

**EARTH SYSTEM SCIENCE ORGANIZATION (ESSO),
MINISTRY OF EARTH SCIENCES, GOVERNMENT OF INDIA
INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM),
Dr. Homi Bhabha Road, Pashan, Pune-411008
Advertisement No. PER/05/2016**

**RECRUITMENT PROJECT SCIENTISTS
PURELY ON TEMPORARY AND SHORT TERM CONTRACT BASIS**

The Indian Institute of Tropical Meteorology (IITM) is an autonomous research organization fully funded by Ministry of Earth Sciences, New Delhi. It is a premier Institute of national and international repute, devoted to research in various aspects of atmospheric sciences with emphasis on tropical meteorology, particularly on the Climate Change and Indian Monsoon. It has state-of-the-art advanced infrastructural facilities like High Performance Computer (HPC) systems with 790 TF compute and 6 PB of Storage, state-of-the-art technical IT, Networking, Security & Storage Infrastructures.

The following two scientific proposals from the Centre for Climate Change Research (CCCR), IITM, Pune have been approved by Belmont Forum - **(1)** “Globally Observed Teleconnections and Their Role and Representation in Hierarchies of Atmospheric Models (**GOTHAM**)” **(2)** “PAleo-Constraints on Monsoon Evolution and Dynamics (**PACMEDY**)”. This Belmont proposal are based on the Memorandum of Understanding (MoU) between MoES, Government of India and the Belmont Forum countries to support Indian scientists for International collaborative research under the theme of Climate Predictability and Inter-regional linkages.

The main objectives of **GOTHAM** are to examine the source mechanisms, and interactions of global tele-connections in order to understand the origins of predictability of regional climate variations on seasonal and decadal time-scales, regional climate extremes, and identify opportunities for improving prediction skill and reliability - using climate models, novel and powerful statistical techniques. The goal of **PACMEDY** is to use past climate changes to improve future projections of monsoon variability - based on observed paleo-climate records over the last 6000 years and past climate simulations. From India, the GOTHAM and PACMEDY projects will be coordinated by the CCCR, IITM, Pune and the duration of the projects is 3 years. Joint partner groups in the two projects are from United Kingdom, France, Germany, Japan, China, Brazil, and Sweden. The two Belmont projects provide an opportunity to address various science issues related to climate change, monsoon teleconnections and predictability, monsoon and ITCZ variations during the last 6000 years, regional weather and climate extremes, etc. IITM is equipped with state-of-the-art advanced infrastructural facilities like High Performance Computer (HPC) system with 790 TF peak performances, modern library, workshop and other scientific support. Laboratory facilities for past climate research at IITM include a tree-ring laboratory and a stable-isotope mass spectrometer facility.

This advertisement is for recruitment of project scientists under the GOTHAM and PACMEDY projects. These are temporary positions on contract basis being offered to bright, dynamic and motivated persons interested to contribute to the mission of the two projects. The appointment would be initially for a period of one year and extendable further based on the performance of the candidate up to 3 years.

Post Code – CCCR2016-001

Post Name - Project Scientist – C (Analysis & Modeling)

No. of post – 3 No. (2- For Project GOTHAM & 1 for Project PACMEDY)

Essential Qualification:

- A First Class (60% of marks) Masters degree (M.Sc/M.Sc-Tech/M.Tech) in Atmospheric Sciences/Meteorology/Oceanography **(or)** in Physics/Geophysics/Mathematics with meteorology or fluid dynamics as one of the subjects from a recognized university/Institute with a minimum of 4 years' research experience
- Working knowledge in HPC and experience with operating systems UNIX/LINUX and Windows environment
- Conversant in high-level programming languages FORTRAN and C.
- Very good experience with a few or more data analysis tools viz., MATLAB, GraDS, IDL, NCL, Ferret, and R software. Additional knowledge of GIS is an advantage.
- Good written and oral communication skills.

Desirable Qualification:

- Ph.D. in any of the above subjects would be a desirable qualification and research Experience supported by publications in good impact journals would be an added advantage.
- Familiarity with governing dynamical processes associated with weather and climate.
- Familiarity with weather and climate modeling/work experience in numerical modeling of ocean/atmosphere general circulation features
- Ability to work with large datasets and analyze climate model outputs
- Ability to design and conduct coupled general circulation model experiments on super-computing platforms.

Job Responsibilities:

The selected candidate will involve configuring, executing and analyzing climate model simulations in addition to observational analysis and development of analytical models to investigate climate and monsoon research problems relevant to the GOTHAM and PACMEDY proposals. The selected candidate should interact with GOTHAM partner Institutions, display ability towards development and maintenance of databases, and publish the scientific merits of the work in peer-reviewed journals.

Salary (₹15,600-39,100) + G.P. ₹ 6,600/- + D.A. + H.R.A. (Total monthly salary is approximately ₹ 64,643 /-)

Upper Age Limit: Up to 40 years as on 15.10.2016

Post Code – CCCR2016-002

Post Name - Project Scientist – C (Field work, Data Collection & Analysis)

No. of post – 1 No.

Essential Qualification:

- A First Class (60% of marks) Masters degree (M.Sc/M.Sc-Tech/M.Tech) in Physics/Geophysics/Geology/Chemistry/Atmosphere Sciences/Ocean Sciences/Earth Science/ Physical or Chemical Oceanography with meteorology/oceanography as one of the subjects from a recognized university/Institute with a minimum of 4 years' research experience
- Experience and strong interest in Analytical Chemistry with demonstrated technological expertise related to isotope ratio mass spectrometer
- Good written and oral communication skills.

Desirable Qualification:

- Knowledge of radiometric dating techniques for sedimentary samples
- Knowledge of analytical techniques involving ICP-MS, Laser Isotope Analyzer etc.,
- Modeling of environmental systems, particularly paleoclimate research.
- Conversant with high-level programming languages like Fortran and C and working experience with data analysis tools –eg. MATLAB, GrADS, IDL, NCL, Ferret, R-Software, etc.

Job Responsibilities:

- The selected candidate needs to participate in field expeditions aimed at collecting speleothem/tree ring samples from remote locations in India.
- The selected candidate is required to perform statistical analysis of the isotopic/ring width data.
- The selected candidate will participate in the research project, in order to develop very high-resolution climate records from sediment, speleothems, tree rings etc., and understanding the causative mechanisms of their variabilities, tele-connections to other ocean atmospheric systems etc.

Salary (₹15,600-39,100) + G.P. ₹ 6,600/- + D.A. + H.R.A. (Total monthly salary is approximately ₹ 64,643 /-)

Upper Age Limit: Up to 40 years as on 15.10.2016

INSTRUCTIONS:

- 1) Only Indian Nationals are eligible and need to apply.
- 2) **Only online applications will be accepted.** Hard copy of the applications will not be accepted.
- 3) Upper age limit is relaxed by 5 years for SC/ST, 3 years for OBC, 10 years for physically handicapped persons and as per rule for ex-servicemen.
- 4) Mere possession of required qualification will not entitle the candidates to be called for interview.
- 5) Candidates called for interview will be paid sleeper class to & fro train fare by the shortest route on production of original tickets.
- 6) Desirable qualifications and experience can be relaxed at the discretion of the Director in case of exceptionally good candidates.
- 7) Experience shall mean the experience in the relevant field acquired from Government/Semi govt./Autonomous/Research/Reputed Organization after obtaining the minimum educational qualification asked for in the said category.
- 8) No interim enquiries / correspondence / communication of any sort will be entertained on the matter.
- 9) Canvassing in any form will disqualify the candidate from being called for interview.
- 10) Candidates must produce all original documents in proof of details furnished in the application at the time of interview for verification and the same will be returned after verification.
- 11) Selected candidate may have to join the post immediately on being found fit by Medical Authority.
- 12) **Aspiring candidates may submit their applications with post code along with their CV online only: <http://www.tropmet.res.in/Careers> up to 15th October 2016.**
- 13) Director, IITM reserves the right to fill-up or not to fill up the posts advertised without assigning any reasons thereof.

Director
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