

# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

# Advertisement No.: IRCC/EXT072/2022

Job Title Research Associate

Job Reference Number 50300568

Application End Date 22.04.2022

Type of Employment Proj. Staff Contract

No. of Position(s)

### IITB Project Recruitment:

Project title: Longitudinal effects of air pollution exposures on lung growth and development of biomarker of lung function deficit in urban children

About the project:

This multi-centric, multi-partner DBT-Wellcome Trust India Alliance funded project has following aims a. to conduct a longitudinal, prospective cohort study to measure the growth of lung function in schoolchildren (age 11 to 14 years), over a period of 5 years, residing in Mumbai, b. to assess the long-term exposures of traffic related air pollutants in schools and homes and characteristics (chemical composition and oxidative potential) of outdoor PM2.5 in schools of the children in four cities – Bengaluru, Delhi, Mumbai and Mysuru, and c. to study the association between air pollution and lung function in children and examine the individual and community level factors modifying their association. The study involves field monitoring, laboratory chemical analysis for organic and inorganic constituents in PM2.5, measuring oxidative potential in PM2.5 for all four cities and conducting spirometry, biosamples (blood, urine, hair and nails) collection and administering structured questionnaire surveys in Mumbai.

#### **Essential Qualifications & Experience:**

MTech in Environmental Science/ Engineering/ Management with at least 5 years of research/work experience in air pollution monitoring/ epidemiology /community medicine OR

PhD in Environmental Science/Engineering/ Atmospheric Science or Equivalent subject with at least 1 year of research experience in in air pollution monitoring/ epidemiology /community medicine

Desirables:

1. Candidates with prior experience in spirometry assessment, conducting community surveys OR laboratory chemical analysis of airborne particles/biosamples OR epidemiological/ exposure modeling will be preferred.

2. Knowledge of GIS will be a huge advantage.

3. Good writing skills a must as demonstrated by published articles.

4. Willingness and commitment to work in a diverse team of professionals to achieve the project targets in a timely manner

## Job Profile:

1. Recruitment of study participants, supervising spirometry and health assessment in Mumbai and air monitoring work in all four cities, Logistic planning.

2. Analysis of the exposure data and development of statistical models.

3. Writing scientific articles, project progress and financial reports.

4. Assisting in administrative work including staff recruitment, equipment/consumables procurement.

5. Project management which will include conducting multi-partner meetings and workshops and stakeholder outreach programs and sharing of data with partner institutions.

#### Pay Details:

Consolidated salary Rs.49000/- p.m. + HRA

#### General information:

The candidate will require to travel ~10% time to the field sites which will include urban neighbourhoods in Bengaluru, Delhi, Mumbai, and Mysuru.

The position is temporary for a period of 1 year and tenable only for the duration of the project. 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@ircc.iitb.ac.in