

**Name : Dr. K. Sabariswaran**

**Designation : Assistant Professor**

**Department : Biotechnology**

**Qualification : M.Sc., M.Phil., PhD**

**Experience : Teaching -4 Years**

**Research : 6 Years**

**Area of Specialization(s) : Environmental Biotechnology**

**Email(Official ID) : sabariswaran@psgrkcw.ac.in**



#### Academic Qualifications

Degree	Branch	Institution/UniversityName	Year of Graduation
Ph.D.	Environmental Sciences	Madurai Kamaraj University	2016
M.Phil.	Environmental Sciences	Madurai Kamaraj University	2011
M. Sc.	Biotechnology	Bharathidasan University	2009
B.Sc.	Biotechnology	Periyar University	2007

#### Research Guidance

Programme	No. of. Scholars	
	Completed	Pursuing
PhD	-	1

#### Research Publications (Indexed): Scopus and Web of Science

**International: 110**

**Other Publications: International/National: 06**

## Patent

S.No	Name of the Faculty	Title of the Invention	Application No.	Publication Date
1.	Dr Sabariswaran Kandasamy	Bio Diesel Production from High FFA Feedstocks with a Novel Chemical Multi-Functional Process Intensifier Method	202141060136 A	2021/12/31
2.	Dr Sabariswaran Kandasamy	A System for Refining Salt Effluent	202241020077 A	2022/4/15
3.	Dr Sabariswaran Kandasamy	Anti-hyperglycemic Natural Product	202341055376 A	2023/09/01
4.	Dr Sabariswaran Kandasamy	Biogenic Silver Nanoparticle and Its Larvicidal Efficacy	202341032494 A	2023/08/18
5.	Dr Sabariswaran Kandasamy	A process of extraction of $\beta$ -carotene from <i>Dunaliella Salina</i> grown in pig manure	202441007010 A	2024/03/08

## Book Published

1. Rathinam R (Ed.), Shanmugam H(Ed.), Mathiyazhagan N(Ed.), Kandasamy, S (Ed.), Jayappriyan K.R(Ed.), (2023). Haematococcus-Biochemistry, Biotechnology and Biomedical Applications. Springer Publishing. <https://doi.org/10.1007/978-981-99-2901-6>
2. Rathinam Raja, K.Sabariswaran and N. Mathiyazhagan 2024. Properties of Algae Fucoidan. Gayathri Publications, Chennai, India, ISBN 978-93-6122-172-9.
3. Raja, K.Sabariswaran and K.R.Jayappriyan 2024. The Role of Algae in Disease Management. Gayathri Publications, Chennai, India, ISBN 978-93-6122-613-7.

## Book Chapter Published

1. Kandasamy, S.; Narayanan, M.; Bhuvanendran, N.; He, Z\*, Thermochemical Conversion of Wastes. In Waste-to-Energy: Recent Developments and Future Perspectives towards Circular Economy, Abomohra, A. E.-F.; Wang, Q.; Huang, J., Eds. Springer International Publishing: Cham, 2022; pp 145-175.
2. Muthusamy, L.; Rajendran, M\*; Ramamoorthy, K.; Narayanan, M.; Kandasamy, S., 11 - Phytostabilization of metal mine tailings-a green remediation technology. In Phytoremediation Technology for the Removal of Heavy Metals and Other Contaminants from Soil and Water, Kumar, V.; Shah, M. P.; Shahi, S. K., Eds. Elsevier: 2022; pp 243-253.
3. Kandasamy, S.; Bhuvanendran, N.; Narayanan, M.; He, Z\*, Chapter 13 - Thermochemical conversion of algal biomass. In Handbook of Algal Biofuels, El-Sheekh, M.; Abomohra, A. E.-F., Eds. Elsevier: 2022; pp 281-302.
4. Bhuvanendran, N.; Ravichandran, S.; Narayanan, M.; Paulraj, B.; Kumarasamy, S.; Su, H.; Kandasamy, S\*, Emerging Trends in Biomass-Derived Carbon-Supported Metal Nanostructures as Efficient Electrocatalysts for Critical Electrochemical Reactions in Low Temperature Fuel Cell Applications. In Biorenewable Nanocomposite Materials, Vol. 1: Electrocatalysts and Energy Storage, American Chemical Society: 2022; Vol. 1410, pp 225-256.

5. Narayanan, M., Kandasamy, S\*, He, Z., Hemaiswarya, S., Raja, R., Carvalho, I.S. 2022. Chapter 10 - Algae biotechnology for nutritional and pharmaceutical applications. in: Biotechnology in Healthcare, (Ed.) D. Barh, Academic Press, pp. 177-194. Elsevier.
6. Narayanan, M., Kandasamy, S\*, He, Z., Kumarasamy, S. 2022. Chapter 2 - Ecological impacts of pesticides on soil and water ecosystems and its natural degradation process. in: Pesticides in the Natural Environment, (Eds.) P. Singh, S. Singh, M. Sillanpää, Elsevier, pp. 23-49.
7. Maghimaa, M., Bharath, S., Kandasamy, S. 2025. Carbon-Based Nanoparticles for Neural Regeneration. in: Nanoparticles in Modern Neurological Treatment, (Eds.) B.S. Sivamaruthi, N. Sisubalan, P. Kesika, K. Varaprasad, Springer Nature Switzerland. Cham, Springer, pp. 263-282.

#### Acted as a Resource Person

1. Guest Talk on "Thermochemical conversion of microalgae". Sri Krishna Arts & Science College, Coimbatore, Tamil Nadu, India, 13.02.2019.
2. Guest Talk on "Ethical Issues and Plagiarism" in the Online Workshop on Scientific Writing held on 08.05.2020, hosted by Chemical Science Review and Letters, Salem, India.
3. Guest Talk on "Research opportunities in overseas & India". Ganesh College, Salem, India, 12.05.2020
4. Acted as "Resource Person". International online Faculty Development Program on "Developing Effective Research Skills" Organized by Institutional Research Committee SAHS, VMRF - DU, Salem, India held on 12.06.2020.
5. Acted as "Resource Person". One-week International Online Faculty Development Programme on "Contribution of Bio-Sciences in New Normal Life" (CBNNL-2020) organized by Department of Biotechnology, Periyar University, PG Extension Centre, Dharmapuri, India from 15.06.2020 to 21.06.2020.
6. Guest Talk on "Biofuels-Can Save the Earth". Nirmala College for Women, Coimbatore, Tamil Nadu, India, 26.05.2021.
7. Acted as "Resource Person". One Day International Webinar On "Applications and Opportunities in Biosciences 2022" organized by Department of Biochemistry, Marudhar Kesari Jain College for Women, Vaniyambadi, India on 07.10.2022.
8. Guest Talk on "Sustainable Chemistry towards Green Environment". Sona College of Arts and Science, Salem, Tamil Nadu, India. 01.02.2023.
9. Guest Talk on "Interdisciplinary Research Applications in Chemistry". Vellalar College for Women, Erode, India, 17.02.2023.
10. Acted as "Resource Person" at International Conference on Materials and Biological Research, R.K.S college, Kallukurichi, India, 02.03.2023 & 03.03.2023.
11. Acted as "Resource Person" at International Conference on Biotechnika career opportunities, Padmavani Arts & Science College for Women, Salem, India, 24.03. 2023.
12. Acted as "Chairperson" at the National Conference on Biomaterials in Healthcare 2023 at Sree Balaji Medical College and Hospital in Chennai on the 18th and 19th of August, 2023.
13. The short lecturer delivered a talk on "Hydrothermal Liquefaction of Algae Biomass Utilizing Activated Carbon Derived from Waste Biomass" at the International Conference on Biomaterials for Advanced Biological Applications (BABA-2024), which was held from February 14th to 16th, 2024. The conference was organized by the Department of Chemistry at Periyar University, Salem.

#### Reviewer in journal

- Fuel (Elsevier)
- Energy (Elsevier)
- Science of The Total Environment (Elsevier)
- Renewable Energy (Elsevier)
- Journal of Environmental Chemical Engineering (Elsevier)
- Journal of Cleaner Production (Elsevier)
- Journal of Environmental Management (Elsevier)
- Chemosphere (Elsevier)
- Environmental Research (Elsevier)
- Biomass Conversion and Biorefinery (Springer)
- Applied Nanoscience (Springer)
- Current Microbiology (Springer)
- Clean Energy (Oxford Journals)
- WIREs Energy and Environment (Wiley)
- Process Safety and Environmental Protection (Elsevier)

## Paper Presentations in Conference

**International: 12**

**National: 15**

**Presentations in Seminar: 8**

**Participation in Conference: 5**

**Participation in Seminars: 7**

**Participation in Workshop: 8**

**Participation in Faculty Development Programme: 6**

**Participation in Webinar: 10**

**Conference/Seminar/Workshop Organized: 4**

## Grants

1. Green Catalysts from Waste Biomass: Enhancing Bio-Oil Yield for Sustainable Biofuel Production - GRG Trust Fund, PSGR Krishnammal College for Women, Coimbatore, India. Funding Amount: 2 Lakhs (2023-2025)

## Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Chemical Science and Review Letters	Editor-in-Chief	Lifetime
Deep Science	Editorial Board member	Lifetime
International Journal of Energy and Environmental Science	Associate Editor	Lifetime
Environmental Research and Ecotoxicology	Editorial Board member	Lifetime
Advances in Applied Research	Associate Editor	Lifetime
Biomass Conversion and Biorefinery	Guest Editor	Short term
Frontiers in Energy Research	Guest Editor	Short term

## Awards/Honors

Awards/Honors	Agency/Institute	Year of Award
Best Faculty	PSGR Krishnammal College for Women, Coimbatore, India	2025
Best Faculty	PSGR Krishnammal College for Women, Coimbatore, India	2024
Top 2% of Scientist	Elsevier and Stanford University, United States	2025
Top 2% of Scientist	Elsevier and Stanford University, United States	2024
Top 2% of Scientist	Elsevier and Stanford University, United States	2023
Best Young Scientist	Best Young Scientist Award by Virtual International Conference on Advances in Food and Agricultural Science and Technology, India	2020
Best Young Scientist	Best Young Scientist Award by Pearl Foundation for Educational Excellence, Tamil Nadu, India.	2017
Young Bio-Energy Scientist	Award by AUFAU International Awards, India	2016

## Indexing and Citations

Research/review articles in Peer-Reviewed Journals – 116

Scopus Citations – 3023

Scopus h-index – 33

Google Scholar Citations – 3559

Google Scholar h-index - 36

Google Scholar i10-index- 79

## Contribution

- Journal Editor & Reviewer across several publications
- Resource person in academic events, workshops, seminars
- Member, Board of Studies, Thanthai Hans Roever College, Perambalur
- Doctoral Committee Member, VIT, Vellore
- Question Paper Setter/Examiner, Sengunthar Arts and Science College, Namakkal
- Research collaborations with various international institutions in the fields of bioenergy and environmental biotechnology.