

## **INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE - 411 008**

(An autonomous Institute under Ministry of Earth Sciences, Government. of India)

### **Advertisement No. PER/CCCR/001/2009 Opportunity for Talented Climate Scientists**

**The Indian Institute of Tropical Meteorology (IITM), Pune**, an autonomous Institute under the Ministry of Earth Sciences, Govt. of India functioning as a leading research centre in applied and fundamental aspects of ocean-land-atmosphere interaction in tropics is looking for reputed scientists for 20 senior scientific positions at different levels for its newly launched **Centre for Climate Change Research (CCCR) at Pune**. The CCCR is a grant-in-aid Program at IITM as part of a larger National Program on Global and Regional Climate Change launched by the Ministry of Earth Sciences, Govt. India. The detailed project document of the Centre could be seen at the link 'CCCR' of the **Institute's website**: <http://www.tropmet.res.in>. CCCR with its state of the art physical and computing environment and a vibrant Ph.D. program at the Institute provides excellent opportunity for cutting edge research in climate science.

The successful candidates will have opportunity to work in an excellent research atmosphere with multidisciplinary team of scientists working on different areas of climate change and contribute substantively in the growth of the centre. The **Scientific Positions** are to advance research in Climate Change in the areas of **(i) Physical Processes, (ii) Climate Modelling, (iii) Climate Scenarios Development, (iv) Impact Assessment, and (v) Observed Changes and Data Products**.

For details of the posts please visit the Institute's website <http://www.tropmet.res.in>. Aspiring candidates please submit their applications, separately for each particular Scientific Position, in the proforma with detailed CV, a list of publications and other relevant papers to the **Administrative Officer** of this Institute **by 15 October 2009**.

**Indian Institute of Tropical Meteorology**  
**Dr. Homi Bhabha Road, Pashan, Pune - 411 008**  
(An autonomous Institute under Ministry of Earth Sciences, Government. of India)  
**(Advertisement No. PER/CCCR/001/2009)**

The Indian Institute of Tropical Meteorology (IITM), Pune, an autonomous organization fully funded by the Ministry of Earth Sciences (MoES), Govt. of India functions as a National Centre for Research in applied and fundamental aspects of tropical climate system involving interactions between ocean, land, atmosphere and biosphere contributing towards the improvement of weather and climate forecasts.

Climate Change is being recognized as a major threat to present day society because of its adverse impacts on ecosystem, agricultural productivity, water resources, socio-economy and sustainability in a global as well as regional basis. Considering the importance of reliable science input on Climate Change for policy framework and the role played by the IITM in the past on climate change research, MoES has set up a national **Centre for Climate Change Research (CCCR)** at IITM to build research strengths, to address all science issues of Climate Change relevant to the regional climate and maintain a sustainable flow of quality science into our national climate change agenda and India's international response.

The CCCR is a grant-in-aid Program at IITM as part of a larger National Program on Global and Regional Climate Change launched by the Ministry of Earth Sciences, Govt. India. The detailed project document of the Centre could be seen at the link 'CCCR' of the **Institute's website: <http://www.tropmet.res.in>**. The Program will involve attribution and projection of regional monsoon climate using regional as well as high resolution global coupled models. R & D activity is planned to do whatever is needed to reduce the uncertainty in the attributions and projections. The Centre is envisioned to be a world centre of excellence with all the necessary physical and computing infrastructure as well as adequate human resources and will provide state-of-the-art work environment for scientists.

IITM is seeking to fill 20 senior scientific positions for the newly launched Centre for Climate Change Research at Pune. The successful candidates for these positions will have opportunity to work in an excellent research atmosphere with a multidisciplinary team of scientists working on different areas of climate change and contribute substantively in the growth of the centre.

The **Scientific Positions** are to advance research in Climate Change in the areas of **(i) Physical Processes, (ii) Climate Modelling, (iii) Climate Scenarios Development, (iv) Impact Assessment, and (v) Observed Changes and Data Products.**

**Physical Processes:** Improving various components of the global and regional models and ultimately the simulation of regional climate.

**Climate Modelling:** (i) Development of coupled Ocean-Atmosphere Modeling Strategy under different climate change scenarios. (ii) Assessment of uncertainties in monsoon under climate change scenarios. (iii) Assessment of the relative roles of aerosols and GHGs on Indian Monsoon. (iv) Development of modeling set up to undertake various sensitivity studies and outstanding issues relevant to climate change. (v) Palaeoclimate and modeling studies to identify climate analogues in the past for the estimate of future evolution of climate.

**Climate Scenarios Development:** (i) To generate an ensemble of high-resolution regional climate change scenarios to be utilized by several groups in the country that are involved with impact assessment and development of adaptation and mitigation policies and methodologies by running several global and regional climate models with different GHG scenarios for more than a century, (ii) To evaluate and develop suitable downscaling methodologies for developing tailor made climate change data products for the users in the country and the region.

**Impacts Assessment:** To examine the impact of climate change on some important sectors such as the water resources with a special emphasis on the Himalayan river systems, agriculture, human health etc. These studies will be done at the centre itself as well as in joint collaboration with other groups in the country.

**Observed Changes and Data Products:** (i) Monitoring, source identification of various GHGs, (ii) Aerosols; space time variability, chemical composition etc., (iii) Monitoring and assessing land use and land cover changes, and (iv) Palaeoclimate reconstruction using various proxies.

It would be desirable for the candidates to have good knowledge of the multi-disciplinary aspects of the climate system in general with particular knowledge of the monsoon system. Experience in climate modeling would be helpful. Interested candidates having specific expertise to take up the challenge of addressing the burning scientific issues of the Tropical Climate Change required for policy making may apply for the following posts:

### **Research and Scientific positions**

#### **(I) Scientist F: Two (2) posts (Unreserved)**

**Scale of pay:** Rs. 37400-67000, Grade Pay Rs. 8900/- plus allowances admissible to Central Govt. employees stationed at Pune (Total emoluments at minimum of the scale presently amount to Rs. 73,626 /- approx.).

### **Essential Qualifications**

- A Doctorate or equivalent in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics from a recognized university / institution with good scientific standing.
- A minimum of 10 years experience of research work (7 years of which should be after Ph.D.) and high capacity for guiding and coordinating research in Atmospheric and Oceanic Sciences especially in Indian monsoon climate change such as physical processes, climate modelling, climate scenarios development, impact assessment, and observed changes, including palaeoclimatology (as evidenced by published papers and guidance to post graduate and Ph.D. students).

### **Desirable Qualifications**

- The candidates must have Administrative and organizational experience in a recognized Scientific/Academic Institution and must have demonstrated scientific leadership including guiding of research students.
- The candidate must have leadership contribution in the research areas viz., (i) Physical Processes, (ii) Climate Modelling, (iii) Climate Scenarios Development, (iv) Impact Assessment, and (v) Observed Changes and Data Products.

**Upper Age Limit:** 50 years as on August 31, 2009

## **(II) Scientist 'E' - Five (5) Posts (Unreserved)**

**Scale of pay:** Rs. 37400-67000, Grade Pay Rs. 8700/- plus allowances admissible to Central Govt. employees stationed at Pune (Total emoluments at minimum of the scale presently amount to Rs. 69,366/- approx.).

### **Essential Qualifications**

- A Doctorate or equivalent in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics from a recognized university/institution with good scientific standing.
- A minimum of 8 years experience of research work (5 years of which should be after Ph.D.) and high capacity for guiding and coordinating research in Atmospheric and Oceanic Sciences (as evidenced by published papers and guidance to Post Graduate and Ph.D. Students).

### **Desirable Qualifications**

- The candidates must have Administrative and organizational experience in a recognized Scientific Institution and must have demonstrated scientific leadership including guiding of research students. In addition, the candidate must have leadership contribution in any of the research areas viz., (i) Physical Processes, (ii) Climate Modelling, (iii) Climate Scenarios Development, (iv) Impact Assessment, and (v) Observed Changes and Data Products.

**Upper Age Limit:** 50 years as on August 31, 2009

## **(III) Scientist 'D' - Four (4) Posts (Three Unreserved and one for Handicap with Hearing Impaired)**

**Scale of Pay:** Rs. 15600 – 39100, Grade Pay Rs. 7600/- plus allowances admissible to Central Govt. employees stationed at Pune (Total emoluments at minimum of the scale presently amount to Rs. 45794/- approx.).

### **Essential Qualifications**

- A Doctorate in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics from a recognized university/institution.
- A minimum of 6 years experience of research (2 years should be after Ph.D.) in Atmospheric and/or Oceanic Sciences (as evidenced by published papers).

### **Desirable Qualifications**

- Proven expertise in any of the research areas viz., Physical Processes, Climate Modeling, Climate Scenarios Development, Impact Assessment, Climate Predictions, Climate Variability Diagnostics, Climate Model Biases, Analysis of Weather and Climate Observations, Palaeoclimate reconstruction and analysis, Interpretation of Palaeoclimate Data, Stable Isotope Ratio Mass Spectrometry,

**Upper Age Limit:** 45 years as on August 31, 2009

#### **(IV) Scientist `C` - Nine (9) Posts (Unreserved)**

**Scale of Pay:** Rs. 15600 – 39100, Grade Pay Rs. 6600/- plus allowances admissible to Central Govt. employees stationed at Pune (Total emoluments at minimum of the scale presently amount to Rs. 39901/- approx.).

#### **Essential Qualifications**

- Master's Degree preferably a Doctorate in Meteorology, Atmospheric Sciences, Oceanography, Physics, Mathematics, Applied Mathematics, Statistics, Applied Physics, Geophysics, Electronics, B.E./ B. Tech./ M. Tech.(Electronics/Electrical Engineering) degree from a recognized university/institution.
- A minimum of 5 years experience of research in Atmospheric and/or Oceanic Sciences related to weather and climate (as evidenced by published papers).

#### **Desirable Qualifications**

- Proven research experience in any of the research areas viz., Physical Processes, Climate Modeling, Climate Scenarios Development, Impact Assessment, Climate Predictions, Climate Variability Diagnostics, Climate Model Biases, Analysis of Weather and Climate Observations, Palaeo-climate reconstruction and analysis, Interpretation of Palaeoclimate Data, Stable Isotope Ratio Mass Spectrometry,

**Upper Age Limit:** 40 years as on August 31, 2009

#### **Age Limit Relaxation**

The upper age limit will be relaxed 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 in the attached format indicating name of the post applied with copies of certificates of relevance should reach the undersigned by **15 October 2009**. 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 admissible fare for to & fro journey by the shortest route on production of original tickets.

**The Administrative Officer**  
Indian Institute of Tropical Meteorology  
Dr. Homi Bhabha Road, Pashan  
Pune – 411 008, India  
Phone: 91-20-25904203  
91-20-25883879  
Fax: 91-20-25893825  
E-mail: admadv@tropmet.res.in  
URL: <http://www.tropmet.res.in>

## PROFORMA

Application for the post of Scientist .....

(Fill separate application for each post)

Name of the candidate in block letters

Surname	Name	Father / Husband's name				
1. Gender : Male / Female		2. Married / Unmarried				
3. Mailing address						
4. Telephone No.						
5. Mobile No.						
6. Fax no.						
7. Email						
8. Permanent Address						
9. Date of Birth						
10. Place of Birth						
11. Nationality						
12. Whether belongs to SC / ST / OBC / Physical Handicapped / Ex- Serviceman (attach relevant certificates for the same)						
13. Academic Record						
Sr. No	Qualification	Year	Board / University	Subjects	Class/ Division	Percentage of Marks
i	SSC (for date of birth)			---		
ii	B.Sc.					
iii	M.Sc.					
iv	M.Tech.					
v	Ph.D.					
vi						
vii						

Enclose Xerox copies of Mark sheets / Certificates

14.	Computer Skills					
15	Area of interest					
16.	Leadership Contribution in the area of research:					
17	The guidance provided to research students					
18.	No. of papers published ( attach list)	i) Journals ii) proceedings				
19.	Conference / seminars etc. attended ( attach list)					
20.	Experience record ( attach separate list with given details)	From	To	Place of work	Salary / scale of pay	Brief nature of duties
21.	Present occupation					
22	Reference from scientists familiar with the candidates work	1.  2.  3.				

Signature of the candidate