

**SRI SRI UNIVERSITY** is a young and dynamic institution established with a goal to provide holistic education in spiritual environment. We are looking for individuals to promote excellence in teaching and research building in the Faculty of Agriculture.

#### OPEN POSITIONS

Current open position available in each discipline are

- AGRONOMY  
Professor-1, Assoc. Prof.-1
- PLANT PATHOLOGY  
Professor-1
- ANIMAL SCIENCES  
Assoc. Prof.-1, Asst. Prof.-1
- SOIL SCIENCE  
Professor-1, Assoc. Prof.-1
- FOOD NUTRITION & DIETETICS  
Professor-1, Assoc. Prof.-1, Asst. Prof.-1
- AGRIBUSINESS  
Assoc. Prof.-1
- GENETICS & PLANT BREEDING  
Professor-1, Assoc. Prof.-1, Asst. Prof.-1
- AGRICULTURAL EXTENSION  
Professor-1, Assoc. Prof.-1
- AGRICULTURAL ECONOMICS  
Professor-1
- ENTOMOLOGY  
Professor-1
- HORTICULTURE  
Professor-1, Assoc. Prof.-1
- AGRICULTURAL ENGINEERING  
Assoc. Prof.-1
- CROP PHYSIOLOGY  
Asst. Prof.-1
- AGRO METEOROLOGY  
Assoc. Prof.-1, Asst. Prof.-1
- FARM MANAGER  
Asst. Prof.-1

#### QUALIFICATIONS

Ph.D. and Master's in respective discipline with basic degree in B.Sc. Agriculture along with as per ICAR/UGC eligibility criteria with ICAR – NET or UGC NET qualified, which is exempt for applicants with Ph.D. Preferentially, require minimum teaching and research experience, for each position level.

#### OTHER REQUIREMENTS

Evidence of publications in international journals of repute with impact factor, abilities to obtain extramural funding to establish the research program. Besides, build outreach activities, conduct training and workshops at regular intervals through externally sourced funds for the activity. Should have interest to develop innovative teaching modules / research facilities in his / her area of expertise.



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FACULTY OF AGRICULTURE  
**SRI SRI UNIVERSITY**  
Bidyadharpur–Arilo, Cuttack, Odisha – 754006

#### NON TEACHING POSITIONS

**Lab Assistant** required in following domains:

Agronomy, Plant Pathology, Animal Sciences, Soil Science, Food Nutrition and Dietetics, Genetics and Plant Breeding, Entomology, Horticulture, Crop Physiology.

**Technical Assistant** required in following domains:

Agricultural Extension, Agricultural Economics, Agricultural Engineering, Agro meteorology.

#### QUALIFICATIONS

- Degree in Agriculture or Diploma in Agriculture for Lab Assistant
- Degree in Rural Management or Social Science for Agricultural Extension
- Degree with major in economics for Agricultural Economics
- Diploma in agricultural engineering for Agricultural Engineering
- Diploma in meteorology for Agro Meteorology

Salary is competitive and commensurate with the experience / academic credentials. We will also consider exceptional candidate/s with Master's degree in agriculture with ICAR / UGC Net qualified candidates as Faculty Fellow (Contractual) in the respective disciplines. 'Positions will remain open until filled.' Prospective candidates are requested to submit an application for consideration to faculty opening in various disciplines.

Please send your application to: [jobs@srisriuniversity.edu.in](mailto:jobs@srisriuniversity.edu.in)

Visit our website: [www.srisriuniversity.edu.in/careers](http://www.srisriuniversity.edu.in/careers)



## INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

Powai, Mumbai 400 076

### Advertisement No.: IRCC/EXT323/2022

**Job Title** : Junior Research Fellow  
**Job Reference Number** : 50376745  
**Application End Date** : 20.01.2023  
**Type of Employment** : Proj. Staff Contract  
**No. of Position(s)** : 2

#### IITB Project Recruitment:

Project title: Particle capture by charged droplets using electrodynamic balance for electrospray air cleaner, funded by DAE-BRNS

About the project: Background of the project:

Increasing air pollution in towns and cities, and threat from the recent pandemic has made air cleaning, by reducing levels of the particulate (virus) matter, an important aspect of every-day life. It is envisaged that like water purifiers, air purifiers would soon become an essential feature of households, industrial setups and hospitals and public spaces.

In this context, the presently available technologies are filter based, water spray based and ionizer based. While filtration has high efficiency and is a time tested technique, it puts premium on air flow rate due to inbuilt filter resistance. In the public domain the hazards associated with replacement is also a matter of concern. Corona discharge ionizers as used in electrostatic precipitators overcome the pressure drop and self cleaning issue, but are generally limited to industrial applications. Domestic unipolar ionizers without airflow tend to contaminate the walls, when integrated with flow, ozone problems might arise. Electrospray technology is the emerging alternative in this genre of mechanisms for particle removal. One would like to develop a hybrid technology embodying stages involving these mechanisms. The main aim of the project is to develop an electrospray based filter less air purifier prototype. The PhD projects would undertake experimental studies, theoretical and analytical model development, CFD studies and ultimately a prototype development of an air-purifier.

**Essential Qualifications & Experience:** BE/BTech in Chemical or Mechanical Engineering  
**Job Profile:**

**Position 1:** Studies on particle scavenging characteristics by Electro Hydro Dynamic (EHD) Sprays and the development of a filterless Aircleaner System

The use of charged droplets to treat pollutants and combustion products has been described in the literature since 1940s. It overcomes the problem of high pressure-drop in filtration and ozone generation in electric based air purification systems. The project aims at both, developing a fundamental understanding of interaction between charged droplets and

aerosol particles and based on this learning building a prototype electrospray based air cleaner.

The project would essentially involve conducting a series of experiments on understanding the fundamentals of droplet-particle interaction, using an in-house levitation device, namely the electrodynamic quadrupole trap. Charged droplets and aerosols interact via hydrodynamic as well as electrostatic interaction. These understandings will be used to develop a scaled-up electrospray air cleaner. The essentials will involve developing a well formed electrospray, particle injection system, using instruments to quantify particle capture amongst others.

**Position 2:** Theoretical investigations on the fundamentals of particle-droplet interactions and the development of a mathematical model for optimizing the performance of an Electro Hydro Dynamic (EHD) Spray based air cleaner system.

The development of an air cleaner system using Electro Hydro Dynamic (EHD) Sprays is being undertaken in our laboratory. The PhD work associated with this development will involve conducting boundary element and other CFD studies to obtain a fundamental understanding of the charged droplet-particle interaction processes. Towards this end, existing inhouse codes, new inhouse codes, and commercial CFD softwares will be used. Further, this understanding will be applied towards the development of a mathematical model to arrive an optimum design for the prototype electrospray-based air cleaner system. The models will involve particle capture efficiencies, hydrodynamics and electrostatics, population balance modeling and CFD studies.

**Pay Details:** Consolidated salary Rs 31000/- p.m.

#### General information:

The position is for project staff (JRF) with a strong possibility of a PhD in chemical engineering with fellowship upto the duration of the project (the official duration is 3 years).

The appointment is for time bound project and the candidate is required to work mainly for the successful completion of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.

Candidates called for interview will be required to attend at his/ her own expenses. For any queries/clarification please contact: [recruit@irc.iiitb.ac.in](mailto:recruit@irc.iiitb.ac.in)

For application visit IRCC page: <https://rtd.iiitb.ac.in/job-opportunities>

Candidates needs to apply on the website only. Hardcopy application will not be accepted.