



## ICAR-IISR Summer Internship Programme-2024

on

### 'Advanced techniques in Microbiology, Biochemistry, Biotechnology and Bioinformatics'

(06<sup>th</sup> May - 04<sup>th</sup> June 2024)

#### Overview

ICAR-Indian Institute of Spices Research, Kozhikode is offering a Summer Internship Programme on "Advanced techniques in Microbiology, Biochemistry, Biotechnology and Bioinformatics" from 06<sup>th</sup> May to 04<sup>th</sup> June 2024. This internship is designed to expose young and curious minds to scientific realms and biological processes, encouraging innovation and scientific discoveries through exploration of new ideas. This internship is a great opportunity for all those who are interested in learning and enhancing their skills in the field of Microbiology, Biochemistry, Biotechnology and Bioinformatics. The internship will cover various aspects of these fields, including advanced techniques and methods combining lectures and hands-on practicals.

#### Eligibility

Final year Graduate/First year Post graduate/PhD students (currently enrolled or completed) in any stream of Life Sciences.

#### Course Content

Course will cover orientation lectures along with hands on experience on laboratory techniques such as

#### Drylab

- Introduction to Bioinformatics & R
- Introduction to Linux
- Introduction to NGS data analysis
- Comparative genomics
- PCR Primer designing
- Basics of Machine learning
- Data visualisation *etc.*

#### Wetlab

- DNA/RNA Isolation
- Agarose Gel electrophoresis
- Plant tissue culture
- PCR and qRT-PCR
- Preparation & quantitative analysis of plant extracts
- Instrumentation and analysis by HPLC, GC-MS, LC-MS/MS
- Biochemical screening for stress tolerance
- Plant disease isolation, characterization & inoculation *etc.*

#### How to apply?

Interested candidates are requested to fill in the google form. The selected candidates will be intimated through email and they have to pay the registration fee by the prescribed date.

#### Fee Structure

Registration fee of Rs. 11,800/- (Inclusive of 18% GST) should be paid by selected candidates.

Food and accommodation has to be arranged by the candidate as this is not included in the registration fee.

#### Important dates

Online registration ends on: 20<sup>th</sup> April 2024

Intimation to selected candidates on: 25<sup>th</sup> April 2024

Acceptance of registration fee ends on: 01<sup>st</sup> May 2024

#### Contact Us

Telephone: 0495-2731410 (Ext: 220/306)

Email: iisrinternship@gmail.com

Google form link: <https://forms.gle/A5xiJL7jdBo87tDe6>

Scan the code to fillup the Registration form

