

Dr. A. Mahalakshmi Vasanth

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# OBJECTIVE

To achieve a position that gives me an opportunity to expand my knowledge while contributing creative solutions for the advancement of the Organization and to keep myself updated to meet the challenges of the changing technologies

**ACADEMIC QUALIFICATION**

## EdYoda Digital University: 6-Month Certification | Full Stack Developer Program *October’22-April’23*

Relevant course work: Python, Data Structure and Algorithms, MY SQL Data pre-processing & Exploratory Data Analysis (EDA), Data Visualization

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**SASTRA Deemed to be University: Ph.D. in Biotechnology *April’12-August ’19***

Thesis Title: A study on the adverse effect of diabetes in Wistar rat with and without cardiomyopathy subjected to ischemia-reperfusion and its influence on Hydrogen sulfide therapy

**Chettinad Health and Research Institute: M.Sc. in Medical Bionanotechnology *Julyl’09-April ’11***

Project Title: Synthesis, characterization and Biological Evaluation of Bio nanocomposites

**Rajiv Gandhi College of Engineering (Anna University affiliation):**

**B.E. in Biomedical Engineering *July’05-April’09***

Project Title: Self-Controlled Voice Activated Wheelchair

# WORK EXPERIENCE

***Teaching Assistant***, **SASTRA Deemed to be university, Thanjavur** ***April’12- June’13***

* Evaluating existing research techniques
* Providing technical and scientific expertise to conduct research
* Performing laboratory activities and operate laboratory equipment effectively and safely

***Jr. Bio Medical Engr.,* Anbu Multispecialty Hospital, Kumbakonam *July’11-March’12***

* Inspection of incoming equipment & machinery and doing pre-acceptance checks before official acceptance & payment
* Install, adjust, maintain, repair, or provide technical support for biomedical equipment
* Evaluate the safety, efficiency, and effectiveness of biomedical equipment

# ACADEMIC PROJECTS

**Title:** Food Ordering App

**Duration:** Jan’23-Feb’23

**Summary:** Designed a food ordering app to make the process of food ordering simplified.

**Title:** Synthesis, characterization and Biological Evaluation of Bio nanocomposites

**Duration:** Nov’10-April’11

## Team size: 5

**Summary:** Synthesized chitosan-based bio-nanocomposites and evaluated its blood compatibility.

**Title:** Self-Controlled Voice Activated Wheelchair

**Duration:** Nov’08-April’09

## Team size: 5

**Summary:** Designed a prototype of voice-controlled wheelchair using voice recognition module.

**PUBLICATIONS**

* Mahalakshmi A, Gopalakrishnan S, Kurian GA. Streptozotocin‐induced type II diabetic rat administered with non-obesogenic high‐fat diet is highly susceptible to myocardial ischemia–reperfusion injury: An insight into the function of mitochondria. Journal of cellular physiology. 2019;234(4):4104-14. (SCI, I.F. 6.513)
* Mahalakshmi A, Kurian GA. Hydrogen sulfide preconditioning could ameliorate reperfusion associated injury in diabetic cardiomyopathy rat heart through preservation of mitochondria. Biochimie. 2019;158:208-16. (SCI, I.F. 4.372)
* Mahalakshmi A, Kurian GA. Evaluating the impact of diabetes and diabetic cardiomyopathy rat heart on the outcome of ischemia-reperfusion associated oxidative stress. Free Radical Biology and Medicine. 2018;118:35-43. (SCI, I.F. 8.101)

***No. of Research papers***: 27 (17 SCI/SCIE, 10 Scopus)

***Cumulative Impact factor***: 84.61

***Citation***s: ~700 (Google Scholar)

***h-index***: 12 (Google Scholar)

***i10 index***: 14

**POSITIVE TRAITS**  Hard working, Keen Observer, Swift Learner, Thrust to learn

**SKILLS** Good Communication (Oral/Written), Analysis & Problem-Solving, Interpersonal & Leadership skill, Project Management & Organization

**TECHNIQUES**  Molecular docking, Animal (Rat) Handling, Cell Culture, Circuit Designing

**INSTRUMENTS** Langendorff Apparatus, Electrophoretic system, Gel Documentation, Zeta Size Analyzer

# FELLOWSHIP AND HONOR

* DST - INSPIRE Fellowship (2013-2018)

(No. DST/INSPIRE Fellowship/2013; IF 130406)

* RAJAH MUTHIA AWARD (2010 – 2011)

# TECHNICAL SKILLS

* Languages: C, C++, FoxPro, Python
* Web Technology: HTML
* Database: MySQL
* Graphic Software: Adobe Photoshop, CorelDraw

# CERTIFICATIONS

* Qualified IELTS exam in 2021
* Programming in C and C++ from NIIT
* Diploma in PC Professional (PCP) from CSC
* Awarded with Praveen certification by Dakshina Bharat Hindi Prachar Sabha, Chennai for successful completion of Hindi course in 2009

# EXTRACURRICULAR ACTIVITIES

* Volunteered in the awareness program conducted by Help Age India, Chennai on August, 2000
* Organized various Cell culture and Molecular Biology workshops
* Participated and presented research work in more than 10 International Conferences
* Co-guided more than 30 final year students’ projects