

T. GAYATHRI, B.Tech (Bio-tech).

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# **CARIER OBJECTIVE:**

Seeking a position to utilize my knowledge, skills and abilities in the industry that offers competitive environment, a true profession to put in the acquired knowledge and gain exposure to upcoming technologies while being resourceful, innovative and flexible.

# **EDUCATIONAL QUALIFICATION:**

Qualification	School /	Year of	Stream / Degree	Score
	College	Passing	Specialization	
Under Graduate	Prist University	2018	B.Tech in Biotechnology	91%
HSC	Jothi Vallalar Higher	2014	Maths, Physics,	81.75 %
	Secondary		Chemistry,	
	School		Biology	
SSLC	Jothi Vallalar Higher	2012	Science	90 %
	Secondary School			

# **AREA OF INTEREST:**

- Microbiology
- Molecular Biology
- Cell Culture
- **★** Immunology
- ★ Biochemistry

#### **ACADEMIC PROJECT:**

TITLE: "Comparison of WHO endorsed Molecular Assays for the Detection of Multi Drug Resistant Tuberculosis" in Microbiology department.

**CENTRE:** Government Hospital for Chest Diseases, Pondicherry.

#### **PUBLICATION:**

**TITLE**: "WELL- DIFFUSION ASSAY: A Novel Approach for Selection and Isolation of High Potent Culture for *Blakeslea trispora*"

JOURNAL: "World Journal of Pharmacy and Pharmaceutical Sciences", Volume 10, Issue 8; 2021; 505-514

# **PROFESSIONAL EXPERIENCE 1:**

**ORGANIZATION**: Pondicherry Center for Biological Sciences and Educational Trust.

DURATION : AUGUST 2018 to JANUARY 2020 (1.5 Years)

**KEY POSITION**: Research Assistant

#### **PROFESSIONAL EXPERIENCE 2:**

**ORGANIZATION**: Teyro Labs Pvt Limited.

DURATION : JANUARY 2020 to till date (1.5 Years)

**KEY POSITION**: Junior Research Associate (Microbiology)

#### **TECHNICAL EXPERTISE:**

# Molecular Biology, Analytical and Separation Techniques:

- Isolation of DNA (Plasmid, Genomic) and RNA from Prokaryotes and Eukaryotes.
- Electrophoresis Techniques (AGE, SDS-PAGE).
- Amplification of Genomic DNA by PCR (Polymerase Chain Reaction) method,
   cDNA synthesis and Real Time PCR.
- DNA fragmentation, DNA and RNA quantification.

#### **Biochemistry:**

- Estimation of Carbohydrate, Protein, Lipid and Nucleic acids.
- UV Spectrophotometric and Phytochemical analysis.

# Microbial Techniques:

- Media preparation, sterilization activities, Maintenance of bacterial and fungal strains.
- Maintenance of cultures for routine laboratory activities.
- Handling microbial culture work and prepare Cryo-Vials.
- Plating techniques and Antibiotic sensitive test.
- Microbial staining techniques and Biofilm assay.
- Gene transformation in bacteria (<u>E.coli</u>).
- Biochemical test for bacterial identification.
- Isolation, Characterization and Screening of microbes.
- Handling of MCB and WCB preparation and maintenance.
- Ability to perform culture suspension of microorganisms for growth promotion test.
- Inoculum development for fermentation at all stages.
- Hands on experience of aseptic operations in seed development and productivity test.
- Discovery of Drugs, Enzyme's from microorganisms by Fermentation and Shake flasks methods
- Having knowledge on Microbial limit test for finished products, food products and raw materials.
- Ability to perform antibiotic assay by spread plate method for probiotic samples.
- Sampling and analysis of Purified water, Raw water and RO water by both Microbial and chemical method
- Growth Promotion Test (GPT) for enumeration and selective media.
- Environmental Monitoring by Plate Exposure method, Air Sampler method and by Swab method.
- Decontamination of leftover samples.

# Immunology:

- Hb cell count, WBC and Platelet count, Blood grouping (ABO) using kit method.
- ELISA (Enzyme Linked Immune Sorbent Assay) Test.
- Media preparation, Maintenance of adherent cell line.
- Animal cell counting techniques using Hemocytometer.
- MTT, Anti-diabetic and Anti- inflammatory assay.
- AO/EB staining.

#### Instrumentation and Documentation:

- Handling of Autoclave, BSC, Incubator shaker, BOD incubator, ULT Freezer, Cold Cabinet, pH meter, Lyophilizer and weighing balance in inoculum preparation.
- Calibration of pH meters and Standard weights verification of weighing balances, Micropipette.

- Coordination with Maintenance and Instrumentation team for maintenance and breakdown activities
- To coordinate with QA for all the validation, qualification and audit preparedness.
- Hands of experience on clean room classified areas (ISO Class 5 to 8)
- Documentation and maintenance of records as per the GMP practices.
- Prepare the Microbiology and documents for customer and regulatory audits.

# LIST OF PARTICIPATED PROGRAMES:

- ➤ Participated in hands on training in "ANIMAL CELL CULTURE TECHNIQUES AND FLOW CYTOMETRY" held on National College, Trichy.
- Went on a workshop on "APPLICATIONS OF BIOINFORMATICS IN GENOME ANALYSIS" at Tamil Nadu Veterinary and Animal Sciences University.
- ➤ Participated in "2<sup>nd</sup> INTERNATIONAL YOUNG SCIENTIST CONGRESS" held at Mother Theresa Post Graduate and Research Institute Pondicherry".
- ➤ Participated in "WORKSHOP ON LIFESTYLE MANAGEMENT" held at Mother

  Theresa Post Graduate and Research Institute, Puducherry.
- ➤ Participated in "NATIONAL WORKSHOP ON TECHNIQUES IN BIOTECHNOLOGY" held at Sathyabama University, Chennai.
- Participated in PRIST Sci Fa' 16, Science Exhibition in the topic of
   "BIODEGRADATION OF PLASTICS" held at Prist University, Puducherry.

# **COMPUTER COURSE AND SKILLS:**

- 1. Completed the course in "DIPLOMA IN COMPUTER APLLICATION"(DCA) with 82% from January 2014 to June 2014 and obtained the "A+" Grade.
- 2 Skills in Microsoft word, Power point, Excel and Graph prism pad.

#### STRENGTHS:

- Ability to work in a team and build partnerships.
- Time management skills and avoiding procrastination.
- Effective communication skills.
- Good knowledge of laboratory and instrumentation techniques.

- Solid knowledge of basic computer.
- Extremely disciplined, professional and punctual.
- Confident about completing the work on time.

# **PERSONAL DETAILS:**

Name : T. Gayathri

Father's Name : S. Thirumal

**Date of Birth** : 19.09.1996

Gender : Female

Marital Status : Single

Nationality : Indian

**Languages Known** : English, Tamil

#### REFERENCES:

- 1. Dr. K. Thirugnanasambantham, Senior Researcher, Seoul National University, Pyeongchang campus, South Korea. Email: thiru\_dna@yahoo.co.in
- Dr. V.I. Hairul Islam, Assistant Professor, Department of Biological Sciences, King Faisal University, Hofuf, Al Hasa, Saudi Arabia. Email: <u>hairul2biot@gmail.com</u>
- 3. Mr. B. Prabhakara Babu, Assistant General Manager, Department of Biotechnology, Teyro Labs Pvt Limited, SLIMS Campus, Osudu, Agaram Village, Pondicherry.

Email: prabhuvana.babu@gmail.com

#### **DECLARATION:**

I hereby declare that the above-mentioned information is in accordance with fact or truth up to my knowledge and I bear the responsibilities for the correctness of the abovementioned particulars.

PLACE: Pondicherry, yours truly,

DATE: (T. GAYATHRI)