

Faculty Profile of Dr. S. Sadhasivam



Dr. S. Sadhasivam

Associate Professor

Department of Extension, Career Guidance and Student Welfare

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Research Area

- Biomaterials
- Laccase
- Regenerative medicine

Education & Career

Education

Ph. D.

Subject : Biotechnology

Institution : University Department, Bharathiar University

Affiliated University : Bharathiar University

Year of Award : 2007

M. Sc.,

Subject: Biotechnology

Institution : University Department, Bharathidasan University *

Affiliated University : Bharathidasan University

Year of Award : 2002

B. Sc.,

Subject: Microbiology

Institution: Bharathidasan University *

Affiliated University: Bharathidasan University

Year of Award: 2000

Career

At Bharathiar University (Reverse Order) *

Associate Professor : November 2016 to Till date

DBT-Ramalingaswami Fellow/Asst. Professor : August 2015 to November 2016 *

Past Experience

Senior Post-Doctoral Researcher : April 2012 to July 2015 at Institute of Biomedical Engineering and Nanomedicine Research, National Health Research Institutes, Zhunan, Taiwan, ROC

Senior Research Assistant : December 2011 to April 2012 at Department of Biomedical Imaging and Radiological Sciences China Medical University, Taichung, Taiwan, ROC

Post-Doctoral Researcher : October 2007 to December 2011 at Institute of Biomedical Engineering, National Taiwan University Taipei, Taiwan

Awards

Membership

Professional Bodies

Advisory member

Advisory member: ISOMRM

Period: 2010-2015

Visits

Country visited: Oman

Duration of visit: 5 days

Month and Year: Nov 2019

Purpose of visit: As a chair-person for the session in “The 5th International workshop on Food and Brain Health.

Country visited: Taiwan

Duration of visit: 1 month

Month and Year: May-June, 2019

Purpose of visit: Visiting Scientist

Country visited: Oman

Duration of visit: 7 days

Month and Year: Nov, 2017

Purpose of visit: International workshop on Food and Brain Health

Country visited: Taiwan

Duration of visit: 4 days

Month and Year: December 2016

Purpose of visit: Key-note Speech in “Functional Ceramics for Bioapplications” in “The 10th Asian Meeting on Electroceramics

Collaborators**Others****Projects**

Funded Projects

National Level

- [Completed - 01](#)
- [Ongoing](#)
- [Submitted](#)

DBT

Title of the project: Fabrication of injectable hydrogel for cartilage tissue engineering

Funding Agency: DBT

Duration: 2015 - 2020

Amount: 88Lakhs

Department Level Projects

Consultancy Projects

Research Guidance

- [Post Doc.](#)
- [Ph.D.](#)
- [M.Phil.](#)
- [M.Sc.](#)

Ongoing

Title

Name

Completed

Title

Name

Ongoing-04

1. Becky

Field of research: Polymer Hydrogel

Date of Registration:

2. Anisha

Field of research: Plant metabolites

Date of Registration:

3. Prasathkumar

Field of research: Polymer Hydrogel

Date of Registration:

4. Dhrisya

Field of research: Industrial Enzymes

Date of Registration:

Completed

Ongoing

Completed-02

2. Mohana priya. B

Title of the thesis: Synthesis of ferulic acid-chitosan-polyvinyl alcohol(PVA)film and evaluation of film properties

Year of award: 2018

Cindhu.B

Title of the thesis: Preparation and characterization of zinc activated chicken feather carbon for the diclofenac adsorption

Year of award: 2018

Ongoing

Completed-02

2. Devapriyan

Title of the thesis: Effect of Poly vinyl alcohol-gelatin film efficiency under different pH

Year of award: 2016

1. Aravind

Title of the thesis: Enhancement of laccase production in Trametes sp using pyrogallol

Year of award: 2016

Research Publication

- [International](#)

- [National](#)
- [Patents](#)
- [Conferences](#)
- [Books/Chapters](#)
- [Database](#)

Reverse Chronological Order

2021

2020

2019-2004

36. Therapeutic efficacy of nanoparticles and routes of administration
Dhrisya Chenthamara, Sadhasivam Subramaniam, Sankar Ganesh Ramakrishnan, Swaminathan

Krishnaswamy, Musthafa Mohamed Essa, Feng-Huei Lin and M. Walid Qoronfleh

Biomaterials Research 23, 1-29 (2019)

35. Simultaneous induction of biomass and lipid production in *Tetrademus obliquus* BPL16

through polysorbate supplementation

Sivakumar Esakkimuthu, Venkatesan Krishnamurthy, Shuang Wang, Abd El-Fatah

Abomohra, Sabarathinam Shanmugam, Sankar Ganesh Ramakrishnan, Sadhasivam Subrmaniam

and Swaminathan K

Renewable Energy 140, 807-815 (2019)

34. Efficacy of *Bletilla striata* polysaccharide on hydrogen peroxide-induced apoptosis of
osteoarthritic chondrocytes

Yen-Liang Lai, Yu-Ying Lin, Subramaniam Sadhasivam, Che-Yung Kuan,
Chih-ying Chi,
Guo-Chung Dong and Feng-Huei Lin
Journal of Polymer Research 25, 49 (2018)

33. Enhanced biodegradation and detoxification of malachite green by
Trichoderma asperellum
laccase: Degradation pathway and product analysis
Sabarathinam Shanmugam, Priyadharshini Ulaganathan, Krishnaswamy
Swaminathan, Subramaniam
Sadhasivam and Yi-Rui Wu
International Biodeterioration & Biodegradation 125, 258-268 (2017)

32. Trichoderma asperellum laccase mediated crystal violet degradation -
Optimization of
experimental conditions and characterization
Sabarathinam Shanmugam, Priyadharshini Ulaganathan, Savitha
Sivasubramanian, Sivakumar
Esakkimuthu, Swaminathan Krishnaswamy and Sadhasivam
Subramaniam
Journal of Environmental Chemical Engineering 5, 222-231 (2017)

31. In vitro and in vivo assessment of chitosan modified urocanic acid as
gene carrier
Yu-Sheng Hsueh, Sadhasivam Subramaniam, Yi-Cheng Tseng, Te-Ming
Chiang, Ondrej Mestak,
Teng-Kuei Cheng, Tzong-Fu Kuo, Savitha Sivasubramanian, Feng-Huei Lin
and Ming- Jium Shieh
Materials Science and Engineering C 70, 599-606 (2017)

30. Biowaste recycling by microbes for hydrogen production – An alternative
strategy for greener fuel
S. Sabarathinam, S. Savitha, K. Swaminathan and S. Sadhasivam
Journal of Environment and Biotechnology 3, 35-41 (2016)

29. MWCNT-Fe₃O₄ based immuno-PCR for the early screening of
nasopharyngeal carcinoma
Chia-Ching Liu, S. Sadhasivam, S. Savitha and Feng-Huei Lin

Materials Science and Engineering C 61, 422-428 (2016)

28. Hydroxyapatite-calcium sulfate-hyaluronic acid composite encapsulated with collagenase as

bone substitute for alveolar bone regeneration

S. Sadhasivam, Yen-Hsin Fang, S. Savitha, Feng-Huei Lin and Chun-pin Lin

Biomaterials 74, 99-108 (2016)

27. Carbon Encapsulated Iron oxide Nanoparticles Surface Engineered with Polyethylene glycol-Folic

acid to induce selective hyperthermia in folate over expressed cancer cells

S. Sadhasivam, S. Savitha, Chun-Jen Wu, Feng-Huei Lin and Leszek Stobiński

International Journal of Pharmaceutics 480, 8-14 (2015)

26. A potent inhibition of oxidative stress induced gene expression in neural cells by sustained

ferulic acid release from chitosan based hydrogel

Guo-Chung Dong, Che-Yung Kuan, S. Sadhasivam, Jiong-Yao Zhao, S. Savitha, Hwan-You Chang and Feng-Huei Lin

Materials Science and Engineering C 49, 691-699 (2015)

25. Design and synthesis of elastin-like polypeptides for an ideal nerve conduit in peripheral nerve regeneration

Yu-Sheng Hsueh, S. Savitha, S. Sadhasivam, Feng-Huei Lin and Ming-Jium Shieh

Materials Science and Engineering C 38, 119-126 (2014)

24. Fabrication of multiwalled carbon nanotubes-magnetite nanocomposite as an effective ultra-sensing

platform for the early screening of nasopharyngeal carcinoma by luminescence immunoassay

Chia-Ching Liu, S. Sadhasivam, S. Savitha and Feng-Huei Lin

Talanta 122, 195-200 (2014)

23. Anti- inflammatory effects of hydrophilic and lipophilic statins with hyaluronic acid against
LPS-induced inflammation in porcine articular chondrocytes
Chang CH, Hsu YM, Chen YC, Lin FH, Sadhasivam S, Loo ST and Savitha S
Journal of Orthopaedic Research 32, 557-565 (2014)
22. Application of Carbon Nanotubes Layered on Silicon Wafer for the Detection of Breast Cancer marker
Carbohydrate antigen 15-3 by Immuno-Polymerase Chain Reaction
S. Sadhasivam, Jung-Chih Chen, S. Savitha, Chun-Wei Chang and Feng-Huei Lin
Journal of Materials Science: Materials in Medicine 25, 101-111 (2014)
21. Cholaminchloride hydrochloride-cationized gelatin/calcium-phosphate nanoparticles as gene carriers
for transgenic chicken production
JY Huang, CC Liu, KC, Yen, PL Kang, S Sadhasivam and FH Lin
Process Biochemistry 47, 1919-1925 (2012)
20. A real time detection of the ovarian tumor associated antigen 1 (OVTA 1) in human serum by quartz
crystal microbalance immobilized with anti-OVTA 1 polyclonal chicken IgY antibodies
S. Sadhasivam, Jung-Chih Chen, S. Savitha, Feng-Huei Lin, Yi-Yuan Yang and Chi-Hsin Lee
Materials science and engineering C 32, 2073-2078 (2012)
19. The Development of Iron Free Partially Stabilized Cement (PSC) For Use as Dental Root-end Filling
Material
Fatou Ndong, S. Sadhasivam, S. Savitha, Feng-Huei Lin, Chun-Pin Lin and Wang Wen-Hsi
International Endodontic Journal 45, 557-564 (2012)
18. Synthesis and Characterization of PSC/Gypsum Cement as a Dental Pulp Capping Material
S. Sadhasivam, Jung-Chih Chen, S. Savitha, Ming-Xiang Hsu, Chung-King Hsu, Feng-Huei Lin and

Chun-Pin Lin

Materials science and engineering C 32, 1859-1867 (2012)

17. Label free gravimetric detection of epidermal growth factor receptor by antibody immobilization on quartz crystal microbalance
Jung-Chih Chen, S. Sadhasivam and Feng-Huei Lin
Process Biochemistry 46, 543-550 (2011)
16. Fabrication, characterization and application of greigite nanoparticles for cancer hyperthermia
Y. S. Chang, S. Savitha, S. Sadhasivam, C. K. Hsu and F. H. Lin
Journal of Colloid and Interface Science 363, 314-319 (2011)
15. Fungal protease: Production, Purification and Compatibility with laundry detergents and their wash performance
S. Savitha, S. Sadhasivam, Swaminathan and K. Feng-Huei Lin
Journal of the Taiwan Institute of Chemical Engineers 42, 298-304 (2011)
14. Effects of betulin on porcine chondrocyte behavior in gelatin/C6S/C4S/HA modified tricopolymer scaffold
W. Y. Lin, F. H. Lin, Sadhasivam and S. Savitha
Materials science and engineering C 30, 597-604 (2010)
13. Regeneration and molecular characterization of an intergeneric hybrid between *Graphium putredinis* and *Trichoderma harzianum* by protoplasmic fusion
S. Savitha, S. Sadhasivam and K. Swaminathan
Biotechnology Advances 28, 285-292 (2010)
12. Deployment of *Trichoderma harzianum* WL1 laccase in pulp bleaching and paper industry effluent treatment
S. Sadhasivam, S. Savitha, K. Swaminathan
Journal of Cleaner Production 18, 799-806 (2010)

11. Biosorption of RBBR by *Trichoderma harzianum* WL1 in stirred tank and fluidized bed reactor models
S. Sadhasivam, S. Savitha, K. Swaminathan and F. H. Lin
Journal of the Taiwan Institute of Chemical Engineers 41, 326-332 (2010)
10. A prototype of proposed treatment plant for sago factory effluent
S. Savitha, S. Sadhasivam, K. Swaminathan and Feng-Huei Lin
Journal of Cleaner Production 17, 1363-1372 (2009)
9. Metabolically inert *Trichoderma harzianum* cells mediated biosorption of synthetic dyes
S. Sadhasivam, S. Savitha, K. Swaminathan, and F. H. Lin
Journal of the Taiwan Institute of Chemical Engineers 40, 394-402 (2009)
8. The dose dependent effects of betulin on porcine chondrocytes
W. Y. Lin, S. Sadhasivam and F. H. Lin
Process Biochemistry 44, 678-684 (2009)
7. Modification of paper properties by the pretreatment of wastepaper pulp with *Graphium putredinis*,
Trichoderma harzianum and fusant xylanase
S. Savitha, S. Sadhasivam and K. Swaminathan
Bioresource Technology 100, 883-889 (2009)
6. Redox-mediated decolorization of synthetic dyes by *Trichoderma harzianum*WL1 laccase
S. Sadhasivam, S. Savitha and K. Swaminathan
World Journal of Microbiology and Biotechnology 25, 1733-1741 (2009)
5. Production, purification and characterization of mid-redox potential laccase from a newly isolated
Trichoderma harzianum
S. Sadhasivam, S. Savitha, K. Swaminathan and Feng-Huei Lin
Process Biochemistry 43, 736-742 (2008)
4. Exploitation of *Trichoderma harzianum* mycelial waste for the removal of rhodamine 6G from aqueous
solution
S. Sadhasivam, S. Savitha and K. Swaminathan

Journal of Environmental Management 85, 155-161 (2007)

3. Feasibility of using *Trichoderma harzianum* biomass for the removal of erioglaucine from aqueous solution

S. Sadhasivam, S. Savitha and K. Swaminathan

World Journal of Microbiology and Biotechnology 23, 1075-1081 (2007)

2. Application of *Aspergillus fumigatus* xylanase for quality improvement of waste paper pulp

S. Savitha, S. Sadhasivam and K. Swaminathan

Bulletin of Environmental Contamination and Toxicology 78, 217-221 (2007)

1. Comparison of the efficacy of live and autoclaved mycelium of *Trichoderma harzianum* on the removal of trypan blue

S. Sadhasivam, E. Saritha, S. Savitha and K. Swaminathan

Bulletin of Environmental Contamination and Toxicology 75, 1046-1053 (2005)

Chapter in Edited Book

1. Textiles: Types, Uses and Production Methods

Sadhasivam. S

Nova Science Publishers, 2012, ISBN: ISBN-10: 162100239X, 621 pages

2. Nanomaterials: Physical, Chemical and Biological Applications

Chapter 2. Synthesis, Surface Modification and Application of Iron Oxide Nanoparticles in Lipase Immobilization for Biodiesel Production: A review

Sadhasivam. S, Jayavignesh, V., Ramkumar, G., Purushothaman, Y. M., Sabarathinam, S., Venkatesan, K., and Swaminathan K

Apple Academic Press (AAP), 2018, ISBN-10: 1771884614, 428 pages

Alumini Reflections: