



## National Institute of Advanced Studies, Bengaluru

### Call for Applications: Project-funded PhD Fellowships and Field Assistants in the Energy and Environment Program

The National Institute of Advanced Studies (NIAS), a visionary initiative of J R D Tata, has a mandate to create leaders of substance and credibility in a variety of domains in India, and to carry out in-depth, policy relevant research from a multi-disciplinary perspective, drawing on a wide spectrum of disciplines in the humanities, social sciences, and natural sciences. Please visit our website ([www.nias.res.in](http://www.nias.res.in)) for further details on NIAS.

NIAS is recognized as a center for research by the Government of India (GOI) and several universities. We are seeking capable and enthusiastic **PhD students** and **Field Assistants** interested to conduct multi-disciplinary research in the **Energy and Environment Program** (“Program”) at NIAS. The Program has recently secured a 5-year grant from the Ministry of Earth Sciences (MOES) “*to understand the Interaction between components of Earth and Human Systems at various Spatial and Temporal Scales.*” The specific objectives of this research grant are as follows:

- To study the impact of air quality on health at the local & regional levels, and examine ways and means to mitigate the same;
- To study the spatial-temporal, seasonal and long-term trends in the level of atmospheric pollutants and their inter-linkages;
- To identify pathways of pollutants and relative contribution between local versus distant sources along with its interpretation for select regions;
- To study the microclimate of select metropolitan cities with the goal of assessing relative contribution of different emission sources;
- To make comprehensive assessments of seasonal air pollution scenario to develop strategies, enablers, and action plans to transition to a more environment-friendly and sustainable energy/transportation mix;
- To understand the water-energy-agriculture nexus in select areas where there is competing use of surface water in agriculture and in thermal power plants to provide a basis for cost-benefit analysis of optimization measures for the sharing of water between agriculture and power generation to enhance sustainable operations in both sectors;
- To establish a baseline case for assessing potential improvements in technologies and practices to optimize usage of water in thermal power plants in general, and those located in water-deficit regions in particular;
- To develop policy formulations designed to make energy services accessible, affordable, and sustainable to the households who are unserved and/or under-served;
- To study socio-economic impact of select MOES’s programs with reference to the SDGs; To contribute towards MOES’s Polymetallic Nodules (PMN) Program, esp. with reference to its potential environmental impact.

The aforesaid objectives will be translated into inter-linked but self-contained projects through both field and analytical studies which will form the basis for policy recommendations after incorporating the views of different key stakeholders.

## **ELIGIBILITY**

### **Doctoral Fellows:**

Master's degree in Earth Sciences/Agricultural Sciences/Engineering/Sciences/Social Sciences/Geosciences/Geo-informatics/Materials/Public Policy from a reputed Institution/University with a minimum of 60% marks or CGPA of 7.0 (10-point scale) or CGPA of 3.5 (5-point scale) at the undergraduate and graduate levels.

Please see the NIAS PhD announcement (<http://www.nias.res.in/sites/default/files/2018-Phd-Admissions-Announcement.pdf>) for other details including financial support and selection procedure.

### **Field Assistants:**

Master's degree in Earth Sciences/Agricultural Sciences/Engineering/Sciences/Social Sciences/Geosciences/Geo-informatics/Materials/Public Policy or BE/B.Tech from a reputed Institution/University with a minimum of 60% marks or CGPA of 7.0 (10-point scale) or CGPA of 3.5 (5-point scale) at the undergraduate and graduate levels.

Selected candidates will be entitled to a stipend of Rs. 22,000 per month as per MOES norms (on a yearly renewable basis), which will be available for a period of three years.

## **HOW TO APPLY**

### **Doctoral Fellows:**

Please download the application from the NIAS website. The completed and signed application form should be sent to: **niasphd@gmail.com along with supporting documents and other details as indicated in the NIAS PhD announcement** (<http://www.nias.res.in/sites/default/files/2018-Phd-Admissions-Announcement.pdf>).

The deadline for receiving application with all required documents by email is **April 30, 2018**. A written examination will be conducted to shortlist the candidates for the two interviews, a subject-specific interview and a comprehensive interview. For additional information, applicants may contact: [niasphd@gmail.com](mailto:niasphd@gmail.com).

### **Field Assistants:**

Interested applicants should submit their curriculum vitae electronically, including the names and addresses of two referees, and a brief statement of interest explaining why they are interested in joining the Program, in a **single PDF document to: [eerpvacancies@gmail.com](mailto:eerpvacancies@gmail.com)**.

The deadline for applications is **30 April 2018**. Short-listed candidates will be invited to NIAS for an interview during which accommodation will be provided. For additional information, applicants may contact: [hippu@nias.res.in](mailto:hippu@nias.res.in) or [rsrikanth@nias.res.in](mailto:rsrikanth@nias.res.in).

## **General**

All applicants for either of the two positions should clearly state in the subject line of their email: **"Energy & Environment Program."** NIAS will accept only applications submitted by email.