

**EARTH SYSTEM SCIENCE ORGANIZATION**  
**Ministry of Earth Sciences, Government of India**

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE-411008**

**Advertisement No. PER/03/2012**

**Opportunities for Talented Young Scientists in Climate Science/Engineers**

➤➤ The Indian Institute of Tropical Meteorology (IITM), Pune, an autonomous research organization, fully devoted to cutting edge research in various aspects of climate science is looking for recruiting bright talented candidates of Indian origin to fill **20 Research Scientist positions, including one Scientist 'D' for Library, Information and Publication Division, 01 Scientist 'D'/Engineer (Computer Engineer) for HPC and 01 Scientist 'C'/Engineer (Mechanical) at this Institute.**

➤➤ Its activities include training to post graduates and motivate them to take up research careers in Atmospheric and Oceanic Sciences required to improve the skill of weather and climate prediction systems. A Centre for Climate Change Research (CCCR) has been established at IITM to address all science issues related to Climate Change and Indian monsoon; and the Centre for Advanced Training on Earth System Science and Climate has started its academic session from August 2011 and the first batch of 20 trainees will be passing out soon. To cater to the modelling needs, a High Performance Computing (HPC) Centre has been set up with peak performance of 70.2 TF and will be upgraded further in the near future. The Institute has excellent infra-structural facilities and also has the state of the art equipments for field observations. It has MoU with University of Pune for carrying out work leading to the award of M.Tech. and Ph.D. Degrees in Atmospheric Sciences and allied subjects.

➤➤ For details of the posts please visit the Institute's website <http://www.tropmet.res.in>. Aspiring candidates please submit your applications, separately for Scientific Positions and Engineer,/Scientist in the proforma with detailed CV, a list of publications and other relevant papers to the Administrative Officer of this Institute by 31 May 2012.

**पृथ्वी प्रणाली विज्ञान संस्थान**  
**पृथ्वी विज्ञान मंत्रालय, भारत सरकार**  
**भारतीय उष्णदेशीय मौसम विज्ञान संस्थान, पुणे - 411008**  
**विज्ञापन सं. कार्मिक/03/2012**

**जलवायु विज्ञान / इंजीनियर्स में प्रतिभाशाली युवा वैज्ञानिकों के लिए सुअवसर**

» भारतीय उष्णदेशीय मौसम विज्ञान संस्थान) आई आई टी एम(, पुणे, एक स्वायत्त अनुसंधान संगठन, जलवायु विज्ञान के विभिन्न पहलुओं में अनुसंधान को बढ़ावा देने के लिए पूरी तरह समर्पित भारतीय मूल के उज्ज्वल प्रतिभाशाली उम्मीदवारों की भर्ती के लिए 20 अनुसंधान वैज्ञानिक के पदों, पुस्तकालय, सूचना और प्रकाशन विभाग के लिए एक वैज्ञानिक 'डी' सहित, 01 वैज्ञानिक 'डी' / अभियंता (कंप्यूटर अभियंता) एच. पी.सी. और 01 वैज्ञानिक 'सी' / इंजीनियर (मैकेनिकल) की इस संस्थान में नियुक्ति हेतु तलाश है।

» मौसम तथा जलवायु पूर्वानुमान प्रणाली के कौशल में विकास हेतु वायुमंडलीय तथा महासागरीय विज्ञानों में अनुसंधान के अवसर प्राप्त करने हेतु स्नातकोत्तरों को प्रशिक्षण देना एवं प्रेरित करना इसकी गतिविधियों में शामिल है। जलवायु परिवर्तन तथा मान्सून संबंधित सभी प्रश्नों के निराकरण हेतु एक जलवायु परिवर्तन अनुसंधान केंद्र (सी सी सी आर) की भारतीय उष्णदेशीय मौसम विज्ञान संस्थान में स्थापना की गयी है। पृथ्वी प्रणाली विज्ञान तथा जलवायु पर प्रगत प्रशिक्षण केंद्र नें अगस्त 2011 से अपना पहला शैक्षणिक सत्र प्रारंभ किया है तथा 20 प्रशिक्षुओं का पहला बैच हाल ही में पास होने वाला है।

» मॉडलिंग की जरूरतों को पूरा करने के लिए, एक उच्च निष्पादन कम्प्यूटिंग सेंटर (एचपीसी) की स्थापना 70.2 टी. एफ. की उच्चतम क्षमता के साथ की गयी है और निकट भविष्य में आगे उन्नयन किया जाएगा। संस्थान के पास उत्कृष्ट श्रेणी की अवसंरचनात्मक सुविधाएं हैं तथा क्षेत्र प्रेक्षणों हेतु अत्याधुनिक उपकरण हैं। वायुमंडलीय विज्ञानों एवं संबद्ध विषयों में एम. टेक. और पी. एचडी. डिग्री प्रदान करने हेतु संस्थान पुणे विश्वविद्यालय से संबद्ध है।

» पदों की विस्तृत जानकारी हेतु कृपया संस्थान की वेबसाइट (<http://www.tropmet.res.in>) देखें। इच्छुक उम्मीदवार प्रत्येक वैज्ञानिक पद तथा इंजीनियर/ वैज्ञानिक पद के लिए विहित प्रपत्र में पूर्ण भरे हुए आवेदन पत्र सी वी के साथ संस्थान के प्रशासनिक अधिकारी को दिनांक 31 मई 2012 तक भेज दें।

**EARTH SYSTEM SCIENCE ORGANIZATION**  
**Ministry of Earth Sciences, Government of India**

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE 411008**

**Advertisement No. PER/03/2012**

**Opportunities for Talented Young Scientists in Atmospheric Science/Engineers**

The Indian Institute of Tropical Meteorology (IITM), Pune, an autonomous research organization, fully devoted to cutting edge research in various aspects of climate science is looking for recruiting bright talented candidates of Indian origin to fill 20 Research Scientist positions, including one Scientist 'D' for Library, Information and Publication Division, 01 Scientist 'D'/Engineer (Computer Engineer) for HPC and 01 Scientist 'C'/Engineer (Mechanical) at this Institute

The Institute is well known for its contribution in understanding monsoon variability and predictability. Its activities include training to post graduates and motivate them to take up research careers in atmospheric and oceanic sciences required to improve prediction skill of weather and climate. A Centre for Climate Change Research (CCCR) has been established at IITM to address all science issues related to Climate Change and Indian monsoon. To cater to the modelling needs, a High Performance Computing (HPC) Centre has been set up with peak performance of 70 TF. The Institute has excellent infra-structural facilities and also has the state of the art equipments for field observations such as an X-Band Radar, a LIDAR Wind Profiler, a Microwave Radiometer, a variety of other LIDARs for aerosol measurements and a stable isotope radio mass spectrometer laboratory for paleoclimatic studies. It has MoU with University of Pune for carrying out work leading to the award of M.Tech. and Ph.D. Degrees in Atmospheric sciences and allied subjects..

Aspiring candidates please submit your applications in the proforma with detailed CV, a list of publications and other relevant papers to the Administrative Officer of this Institute by 31 May 2012. Candidates must also arrange three letters of References to be sent directly to the Administrative Officer by giving reference to this advertisement.

Requirements for the posts are as under :

**(I) Scientist 'E' 03 Posts (Unreserved)**

**Pay Band and Grade Pay** : Rs. 37400-67000, Grade Pay Rs. 8700 plus allowances admissible to Central Govt. employees stationed at Pune.

**Essential Qualifications :**

- ❖ A Master's Degree or equivalent in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics or a Degree in Engineering or Technology from a recognized university/ institution with good scientific standing and with at least 60% marks at Graduation or Post-Graduation level.

- ❖ A minimum of 11 years experience of research work (6 years of which should be after Ph.D.) and high capacity for guiding and coordinating research in the desired areas (as evidenced by published papers and guidance to Post-Graduate and Ph.D. Students).

**Desirable Qualifications :**

- Preferably a Doctorate in any one of the above subjects.
- The candidates must have Administrative and organizational experience in a recognized Scientific Institution and must have demonstrated scientific leadership including guidance of research students. In addition, the candidate must have leadership contribution in any of the research areas viz. coupled ocean-atmosphere modelling and seasonal prediction of monsoon, extended prediction of active and break spells of monsoon, climate dynamics and climate modelling, dynamics and thermodynamics of air-sea interactions in tropics, data assimilation for climate models, parameterization of tropical convection and Regional and Global climate change.
- Experience in policy making, planning or management etc. in the relevant field.

**Upper Age Limit : 50 years as on 31 May 2012.**

- (II) Scientist 'D' ; 13 posts (10 posts for General candidates; 01 post reserved for Hearing Handicapped; 01 post for general candidates for Library, Information and Publication Division; and 01 post for general candidates for Scientist 'D'/ Computer Engineer for HPC.**

**Pay Band and Grade Pay for all the posts of Scientist 'D'/Engineer : Rs. 15600-39100, Grade Pay : Rs. 7600 plus allowances admissible to Central Govt. employees stationed at Pune.**

**Essential Qualifications :**

- A Master's Degree or equivalent in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics or a Degree in Engineering or Technology from a recognized university/ institution with good scientific standing and with at least 60% marks at Graduation or Post-Graduation level.
- A minimum of 7 years experience of research in Atmospheric and / or Oceanic Sciences and in allied subjects as above and as evidenced by published papers.

**Desirable Qualifications :**

- ❖ Preferably a Doctorate in any one of the above subject with 7 years experience in research.
- ❖ Proven expertise in any of the research areas viz., coupled ocean-atmosphere modelling and seasonal prediction of monsoon, climate dynamics and climate modelling, dynamics and thermodynamics of tropical air-sea interactions, assimilation of satellite and conventional data for climate predictions, parameterization of tropical convection, physical oceanography of the tropical ocean in general and Indian Ocean in particular and role of Indian Ocean processes on Indian monsoon, diagnosing climate variability and climate model biases and understanding of the Asian monsoon and its variability, Atmospheric Radar Technology and its application for weather and climate observations and climate change.

Earth System modelling, Biogeochemistry and Carbon cycle observations and modelling, Hydrological modelling, Laboratory Fluid Mechanics and Boundary Layer turbulence.

- ❖ Experience in policy making, planning or management etc. in the specified field.

### **Scientist 'D'/Engineer (Computer Engineer)**

#### **Essential Qualifications :**

- A Master's Degree in Science or Technology or equivalent, coupled with at least five years of experience in Unix systems administration.

#### **Desirable Qualifications :**

- A professional background in massively parallel processing computer systems, large-scale Linux clusters or other machines of similar architecture, in particular IBM SP clusters running AIX, would be a distinct advantage
- A good knowledge of Unix shells, Perl or Python, software configuration management and operating system security is essential. Some familiarity with parallel programming using C, Fortran, MPI and/or openMP is considered beneficial.
- The candidate should be proactive, methodical and have good analytical skills, able to demonstrate an ability to progress multiple tasks to completion and solve problems under pressure. Good written and oral communication skills are essential as is the ability to work responsibly and reliably as a member of a small team.

#### **Job Requirements :**

- ❖ Planning and scheduling upgrades to the IITM's HPC system
- ❖ Installing, maintaining and configuring the operating system and standard utilities on the HPC facilities
- ❖ Resolving user and operational problems relating to the operating system or to software packages maintained by the section
- ❖ Providing general day-to-day support, including 24-hour on-call support
- ❖ Ensuring that the HPC Facilities are used efficiently, and to that end, providing IITM's support groups and users with the tools
- ❖ Participating in meetings with supercomputer vendors and at international technical conferences
- ❖ From time to time, contributing to the research and evaluation of successor systems to IITM's current High Performance Computing Facilities

### **Scientist 'D' (Library, Information and Publication)**

#### **Essential Qualifications :**

- ❖ A Master's Degree in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics from a

recognized University / Institution with a Master's Degree in Library Science from an accredited School/University with at least 60% marks at Graduation or Post-Graduation level.

- ❖ A minimum of 5 years experience in documentation, technical writing, report writing, editorial work, publication, dissemination of information, science popularization, liaison, etc. at R&D Institution or University;

**Desirable Qualifications :**

- ✓ Preferably a Doctorate in any one of the above subjects;
- ✓ Knowledge of Computer operations, DTP for publication of reports, brochures, exhibits, power point presentations.
- ✓ Good communication and interpersonal skills.
- ✓ Research Publications demonstrating quality of scientific writing

**Job Requirements :**

- ❖ As In-charge of the Library, Information and Publications Division should be able to take care of the Division's smooth functioning;
- ❖ To prepare and handle Detail Project Reports for Plan and Non-Plan schemes of the Institute.
- ❖ To prepare Annual Report of the Institute every year
- ❖ To prepare Scientific Reports and Presentation of Institute's activities whenever required, for example to the Governing Council, Ministry etc.
- ❖ To prepare posters, brochures, fliers etc. whenever required

**Upper Age Limit : 50 years as on 31 May 2012**

**(III) Scientist 'C' : 04 posts i.e. (02 posts for General candidates and 01 post reserved for Visually Handicapped; and 01 post for (general candidates) for Mechanical Engineer.**

**Pay Band and Grade Pay for all posts of Scientist 'C'/Engineer :**

Rs. 15600-39100, Grade Pay Rs. 6600/- plus allowances admissible to Central Govt. employees stationed at Pune.

**Essential Qualifications :**

- Master's Degree or equivalent in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics, B.E./B.Tech./M.Tech. degree from a recognized university/institution and with at least 60% marks at Graduation or Post-Graduation level.
- A minimum of 3 years experience of research in Atmospheric and/or Oceanic Sciences related to weather and climate (as evidenced by published papers).

**Desirable Qualifications :**

- ❖ Preferably a Doctorate in any one of the above subjects with 5 years experience in research.

- ❖ Proven expertise in any of the research areas viz., diagnosing climate variability and climate model biases and a deep understanding of the Asian monsoon and its variability, modelling of land surface processes and their impact on climate, assimilation of satellite and conventional data to AGCMs and oceanic data to OGCMs, dynamics and thermodynamics of convection, interaction between clouds and environment. Atmospheric Radar Technology and its application for weather and climate observations, nonlinear dynamics applied to atmospheric predictability, Climate modelling and Climate Change and Satellite Meteorology.
- ❖ Experience in policy making, planning or management etc. in the specified field.

### **Scientist 'C' / Engineer (Mechanical)**

#### **Essential Qualifications :**

- Bachelor's degree in Engineering or Technology (Mechanical) from a recognized University or its equivalent with at least first class (60%) at graduation or post graduation level.
- Should possess more than 3 years working experience of installation and maintaining sophisticated scientific equipments in a scientific R&D organization of repute.

#### **Desirable Qualifications :**

- Should have experience in Handling HVAC (Heating Ventilation A.C.) systems
- Should possess experience to look after HVAC systems, electrical systems, BMS system, CCTV system and Fire System in a HPC Data centre
- Should be able to take care of chiller system and PAC systems systems and operation at HPCS
- Should be able to observe and certify the testing & commissioning activities for HVAC system at HPCS.

**Upper Age Limit :** 40 years as on 31 May 2012.

#### **General : Age Limit Relaxable :**

- The upper age limit is relaxable by 5 years for candidates belonging to SC/ST and 3 years for candidates belonging to the Other Backward Class, and as per rules for ex-servicemen and physically handicapped persons. There is no age limit for IITM and Government employees.
- Application on plain paper together with detailed CV and list of publications should reach the undersigned by 31 May 2012. The candidates should arrange three letters of reference to be sent directly to the undersigned from three scientists familiar with candidate's work. Separate applications should be submitted for each post. Candidates called for interview will be paid Sleeper Class to and fro train fare by the shortest route on production of original tickets.

**The Administrative Officer**  
**Indian Institute of Tropical Meteorology**  
**Dr. Homi Bhabha Road, Pashan, Pune-411008**  
**Phone : 020 - 25904203; FAX : 020 - 25865142**  
**Email : [admadv@tropmet.res.in](mailto:admadv@tropmet.res.in) URL: <http://www.tropmet.res.in>**