

Dr.B. Senthil M.Sc., Ph.D.,
Assistant Professor,
Department of CHEMISTRY, E & T, SRMIST
Ramapuram Campus, Chennai 89
senthilb4@srmist.edu.in



Dr. B. Senthil currently serves as an Assistant Professor in the Chemistry Department at SRMIST, Ramapuram. He completed his undergraduate studies at Pachaiyappa's College, University of Madras, located in Chennai, Tamil Nadu, India. He achieved the first rank in the University during his M. Sc. program, specializing in Photonics and Biophotonics, also at the University of Madras. Subsequently, he pursued his Ph.D. at Anna University, Chennai, India. Dr. B. Senthil has dedicated over three years to the field of education and has a significant track record of presenting numerous research papers at both national and international levels, contributing to various journals, conferences, and symposiums.

RESEARCH FOCUS

- Synthesis and physico-chemical characterization of nanomaterials
- Influence of synthesized nano-drugs in food infectious bacteria
- Larvicidal activities of nanoparticles on mosquito larvae
- Photocatalytic degradation of organic pollutants
- Nanotoxicity and nanobiotechnology studies

LIST OF PUBLICATION

JOURNALS

1. Hema. K, Vasthi Gnanarani, Shanmugam. M, **Senthil. B***, Assessment of Biomedical properties of stem extract from *Cissus vitiginea*, **Biomass conversion and refinery**.
2. Shanmugam Mahalingam, Praveen Kumar Govindaraji, Vasthi Gnanarani Solomon, Hema Kesavan, Yalini Devi Neelan, **Senthil Bakthavatchalam***, Junghwan Kim*, and Prakash Bakthavatchalam, Biogenic Synthesis and Characterization of Silver Nanoparticles: Evaluation of Their Larvicidal,

- Antibacterial, and Cytotoxic Activities, *ACS Omega* 2023, 8, 13, 11923–11930. IF: 4.1
3. Abinaya Srinivasan, Helen P Kavitha, **Senthil Bakthavatchalam**, Govindharaj Muniyandi , Jasmine P Vennila, Arulmurugan S, Lohita D, Prakash M, Pseudo first order reaction of Copper doped magnesium oxide nanostructures for enhanced structural and photocatalytic activity for organic pollutants degradation, *Catalysis Communication*, 2023. **(Under review)**.
 4. Mahalingam, Shanmugam ; Neelan, Yalini; **Bakthavatchalam, Senthil**; Al-Humaid, Latifah A. ; Al- Dahmash, Nora Dahmash ; Santhanam, Harikrishnan; Yang, Tae-Youl; Hossain, Nazmul; Park, Sung Heum; Kim, Junghwan, Effective visible-light-driven photocatalytic degradation of harmful antibiotics using reduced graphene oxide-zinc sulfide-copper sulfide nanocomposites as a catalyst, *ACS Omega* 2023.
 5. Leelakrishna Saikam, Arthi P, **Senthil Bakthavatchalam**, Shanmugam Mahalingam, A review on exfoliated graphite: Synthesis and applications, ***Inorganic Chemistry Communications*** 152 (2023) 110685. IF: 3.2
 6. Abbu Rajasekar, Thiyagarajan Devasena, Subramaniyam Suresh, **Bakthavatchalam Senthil**, Ramachandran Sivaramakrishnan Arivalagan Pugazhendhi, Curcumin nanospheres and nanorods: Synthesis, characterization and anticancer activity, ***Process Biochemistry***, 2022, Vol. 112, 248-253. IF: 4.88
 7. **Senthil B**, Rajasekar A and Devasena T, “Mechanism of Bactericidal Action of Biosynthesized Silver Nanoparticles”, ***Research Journal of Biotechnology***, 2018. Vol.13(1):72-78, IF: 0.29.

BOOK:

1. Biology for engineers

A textbook for UG B. Tech students, Edition 1, Shine Publications, Chennai, India.

SCOPUS id:

57193648149