



# HARIKRISHNAN P M

## BSC CHEMISTRY GRADUATE

### CONTACT

- 📍 POIKKAT HOUSE KANNAMPUZHA TEMPLE ROAD CHALAKUDY, THRISSUR, KERALA
- ☎ 6238596577
- ✉ harikrishnanpm958@gmail.com
- 📅 15/09/2001

### OBJECTIVE

As a chemistry aspirant iam looking for a challenging full-time job in the field of chemistry where I can leverage my strong educational background, analytical skills, and laboratory experience to contribute effectively to the qualitative and development efforts of the company, while continuously expanding my knowledge and skills in the field.

### LANGUAGE

- ✓ MALAYALAM
- ✓ ENGLISH

### SKILLS

- ANALYTICAL SKILLS
- LABORATORY TECHNIQUES
- CHEMICAL KNOWLEDGE
- PROBLEM SOLVING
- ATTENTION IN DETAIL
- COMMUNICATION SKILLS
- TEAM WORK
- REGULATORY COMPLIANCE
- CONTINUOUS LEARNING
- TIME MANAGEMENT

### INTEREST

- RESEARCH, INNOVATIONS IN CHEMISTRY, MUSIC, CRICKET,

### PROJECTS

#### 📌 COMPARISON AND STUDY OF WATER SAMPLES FROM DIFFERENT LOCALITIES IN THRISSUR DISTRICT BASED ON VARIOUS PHYSICAL AND CHEMICAL PARAMETERS.

Water is going to be one of the major issues confronting humanity in the coming decade. Safe drinking water is a vital requirement to human being and its availability is so important in contributing the overall socio-economic development of a nation. Water may be contaminated by various means chemically & biologically & may become unfit for drinking and other uses.

Aim of the present study

1. To assess the quality of open well water in some areas of Thrissur
2. To examine whether any type of pollution take place in open well water in some areas of Thrissur district.
3. To suggest various methods to decrease the extend of pollution.

#### 📌 A STUDY ON SOL-GEL SYNTHESIS OF NiFe<sub>2</sub>O<sub>4</sub> AS ELECROCATALYST IN ZINC-AIR BATTERY DONE IN MG UNIVERSITY CAMPUS

This work presents a study on the Sol-gel Synthesis of NiFe<sub>2</sub>O<sub>4</sub> As Electrocatalyst in Zinc-air Battery. Zinc-air batteries have drawn a lot of interest as viable energy storage technologies because of their high energy density, low cost, and environmental friendliness. The NiFe<sub>2</sub>O<sub>4</sub> is designed to serve as a bifunctional catalyst for both the Oxygen Evolution Reaction (OER), critical process in the operation of Zinc-air battery. The synthesis method, characterization techniques, and electrochemical performance of the catalyst are investigated. The findings of this study may have broad implications for the development of energy storage technologies in the future and the transition to a cleaner, more sustainable environment. We successfully synthesized NiFe<sub>2</sub>O<sub>4</sub> and characterized by XRD and SEM. The synthesized catalyst incorporated with zinc-air battery. The catalytic activity analyzed by galvanostatic charge discharge cycle. The GCD shows that the zinc-air battery with the prepared catalyst shows better charge discharge. ZABs shows regular longer discharge curves of longer shelflife. In conclusion, the sol-gel synthesis of NiFe<sub>2</sub>O<sub>4</sub> as an electrocatalyst in Zn- air batteries demonstrates promising potential for improving battery efficiency and performance.

### EDUCATION

- 📌 **BSC CHEMISTRY** 2019 - 2022  
UNIVERSITY OF CALICUT  
7.317
- 📌 **MSC CHEMISTRY** 2022 - Present  
MAHATMA GANDHI UNIVERSITY

### ACHIEVEMENTS

- ✓ ATTENDED MANY SEMINARS AND WEBINARS IN FIELD OF CHEMISTRY LIKE INNOVATION AND ADVANCE IN INTERDISCIPLINARY RESEARCH, NANOTECHNOLOGY, HYDROTECHNOLOGY, LIFE SCIENCES.

PARTICIPATED IN POWERPOINT PRESENTATION COMPETITIONS IN COLLEGE

COMPLETED AN ADD ON COURSE ON GEO INFORMATICS CONDUCTED BY CENTRE OF ENVIRONMENT AND DEVELOPMENT WITH A GRADE

COMPLETED A VALUE EDUCATION COURSE WITH FIRST CLASS

VISITED INDUSTRIES LIKE NITTA GELATIN, KORATTY AND AQUA TECH, ERNAKULAM TO STUDY ABOUT THE INDUSTRIAL PRODUCTION AND DEVELOPMENT