

# Internship in Food Science & Technology

## Bridging Gap Between Industry & Academia



The overall goal of the training program is to provide the trainee with the skills they will need to provide appropriate food product testing and management for food industry.

**Analytical Food Chemist** develop and apply stringent methods of chemical analysis to the product before it goes on the market, ensuring the quality of food products and **Quality Control Analyst** utilises chemistry lab skills to test and measure materials, generally in a manufacturing or quality control lab.

### OBJECTIVES :

- To develop the skill with latest technologies used in Food Analysis
- Lab facility with dedicated scientific advisory and research assistants
- Documentation of all experimental work
- Data Handling and interpretation

1

### FOOD ANALYSIS

Food Quality Control  
Analysis by Latest  
Technology

2

### FOOD RESEARCH

Exposure to tools and  
techniques for Food  
Product Research

3

### TOXICOLOGY

Allergens, Mycotoxin,  
Aflatoxin, Pesticide  
Analysis

### Food Analysis

### Allergen Analysis



### Preservatives



### Mycotoxins



### Microbial Analysis

### Pesticides

### Regulatory

### Documentation

## UNITS TO BE COVERED : - All Units are compulsory For Training in Genomics & Molecular Biology

### Unit I - Food Lab Safety, Standards, Regulatory and SOP's

Law of Food Safety and Standards , Food Products Regulatory Bodies ,Standard Operating Procedures in Food Analysis

**Basics of Laboratory:** Lab safety and Procedures, Record Maintenance, Handling of Equipments , Sterilisation Techniques , Preparation of Chemical & Reagents.

### Unit II - Quality Control & Quality Check in Food Microbiology

Enumeration of microorganisms in food : Determination of Aerobic colony count in Foods, Most Portable number method, Enumeration of yeast and molds in food, Enumeration of coliform

**Determination of microorganisms in food :** Direct microscopic count for Sauces, Tomato Puree and Pastes, Rope producing spores in Food, Enumeration and Isolation E.Coli, Salmonella , Shigella, Vibrio etc, Detection and determination of Thermophilic Flat Sour Spore Formers in Food, Bacteriological Examination of Water for coliform, Identification of Microbes

### Unit III - Analysis of Food Products by PCR & Q-PCR Technology

Extraction of Nucleic Acid from microbe, Check of DNA integrity ( DIN) , Purification of DNA , Amplification of DNA through PCR , Characterisation of microbes through 16s rDNA

**Next Generation Sequence Data Analysis ( amplicon based ),** Amplicon Target Population Structure, Meta-genome Shotgun Processing, Q.C of meta-genomics Sequence Data, **Real Time PCR Primer Design,** Q-PCR Data Handling,

### Unit VI - Quality Analysis by HPLC, GC & Spectrometry

Basics of Spectroscopy, chromatography, HPLC, GC and Mass Spectrometry. **Analysis of Preservative / Adulterants** by Spectroscopy , analysis of any Preservative / Adulterants by HPLC , Analysis of Preservative / Adulterants by Gas Chromatography , Data Analysis of Chromatography Data : Software Handling & Data Analysis .

**Sample to be analyse : -**

**Preservatives -** BHT or Benzene , **Nutritional -** Any Vitamin, Afalotoxin or Mycotoxin as Adulterants

### PROJECT WORK :

We will provide a project work of your interested area, our assigned projects will be on product development, basic research and novel idea . **We do respect and welcome all feasible ideas** suggested by you for technology development in life science research.

### TECHNIQUES COVERED IN THIS PROGRAM :

Nucleic Acid Extraction ,Optimisation, Electrophoresis, Imaging and Data Analysis, DIN/RIN Quantitative Analysis , Advance Bioinformatics tools and softwares, PCR & Real Time PCR Assay Development and Data Analysis, rDNA Technology, cDNA Construction, Basics of Microarray , Bio-separations by HPLC & Gas Chromatography

### BENEFITS OF THE TRAINING PROGRAM :

1. Research & Development in Bio-Pharmaceutical Sector
2. Molecular Diagnostics in health care
3. Doctoral Research
4. Bridging Gap in Academic Program
5. Boost your confidence

## INFORMATION TO APPLY FOR THE PROGRAM

### WHO MAY JOIN :-

Any enthusiast and dedicated learner from life science, biotechnology, chemistry or applied sciences

### SELECTION CRITERIA:-

First come first serve basis



### TRAINING FEE :

Rs 10,000 / - For 30 Days Training & Rs 12,000 /-For 45 Days ( Training + Project Work )

### HOW TO APPLY –

#### Details of Documents :

1. Any identity proof along with University / College Identity Card
2. Filled **Registration form** with photograph ( Given in Brochure )
2. Registration fee will be Rs 1000 / - paid through cheque or on line payment

#### How to pay Registration Fee :

1. Cheque will be in favour of **Allele Life Sciences Private Limited**
2. **For on line payment detail send request at : [allelelifesciences@gmail.com](mailto:allelelifesciences@gmail.com)**

#### How to send document :

**Those who pay through cheque send all documents at following address :**

#### **Allele Life Sciences Pvt. Ltd.**

C - 59 , Sector - 10 , Noida  
Uttar Pradesh - 201301 , IN  
Ph.No : + 91-9891179928

**Those who opt on Line registration send scan copy of all documents and receipt of online payment at : [allelelifesciences@gmail.com](mailto:allelelifesciences@gmail.com)**

**Note :** We will send confirmation within specified time. If not received send a reminder mail.

**For Any other query mail at : [allelelifesciences@gmail.com](mailto:allelelifesciences@gmail.com) or WhatsApp - 9891179928**

**Registration Form is Given at next page**



## Registration Form

**Name of Training Program :**

**Expected Date of Joining :**

**Candidate Details :**

**Name:** .....

**Father's Name:** .....

**Address :** .....

**Contact No :** .....

**Email:** .....

**Institution :** .....

**Qualification :** .....

### Terms & Conditions :

1. The admission to training / internship programs will be confirmed after the payment of registration fee along with documents.
2. The registration fee deposited is completely non refundable.
3. The industrial training fee includes the cost of chemical , reagents and study material costs.
4. I will deposit the service charges as decided by the company at the time of joining date of training program.
5. Students have to bear their own boarding/lodging /conveyance charges. We facilitate students in finding proper paying guest arrangements.
6. The trainees will have to bring their own lab coat and wear them all the time in the campus.
7. Trainees are selected on first come first serve basis
8. Trainees will maintain adequate discipline inside the lab premises.

### DECLARATION

I \_\_\_\_\_ from \_\_\_\_\_  
hereby declare that all statement/information given in the application form are true to the best of my knowledge and belief . I will strictly abide by the norms/lab etiquette during the training

Signature

Place: \_\_\_\_\_

Date: \_\_\_\_\_

**For office use only**