Ministry of Earth Sciences, Government of India INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM), Dr. Homi Bhabha Road, Pashan, Pune-411008 Advertisement No. PER/07/2022 <u>RECRUITMENT OF VARIOUS PROJECT POSTS</u> <u>PURELY ON SHORT TERM</u> 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.

Sr. No	Name of Post	Pay	No of posts \$	Age Limit In years			
1.	Project Scientist -III	₹ 78,000/- + HRA	02	45			
2.	Project Scientist –II	₹ 67,000/- + HRA	05	40			
3.	Project Scientist –II [Computer Appli support sc.]	₹ 67,000/- + HRA	01	40			
4.	Project Associate-I	<u>₹ 31,000/- + HRA *</u> ₹ 25,000/- + HRA	02	35			
	Total Posts 10 posts						

It is proposed to recruit the following posts as detailed below:

*[Emoluments for Candidates having NET/CSIR-UGG / GATE or having passed national level examination conducted by Central Govt. Dept. and their agencies and Institutions]

\$ The number of vacancies mentioned in the advertisement may vary depending upon the requirements of the project.

- The appointment is purely on temporary and contractual basis initially for a period of one year. Extension of tenure is co-terminous with the project period and subject to the satisfactory performance.
- Aspiring candidates may submit their applications along with their CV online only: <u>http://www.tropmet.res.in/Careers</u>
- Hard copy of the applications will not be accepted.
- Other relevant details about the posts are available under <u>www.tropmet.res.in/Careers</u> <u>Facility for submitting online applications for the</u> <u>posts will commence on 6th September, 2022 (1700 hrs.)</u>

INSTRUCTIONS

- The last date of submission of online application is <u>23rd September, 2022 (1800 hrs.)</u>. The last date is the cut of date for all purposes including age/qualification/experience etc.
- 2. Only Indian Nationals are eligible to apply.
- 3. Mere possession of required qualification will not entitle the candidates to be selected for interview. If the number of applications received in response to advertisement is large, it will not be convenient or possible for the selection Board to interview or conduct written test for all those candidates. The Institute may short list the candidates to a reasonable limit based on the essential and desirable qualifications / record of academic performance / relevant experience for the post or any other benchmarks as decided by a committee constituted to screen the applications.
- 4. No correspondence will be entertained with candidates who are not called for Interview/written examination.
- 5. Upper age limit is relaxed for SC/ST/ OBC/Physically Handicapped persons/Exservicemen as per Government of India norms.
- 6. Experience claim should be supported by valid documentation.
- 7. For other posts selection will be on the basis of performance of the screened in candidates, in the online/ offline interview.
- 8. Candidates must produce all original documents as proof of details furnished in the application and photocopy of each, at the time of joining. Any discrepancies found in the certificate will attract the disqualification of applications. Non production of the original certificates at the time joining will also make the candidate disqualified.
- 9. Selected candidate may have to join the post immediately, on being found fit by Medical Authority.
- 10. Essential qualification, experience and age limit can be relaxed at the discretion of the appointing authority in exceptional cases.
- 11. Doctorate Degree will count as 3 years of experience (in case the doctorate degree is not mentioned as the essential qualification).
- 12. No TA/DA will be paid for attending the interview/written examination. For SC/ST candidates admissible TA/DA shall be considered as per Government of India orders.
- 13. CGPA grading is to be converted in percentage.
- 14. Online application submitted without scanned copies of the certificates will be rejected.
- 15. Applicants working in Government/ Semi-Government/ Public Sector Undertakings/ Autonomous bodies should apply through proper channel. If application is not routed through proper channel, then the applicant must produce the requisite 'No Objection Certificate' from their employer at the time of interview.
- 16. Director, IITM reserves the right to fill-up or not to fill up the post advertised without assigning any reasons thereof.
- 17. Further updates regarding this recruitment will be published/uploaded in this website only. Hence candidates are advised to regularly check the website.
- 18. Canvassing in any form and /or bringing any influence, political or otherwise will be treated as disqualification of candidature. No interm correspondence/inquiry will be entertained.

PROJECT SCIENTIST -III		
Post Code	:	CVP2022-001
Name of the post	:	Project Scientist –III
		(Climate Variability and Prediction)
Number of post	:	02
Essential Qualification	:	 Master's Degree in Meteorology/ Oceanography/ Atmospheric Sciences/ Physics/ Geophysics (Meteorology)/ Electronics/Mathematics/Earth Science with minimum 60% marks from recognized university. OR Bachelor's degree in Engineering or Technology with minimum 60% marks from recognized university. 7 years proven research experience in Global Data Assimilation/Decadal prediction/ Decadal Predictability/Decadal Variability/ Climate prediction/ Earth system modelling/ Climate modelling/ Coupled (ocean atmosphere) modelling/Sea ice modelling/Land surface modelling.
Desirable Qualification	:	 Basic knowledge in model code handling. Working knowledge of Atmospheric, Oceanic and Coupled General Circulation Models and issues related to porting, installation and troubleshooting of dynamical models in HPC. The experience should be demonstrated through scientific reports/publications. Experience in using programming languages (like Python, FORTRAN-90, C/C++ etc); Shell scripting is needed. Ability to write and prepare model code using program language and shellscripts. Knowledge of parallel computing and porting general circulation models on the high-performance computer architectures. Experience in handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc. A knowledge in meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc). Ability to work in large groups. Knowledge of UNIX/LINUX System Administration would be an added advantage.
Job Responsibilities	:	Scientists will be responsible for developing decadal prediction system, handling the earth system model codes, its debugging etc. in HPC, preparing initial conditions for the decadal prediction
		system.

PROJECT SCIENTIST -II		
Post Code	:	CCCR2022-001
Name of the post	:	Project Scientist – II
		(Hydrometeorology Observations and Modelling)
Number of post	:	01 Nos.
Essential Qualification	:	Doctoral Degree in Atmospheric Sciences/Meteorology
		/Physics/Geophysics/ Mathematics from recognized
		university or equivalent.
		OR

Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/ Geophysics/ Mathematics with at least 60% marks from a recognized university or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. 3 years of experience in satellite and in situ data collection/handling/analysis, geophysical modeling and network simulations. Expertise in calibration, validation and theoretical analysis for field-scale soil moisture monitoring. Working knowledge of handling hydrological models and experimental set ups using local and regional hydro-
		 meteorological inputs. Working knowledge in using scientific programming languages such as Fortran, C, Python, shell scripting, and analysis software tools such as CDO, NCO, Grads, NCL, , R, Python workflows etc.
		 Experience in HPC use and parallel computing (multi-threaded applications). Conduct scientific research through analysis of hydro-meteorological observations and model outputs of land surface hydrological processes. Knowledge of handling large datasets, and a good knowledge of NetCDF and various data formats. Ability to prepare and submit manuscripts to peer-review journals.
Job Responsibilities	:	 Expertise in validation and theoretical processes for field-scale soil moisture monitoring Optimization of the soil moisture sensor network using Hydrological models Conduct scientific research through analysis of Hydro-meteorological observations and model outputs relevant to land surface hydrological processes. Handling hydrological models with regional and local hydro-meteorological inputs
Post Code		CCCR2022-002
Name of the post		Project Scientist – II
		(CCCR- UTLS Balloonsonde project)
Number of post	1:	01 Nos.
Essential Qualification	:	 Doctoral Degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics from a recognized University or equivalent. OR Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of proven research experience in Atmospheric chemistry/ observations of atmospheric gases and aerosols/ chemistry modelling.

Desirable Qualification	:	• Experience in a filed campaign of chemical species.
•		• Experience in air pollution transport and monsoon process
	1	studies
	1	Modelling of Atmospheric chemistry/ chemistry Climate
		modelling Satellite (Ballooneende date analysis of trace gases and acrossele
		 Satellite/Balloonsonde data analysis of trace gases and aerosols Knowledge of stratospheric process studies will be an
		advantage
		• Knowledge of Python/ MATLAB/ NCL/NetCdf/GrADS/
		CDO/UNIX/LINUX System would be an added advantage.
		 Ability to prepare and submit manuscripts to peer-review journals.
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Job Responsibilities	:	Participation in field campaign of UTLS Balloonsonde observation
		(Ozone, aerosol backscatter and water vapour), collection/analysis
		of data or as per instructions by the Project Leader / Director IITM. The selected candidate will have to participate in field expeditions
		at remote locations. Analysis of output of UTLS Balloonsonde data
		and chemistry-climate model simulations.
Post Code	:	CCCR2022-003
Name of the post	:	Project Scientist – II
		(CCCR - KNP MET-FLUX project)
Number of post Essential Qualification	:	01 Nos.
Essential Quanneation	•	 Doctoral Degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics from a recognized
		University or equivalent.
		OR (MARCHART
		Master's degree in Atmospheric Sciences/Meteorology /
		Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks
		Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR
		Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a
		Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent.
		Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a
Desirable Qualification	:	Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. • Three years of demonstrated experience in atmospheric observations • Experience with eddy covariance flux-tower sensors installation,
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance.
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance.
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field.
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field. Handling of high-frequency measurement data and analysis
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field . Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc.
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field. Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc. Knowledge of Ferret/NCL/ NetCdf/ GrADS/ CDO/UNIX/LINUX
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field . Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc.
	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field . Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc. Knowledge of Ferret/NCL/ NetCdf/ GrADS/ CDO/UNIX/LINUX System and large data handling would be an added advantage. Ability to prepare and submit manuscripts to peer-review journals.
Desirable Qualification	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field . Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc. Knowledge of Ferret/NCL/ NetCdf/ GrADS/ CDO/UNIX/LINUX System and large data handling would be an added advantage. Ability to prepare and submit manuscripts to peer-review journals. Operation and maintenance of instruments mounted on flux-
	:	 Master's degree in Atmospheric Sciences/Meteorology / Physics/Geophysics/Mathematics with at least 60% marks from a recognized University or equivalent. OR Master's degree in Engineering or Technology from a recognized University or equivalent. Three years of demonstrated experience in atmospheric observations Experience with eddy covariance flux-tower sensors installation, operation and maintenance. Experience in calibrating sensors and data collection in forests in remote locations, analysis of data. High quality publications in SCI index journals in the relevant field . Handling of high-frequency measurement data and analysis skills in R, Python, MatLab, Origin, EddyPro, Tovi etc. Knowledge of Ferret/NCL/ NetCdf/ GrADS/ CDO/UNIX/LINUX System and large data handling would be an added advantage. Ability to prepare and submit manuscripts to peer-review journals.

MET-FLUX measurement network in India, etc., or as p instructions by the Project Leader / Director IITM. The select candidate will have to participate in field expeditions at remo locations.	ted
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Post Code	:	NMM2021-006
Name of the post	:	Project Scientist II
-		(Development of extended range prediction system)
Number of post	:	01 Nos.
Essential Qualification	:	 Master's Degree in Physics/ Mathematics/ Meteorology/ Oceanography/ Atmospheric Sciences with minimum 60% marks or Master's degree in Engineering or Technology from a recognized University or equivalent. Three year experience of research in Atmospheric Science/Oceanography/Climate Sciences or allied fields.
Desirable Qualification	:	 Doctoral Degree in any of the above subjects. Good knowledge of climate processes and their representation in Models as indicated by research publications. Knowledge in programming languages (like FORTRAN-90, C/C++ etc); Shell scripting and meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc). Handling of a large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc. Ability to work in large groups. Knowledge of UNIX/LINUX System Administration would be an added advantage. Expertise in AI/ML techniques relevant to weather and climate sciences
Job Responsibilities	:	The scientist will be working on model running and development of a system for extended range prediction using coupled models and modification as needed for monsoon prediction.

Post Code	:	DESK2021-003
Name of the post	:	Project Scientist-II
		(Climate Variability, Prediction & Fluid Dynamics)
Number of post	:	01 Nos.
Essential Qualification	:	 A Masters Degree in Atmospheric Science/ Meteorology/ Oceanography/ Physics/Mathematics/Geophysics or B.E./B.Tech from a recognized University or equivalent with at least 60% marks. Three years of experience of research in coupled ocean atmosphere modelling or decadal prediction or monsoon prediction or ocean modelling or climate variability and analysis or turbulence and fluid dynamics.
Desirable Qualification	:	 Teaching Experience in relevant field of ocean/atmospheric sciences PhD in Atmospheric/Meteorology/Oceanography or equivalent M.Tech in Atmospheric Sciences or Physical Oceanography Good track record of peer reviewed publications in high impact journals Working knowledge in Coupled Ocean Atmosphere General Circulation Models and/or Ocean General Circulation Models.

		 Experience in Programming languages (like FORTRAN-90, C/C++ etc.), Shell scripting,; Meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc.) Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB etc.
Job Responsibilities	:	 To develop a decadal prediction system for monsoon prediction. Selected candidates are expected to engage in teaching activities of Training program under Development of skilled manpower (DESK) in addition to the R&D in relevant scientific groups in line with the essential qualifications mentioned.

PROJECT SCIENTIST -II [COMPUTER APPLICATION SUPPORT SCIENTIST]

Post Code	:	NMM2021-008	
Name of the post		Project Scientist-II (Computer Application Support Scientist)	
Number of post	:	01 No.	
Essential Qualification Desirable Qualification	:	 Master in computer applications (MCA)/ B.E./ B. Tech (computer Science)/IT from a recognized University or equivalent with atleast 60% marks. 3 years experience in IT/computer science or similar field. 	
Destrable Quantication	:	 Adequate knowledge of webpage designing, data uploading, porting software etc. Working knowledge in Atmospheric, Oceanic and coupled general circulation models and issue related to porting, installation and troubleshooting of dynamical models in HPC. Experience in using programming languages (like FORTRAN-90, C/C++ etc); Shell scripting is needed. Ability to write and prepare model code using programme language and shellscripts. Knowledge of parallel computing and porting general circulation models on the high performance computer architectures. Handling of large volume of data and conversant with data format like NetCDF, HDF, GRIB, GrADS etc. Ability to work in large groups. Knowledge of UNIX/LINUX System Administration would be an added advantage Expertise in AI/ML techniques relevant to weather and climate sciences 	
Job Responsibilities	:	Development of webpage for monsoon mission, handling model output large volume data and supporting to dismantle the applications developed by the mission.	
		PROJECT ASSOCIATE-I	
Post Code	:	ART_Bhopal2021-008	
Name of the post	:	Project Associate – I (For ARTs/Electrical Engineer)	
Number of post	:	01 No. (To be posted at ART-CI facility at Silkheda, Sehore District)	
Essential Qualification	:	Bachelor Degree in Engineering or Technology (EEE/E&TC) from a recognized University or equivalent.	
Desirable Qualification	:	• Experience in maintenance of HT sub-station.	

Job Responsibilities	:	To maintain electrical sub-station and other electrical facilities in
		the site.
Post Code	:	HACPL2021-011
Name of the post	:	Project Associate - I (For Electrical and Instrumentation
		Installation works)
Number of post	:	1 Nos. (To be posted at Mahabaleshwar, Satara District,
		Maharashtra)
Essential Qualification	:	Bachelors Degree in Engineering or Technology (EEE/E&TC)
		from a recognized University or equivalent.
Desirable Qualification	:	Experience in (i) operation /maintenance of HT sub-stations
Job Responsibilities	:	• To Assist in maintenance and operation of atmospheric
		instruments and electrical Works in the lab