

SIVASHANKAR. R

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ACADEMIC STATUS

- **Ph.D. Chemical Engineering (2011-2017)**
National Institute of Technology, Calicut, India.
- **MBA Human Resource Management (2014-2016), Distance Education**
Madurai Kamaraj University, Tamil Nadu, India.
- **M. Tech Industrial Biotechnology (2008-10), 8.00 CGPA**
SASTRA University, Thanjavur, India.
- **B. Tech Industrial Biotechnology (2003-07), 80 Percentage**
P.R.Engg. College, Anna University, Thanjavur, India.

EXPERIENCE

- **Teaching: Assistant Professor (July 2018-till date)**
Department of Chemical Engg., Hindustan Institute of Technology and Science, Chennai, India.
- **Teaching: Teaching Assistant (August, 2017-April 2018)**
Department of Chemical Engineering, NIT Calicut, India [9 months]
- **Teaching: Assistant Professor (July 2015 – June 2017)**
Department of Biotechnology, MET'S School of Engineering, Thrissur, India [24 months]
- **Teaching: Assistant Professor (July 2010 – Dec 2011)**
Department of Biotechnology, PRIST University, Thanjavur, India [18 months].
- **Industrial: Quality Analyst (June 2007 – May 2008)**
Pricol Pvt. Ltd, Coimbatore, India [12 months].

AREA OF INTEREST

- Environmental Engineering, Nanoscience & Technology, Bioprocess & Bioreactor Engineering.

JOURNAL PUBLICATION [18]

1. Arunachalam T, R Nithya, **R Sivashankar**, A B Sathya, S Rangabhashiyam, S Arul Pasupathi, M Prakash, M Nishanth, (2020), Green soap formulation: an insight into the optimization of preparations and antifungal action, Biomass conversion and Biorefinery, (Published Online: <https://doi.org/10.1007/s13399-020-01094-1>). (**SCI-2.602 IF**).
2. Arunachalam T, R Nithya, **R Sivashankar**, (2020), A review on the role of nanomaterials in the removal of organic pollutants from wastewater, Reviews in Environmental Science and Biotechnology, (Published Online: <https://doi.org/10.1007/s11157-020-09548-8>), (**SCI-4.957 IF**).
3. Sathya A. B, **Sivashankar. R**, Kanimozhi. J, Sivasubramanian. V, Santhiagu. A, (2020), Investigation of fermentation condition for production enhancement of polyhydroxyalkanoate from cheese whey by *Pseudomonas sp.* Journal of Microbiology, Biotechnology and Food science, 9 (5), 890-989). (**SCI-0.6 IF**).
4. Nithya, R., Arunachalam Thirunavukkarasu, **Sivashankar, R.**, & Rangabhashiyam, S. (2020).

- Fenalan Yellow G adsorption using surface-functionalized green nanoceria: An insight into mechanism and statistical modelling. *Environmental Research*, 181 (Feb), 108920. (SCI-5.715 IF).
5. **Sivashankar, R.**, Thirunavukkarasu, A., Nithya, R., Sathya, A. B., Sivasubramanian, V. (2020), Sequestration of organic dye from aqueous solution by magnetic biocomposite: three level box-behnken experimental design optimization and kinetic studies. *Separation Science and Technology*, 55 (10). (SCI-1.718 IF).
 6. Kanimozhi J., Sivasubramanian V., Ganesh Moorthy I., R. Sivashankar, (2019), Influence of Dextranucrase of *Weissella Cibaria* NITCSK4 on Low Molecular Weight Dextran Yield: a Statistical Approach using Mixed Level Taguchi Design and Artificial Neural Network., *International Journal of Innovative Technology and Exploring Engineering*, 9 (2S2), 652- 664. (Scopus).
 7. Sankaran K, Rangabhashiyam S, Govindarajan R, Sivashankar R, Thomas Wintgens, (2019), Editorial: Emerging technologies for wastewater treatment and reuse, *Water Science and Technology*, 80(11), 3-4. (SCI- 1638IF)
 8. Sathya A. B., **Sivashankar, R.**, Santhiagu. A., Sivasubramanian. V (2018), Green algae as source for polyhydroxyalkanoate synthesis from food processing wastewater. *Research Journal of Chemistry and Environment*, 22 (12), 66-74. (Scopus- 0.6 IF).
 9. Sathya A. B., Sivasubramanian. V, Santhiagu. A, Chitra Sebastian, **Sivashankar, R.** (2018), Production of polyhydroxyalkanoates from renewable sources using bacteria. *Journal of Polymers and the Environment*, 26 (9), 3995-4012. (SCI – 2.572 IF)
 10. Kanimozhi, J., Moorthy, I. G., **Sivashankar, R.**, & Sivasubramanian, V. (2017). Optimization of dextran production by *Weissella cibaria* NITCSK4 using Response Surface Methodology-Genetic Algorithm based technology. *Carbohydrate polymers*, 174, 103-110. (SCI- 7.182 IF)
 11. Sathya, A. B., Sivasubramanian, V., Santhiagu, A., Jyothy, V. B., & **Sivashankar, R.** (2017). Biological Significance and Advances in Application of Polyhydroxyalkanoate. *Journal of Advanced Engineering Research*, 4(1), 73-88.
 12. Deepanraj, B., Lawrence, P., **Sivashankar, R.**, & Sivasubramanian, V. (2016). Analysis of pre-heated crude palm oil, palm oil methyl ester and its blends as fuel in a diesel engine. *International Journal of Ambient Energy*, 37(5), 495-500. (SCI-1.6 IF)
 13. **Sivashankar, R.**, Sathya, A. B., & Sivasubramanian, V. (2015). Synthesis of magnetic biocomposite for efficient adsorption of azo dye from aqueous solution. *Ecotoxicology and environmental safety*, 121, 149-153. (SCI- 4.872 IF)
 14. **Sivashankar, R.**, Susheeba, O. K., & Sivasubramanian, V. (2015). Adsorption of Organic Dye on to Novel Magnetic Biocomposite: Kinetics and Equilibrium Studies. *Research Journal of Chemistry and Environment*, 19(6), 48-57. (Scopus- 0.6 IF)
 15. **Sivashankar, R.**, Sathya, A. B., Vasantharaj, K., & Sivasubramanian, V. (2014). Magnetic composite an environmental super adsorbent for dye sequestration—A review. *Environmental Nanotechnology, Monitoring & Management*, 1, 36-49. (Scopus)
 16. **Sivashankar, R.**, Sathya, A. B., Vasantharaj, K., & Sivasubramanian, V. (2014). Reduction of azo dye from aqueous solution using acid treated aquatic macrophytes. *J. Environ. Nanotechnol*, 3(2), 50-61. (Index Copernicus -0.6 IF)
 17. Rajagopalan, Magesh, Vivek Rangarajan, R. Kumaresan, D. Gunaseelan, **R. Sivashankar**, K. Sunil Kumar, and K. Vasanth Raj. (2010). Assessment of Oxygen Transfer Efficiency in

Internal Loop Air-Lift Reactor and a Study on the Role of Oxygen Vectors in the Enhancement of Oxygen Transfer. International Journal of Biotechnology and Bioengineering Research, 1(1), 107–114. **(Index Copernicus -0.2 IF)**

18. Krishnakumar, U., Sivasubramanian, V., & **Sivashankar, R.** Stability and quality assessment of biodiesel by photo chemiluminescence method. Journal of energy (Accepted for publication). **(Scopus).**

BOOK CHAPTER [9]

1. “Industrial hygiene in the pharmaceutical industry” in the book “Advances in industrial safety springer transaction in civil and environmental engineering”, edited by Faisal I. Khan, Nihal , Anwar Siddiqui, S. M. Tauseef, B. P. Yadav, 2020, Springer Singapore, ISBN 978-981-15-6852-7. **(International)**
2. “Phytochemicals as traditional medicine and their ameliorative effects in cancer therapy in the book “Agriculture food biotechnology and nanotechnology” edited by R. Devika, 2020, ESN Publication, Tamilnadu, india, ISBN 9789390188000. **(National)**
3. “Wastewater Treatment Technologies and Recent Developments” in the book “Environmental Sustainability using green technologies” edited by V.Sivasubramanian, June 22, 2016, CRC Press. Taylor & Francis Group, ISBN 9781498753050. **(International)**
4. “Integrated Biological System for the Treatment of Sulfate-Rich Wastewater” in the book “Environmental Sustainability using green technologies” edited by V.Sivasubramanian, June 22, 2016, CRC Press. Taylor & Francis Group, ISBN 9781498753050. **(International)**
5. “Biodegradable Polymers: Recent Perspectives” in the book “Environmental Sustainability using green technologies” edited by V.Sivasubramanian, June 22, 2016, CRC Press. Taylor & Francis Group, ISBN 9781498753050. **(International)**
6. “Biotechnology and its Significance in Environmental Protection” in the book “Bioprocess Engineering for a Green Environment” edited by V.Sivasubramanian, May 2018, CRC Press. Taylor & Francis Group, ISBN 9781138035973. **(International)**
7. “Bioprocessing of agro-food industrial wastes for the production of bacterial exopolysaccharaide” in the book “Bioprocess Engineering for a Green Environment” edited by V.Sivasubramanian, May 2018, CRC Press. Taylor & Francis Group, ISBN 9781138035973. **(International)**
8. “Bio-Based Building Materials for Green and Sustainable Environment” in the book “Bioprocess Engineering for a Green Environment” edited by V.Sivasubramanian, May 2018, CRC Press. Taylor & Francis Group, ISBN 9781138035973. **(International)**
9. “Biodegradable Plastics for Green and Sustainable Environment”, in the book “Bioprocess Engineering for a Green Environment” edited by V.Sivasubramanian, May 2018, CRC Press. Taylor & Francis Group, ISBN 9781138035973. **(International)**

SKILLS

- **Instrumentation:** Fermentor (stirred tank, airlift & bubble column reactor), UV-Vis spectrometer, Brookfield Viscometers, PCR, etc.
- **Experimental:** Fermentation, Electrophoresis, Immobilization, Blotting, ATP system, Cloning, and chromatography techniques.
- **Computer:** Operating System: Windows. Languages: C, HTML. Packages: MS office.

PROJECTS GUIDED

- M.Tech : 3; B.Tech: 5