulated Triphala Churna International conference at Advanced Nanomaterials (ICAN-2018) conducted by Department of Nanoscience and Technology, Alagappa University during 26.02.2018 and 27.02.2018
  5. Biogenic synthesis of Magnesium Oxide nanoparticles using Brown Seaweed Sargassum Wightii and assessment of its Anticancer activity at International conference on Advanced Nanomaterials (ICAN-2018) conducted by Department of Nanoscience and Technology, Alagappa University during 26.02.2018 and 27.02.2018
  6. Comparative study of antibacterial and antioxidant activities of ZnO nanoparticles synthesized through various routes at 3rd International Conference on Recent Trends in Microbiology (RTM-2019) conducted by Department of Microbiology, Alagappa University during 24.01.2019 and 25.01.2019
  7. Green synthesis of catechin encapsulated nanoscale zeolitic imidazole frameworks using Sargassum swartzii extract: antibacterial and mosquito larvicidal activity at 3rd International Conference on Recent Trends in Microbiology (RTM-2019) conducted by Department of Microbiology, Alagappa University during 24.01.2019 and 25.01.2019
  8. One-pot synthesis of Methyl gallate (MEGA) encapsulated Nanoscale Metal Organic Framework as a pH responsible drug delivery system for lung cancer therapy at 5<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN-2019) conducted by Department of Physics and Nanotechnology, SRM Institute of Science and Technology during 28.01.2019 to 30.01.2019
  9. In vitro Evaluation of Neuroprotective, Antibacterial and Antibiofilm efficacy of Starch Encapsulated Triphala Churna on 5th International Conference at Nanoscience and Nanotechnology (ICONN-2019) conducted by Department of Physics and Nanotechnology, SRM Institute of Science and Technology during 28.01.2019 to 30.01.2019
  10. Evaluation of antioxidant and Antimicrobial Efficacy of Starch Encapsulated Methyl gallate – An in Vitro Study at Advanced nanomaterials for Energy, Environment and Healthcare Applications (ANEH-2019) conducted by Department of Physics, Bishop Heber College during 04.02.2019 to 06.02.2019
  11. Green Synthesis of Nickel Metal Organic Frameworks Using *Sargassum swartzii* Extract: Antibacterial and Mosquito Larvicidal Activity on International Conference at Applied Nanoscience and Nanotechnology (ICANN-2019) conducted by Department of Nanoscience and Technology, Alagappa University during 18.03.2019 to 19.03.2019
  12. A Comparative study on Biological Potential of Zinc Oxide (ZnO) nanoparticles by Various Routes of Synthesis at International Conference on Applied Nanoscience and Nanotechnology (ICANN-2019) conducted by Department of Nanoscience and Technology, Alagappa University during 18.03.2019 to 19.03.2019

13. Green synthesis of Methyl Gallate Encapsulated Zeolitic Imidazole Frameworks using *Sargassum swartzii* Extract: Antibacterial and Mosquito Larvicidal Activity at International Conference on Applied Nanoscience and Nanotechnology (ICANN-2019) conducted by Department of Nanoscience and Technology, Alagappa University during 18.03.2019 to 19.03.2019
14. Synthesis of ZnO Nanoparticles using Termite and Ant Mount Extract: In vitro Evaluation of Antioxidant and Photovoltaic Efficacy at International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS-2019) conducted by Department of Chemistry, SreeSevugan Annamalai College on 06.09.2019
15. One pot fabrication of nanoscale hybrid- Phytodrug encapsulated metal organic framework as smart drug delivery system for lung carcinoma at Engineering, Medicine, Technology international conference, Mahsa University, Malaysia during 14.10.2019 to 15.10.2019.
16. Anticancer Potential of rGO-ZnO Nanocomposite Synthesized by Hydrothermal Method at International Conference on Nanomaterials Driven Advances in Chemical and Biosensors (NanoSe 2019) conducted by Department of Bioelectronics and Biosensor, Alagappa University during 27.11.2019 to 29.11.2019
17. Marine Waste Derived CaCO<sub>3</sub> Nanoparticles as Neuroprotective Carrier System at International Workshop on Emerging Materials and Modeling for Future Technology (EMMFT-2022) conducted by Centre for Nanoscience and Technology, Anna University, Chennai on 03.09.2022
18. Antimicrobial activity of Black rice wine encapsulated in hydroxyapatite nanoparticles derived from fish scale waste at 4<sup>th</sup> International Conference on Recent Trends in Microbiology (RTM-2023) conducted by Department of Microbiology, Alagappa University during 05.01.2023 and 06.01.2023
19. Biogenic Waste Derived rGO/CaCO<sub>3</sub> Nanocomposites for Waste Water Management at International Conference on Recent Advancement in Materials Science and its Applications (ICRAMSA-23) conducted by Research Department of Physics, Mannar Thirumalai Naicker College (Autonomous), Madurai on 11.01.2023 and 12.01.2023.
20. Marine Waste Derived CaCO<sub>3</sub> Nanoformulation for Breast Cancer Therapy at International Conference On Current Trends In Medicinal Chemistry (CTMC-2K23) organized by Department of Physiology, Saveetha Dental College & Hospital, Saveetha Institute of Medical and Technical Sciences (SIMATS) Saveetha University, Chennai on the 24.01.2023 and 25.01.2023.
21. Plant waste Derived Carbon Quantum Dots for Bacterial Bioimaging ” at International Conference On Current Trends In Medicinal Chemistry (CTMC-2K23) organized by Department of Physiology, Saveetha Dental College & Hospital, Saveetha Institute of Medical and Technical Sciences.
22. Carbon Quantum dots labelled CaCO<sub>3</sub> nanoformulation for Lung Cancer Therapy at 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2023) organized by Department of Nanoscience and Technology, Alagappa University during 09.02.2023 to 11.02.2023
23. Biochar nanoparticles from biogenic waste for dye degradation at 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2023) organized by Department of Nanoscience and Technology, Alagappa University during 09.02.2023 to 11.02.2023
24. Sugarcane bagasse derived carbon quantum dots for bacterial bioimaging at 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental

- Applications (ICANEE-2023) organized by Department of Nanoscience and Technology, Alagappa University during 09.02.2023 to 11.02.2023
25. Sugarcane bagasse derived carbon quantum dots for bacterial bioimaging at 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2023) organized by Department of Nanoscience and Technology, Alagappa University during 09.02.2023 to 11.02.2023
  26. rGO/Starch Nanofilter Membranes for Salt Water Desalination at the 2<sup>nd</sup> International Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2023) organized by Department of Nanoscience and Technology, Alagappa University during 09.02.2023 to 11.02.2023
  27. Biogenic Waste Derived CaCO<sub>3</sub> Nanofertilizer for Control and Treatment against Plant Fusarium Wilt Disorder and Nutritional Deficiency on Tomatoes at the International Conference on Innovative Approaches In Life Sciences- ICIALS23 organized by the Department of Food Science & Nutrition, The American College, Madurai on 24. 03. 2023 and 25. 03. 2023.
  28. Starch nanosponge for dye degradation at the International Conference on Innovative Approaches In Life Sciences- ICIALS23 organized by the Department of Food Science & Nutrition, The American College, Madurai on 24. 03. 2023 and 25. 03. 2023
  29. Biochar nanoparticles from biogenic waste for dye degradation at the International Conference on Innovative Approaches In Life Sciences- ICIALS23 organized by the Department of Food Science & Nutrition, The American College, Madurai on 24. 03. 2023 and 25. 03. 2023.

#### **Conference/Symposium - National**

30. Anticancer potential of green synthesized Silver/Palladium bimetallic nanoparticles from aqueous fruit extract of *Terminalia chebula* at National Conference on Recent Trends in Biotechnology (BIOTRENDS-2016) & Annual Meet of the Society for Biotechnologists (INDIA) conducted by National Institute of Ocean technology (MoES, Government of India) and Society for Biotechnologists (India) during 19.10.2016 to 21.10.2016
31. Evaluation of Neuroprotective potential of fruit Terminalia chebula – an in vitro study on National Conference at Recent Trends in Biotechnology (BIOTRENDS-2016) & Annual Meet of the Society for Biotechnologists (INDIA) conducted by National Institute of Ocean technology (MoES, Government of India) and Society for Biotechnologists (india) during 19.10.2016 to 21.10.2016
32. Extracellular synthesis of Magnesium oxide nanoparticles using red seaweed *Gracilaria edulis* and assessment of its antibacterial activity at National conference on enhancing entrepreneurship and innovation in biotechnology for sustainable development conducted by Tamil Nadu scientific research organization and Department of Botany, HH The Rajah college, Pudukkottai during 28.07.2017 to 29.07.2017