

University of Hyderabad

Department/Centre: **Centre for Earth, Ocean and Atmospheric Sciences (CEOAS)**

School of **Physics**

ADVERTISEMENT No: UH/CEOAS-SoP/SP/MM-III/PS/01

Date: 19th August 2024

1. Applications are invited from eligible candidates (Indian Nationals only) as per the attached format (*Form B*) for the following temporary positions in the research project entitled “Improving initial conditions for weather and climate prediction – a Coupled Data Assimilation framework” sponsored by Monsoon Mission -III, Indian Institute of Tropical Meteorology - IITM, under Ministry of Earth Sciences (MoES) vide Sanction Order No. IITM/MM-III/2024/IND-8/Sanction Order dated 27th June 2024.

Post Code: CEOAS-MM-III-PS-01

1	Post Code	CEOAS-MM-III-PS-01
2	Name of the Post	Project Scientist - II
2	Number of positions	3 (three)
3	Fellowship/Stipend in ₹.	₹. 67,000/- per month + HRA
4	HRA, if applicable	HRA@30%
5	Tenure of the Post	The position will be offered initially for one year and can be extended based on performance and review after every six months until the duration of the project (3 years)
6	Essential Qualifications	<p>(i) Master’s degree in Meteorology/ Oceanography/ Atmospheric Sciences/ Ocean and Atmospheric Sciences/ Earth Sciences/ Climate Sciences / Physics/ Geophysics (Meteorology)/ Mathematics with minimum 60% marks from recognized university or equivalent.</p> <p style="text-align: center;">OR</p> <p>M.Tech in Atmospheric Sciences/Ocean Sciences/Modeling and Simulation/Meteorology/ Atmospheric and Ocean Sciences/Earth Sciences from a recognized university or equivalent.</p> <p style="text-align: center;">AND</p> <p>(ii) Three years’ experience in the field of data assimilation/coupled Ocean-Atmospheric models/Ocean or Atmospheric general circulation models/numerical weather prediction/implementing AI ML methods for Ocean and/or Atmospheric Sciences</p>
7	Desirable Qualifications and experiences	<ul style="list-style-type: none"> • Doctoral Degree in any of the above-mentioned subjects. • Knowledge in model code handling. Working knowledge of Data assimilation and/or Atmospheric, Oceanic and Coupled General Circulation Models and issues related to porting, installation and troubleshooting of dynamical models in HPC. • 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 shell scripts. • 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

		<p>with data format like NetCDF, HDF, GRIB etc.</p> <ul style="list-style-type: none"> • A knowledge in meteorological data analysis tools (like GrADS, FERRET, NCL, NCO, CDO etc). • Experience in implementing advanced ensemble (and/or) coupled data assimilation methods to Ocean and Atmospheric models would be an added advantage. • Experience in radiance data assimilation and or ocean salinity data assimilation would be an added advantage. • The experiences should be demonstrated through scientific reports/publications.
8	Job Responsibilities	<p>➤ The selected Scientists will be working on the development and implementation of advanced ensemble data assimilation methods for Ocean - Atmospheric coupled model. Further development/ implementation of assimilation of different types of Atmospheric and Ocean variables to the coupled data assimilation system, and adaptation of AI/ML methods.</p>
9	Age Limit	40 years

Post Code: CEOAS-MM-III-PS-02

1	Post Code	CEOAS-MM-III-PS-02
2	Name of the Post	Project Scientist - II
2	Number of positions	1 (one)
3	Fellowship/Stipend in ₹.	₹. 67,000/- per month + HRA
4	HRA, if applicable	HRA@30%
5	Tenure of the Post	The position will be offered initially for one year and can be extended based on performance and review after every six months, until the duration of the project (3 years)
6	Essential Qualifications	<p>(i) Master's Degree in Computer/Computational Science, Computer Application, Mathematics (including applied Maths and statistics), Physics and Meteorology or in other subjects with majors in computing, mathematics, or application to Meteorology/ Physics with minimum 60% marks from a recognized University or equivalent.</p> <p>Or</p> <p>Bachelor's Degree in Engineering, Technology with minimum 60% marks (equivalent CGPA) from a recognized University or equivalent;</p> <p>Or</p> <p>MS in interdisciplinary studies with minimum 60% marks (equivalent CGPA) from a recognized University or equivalent;</p> <p>AND</p> <p>(ii) Three years experience in</p> <p>(a) Application/System software/porting Ocean and or Atmospheric models in HPC or</p> <p>(b) HPC System/Network administration</p>

7	Desirable Qualifications and experiences	<ul style="list-style-type: none"> • Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent. • Working knowledge of Data assimilation and/or Atmospheric, Oceanic and Coupled General Circulation Models and issues related to porting, installation and troubleshooting of dynamical models in HPC. • Good knowledge of basic programming (Fortran, C, C++), Python and/or Operating systems, parallel file systems & Interconnect technologies. • Experience in development of system software's, tools and applications used in high performance computing environment would be desirable. • Prior experience on the development of AI/ML models, such as regression problems. • Good experience in development of parallel code using high level languages and/or in Python. • Experience on visualization software or development of visualization tools. • Knowledge of HPC Systems Administration would be an added advantage.
8	Job Responsibilities	<ul style="list-style-type: none"> ➤ Scientists will be working on the development and implementation of advanced ensemble data assimilation methods for ocean atmospheric coupled model. ➤ To work in the development and troubleshooting of various HPC applications-related issues. To work on the HPC system administration.
9	Age Limit	40 years

2. Applicants should note that the appointments to be made are purely temporary and they have no right to claim for any regular appointment in the University.
3. No TA/DA will be paid for attending the written test / skill test or at the time of joining.
4. Self-Attested copies of all certificates in support of the information furnished in the application should be enclosed.
5. **Last date for receipt of filled-in applications by email is 09th September, 2024, before 5:00 PM.** Late applications will not be considered.
6. The interview will be held online over Google-meet/Zoom. The link will be shared with the short-listed candidates only. The decision of UoH in the selection of candidates is final.
7. **The completed application (Form-B) should be sent by email to sreenivas83@uohyd.ac.in.** In addition, the candidates are requested to attach a detailed CV, which includes list of publications, reports, testimonials etc.
8. Few of the selected candidates may need to work at MoES collaborating institutes, viz. IITM-Pune and/or NCMRWF-Delhi (by deputation) for a period or an interval of periods, as required for the implementation of project objectives.
9. **Clearly mention advertisement No. and post code in the subject of the email without fail.**



Name & Signature of the Project Investigator

Prof.SREENIVAS PENTAKOTA
Centre for Earth Ocean & Atmospheric Sciences
University Of Hyderabad
Hyderabad - 500 046.INDIA

To

1. Web Master, UoH - with a request to place in the University website. Hyderabad - 500 046.INDIA
2. All Notice Boards in the University of Hyderabad.
3. All reputed research institutions in related area of the Project—for display on notice boards.

Application for Position in the Project

UNIVERSITY OF HYDERABAD P.O. Central University Campus, Gachibowli Hyderabad – 500 046., Telangana, INDIA		
Application fee payment details:	Not Applicable	Paste Recent Photograph
Post Applied for:Post Code:.....	
Notification No & Date:	

Personal Details:			Proof enclosed Sl. No.
1	Full Name (as in SSC certificate)		
2	Gender (Male / Female)		
3	Date of Birth & Age (as on last date of the Notification)		
4	Father's Name		
5	Nationality		
6	Community (General / OBC / SC / ST / PWD)		
7	Married / Unmarried		

Candidate's Name & Address for correspondence :		
	Mailing address	Permanent address
Name		
Address with PIN Code		
Email:		
Phone No.		
Mobile No.		
Fax No.		

Present position held, if any:			
Name of the University / Institution	Name of the Position and Salary Details	Nature of Job	Proof encl. no.

Educational Qualifications							
Name of the Examination passed	Name of the Board / University	Month & Year passed	Division /Class	% of Marks	CGPA (if grading is applicable)	Subjects studied	Proof Encl. No.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)

Experience (Including present position / employment)						
Designation & scale of pay	Name & Address of the Employer	Period of Experience			Nature of work	Proof encl. Sl.no.
		From date	To date	No. of years/ Months/days		
(a)	(b)	(c)	(d)	(e)	(f)	(g)

Names & complete postal addresses of 2 referees :			
Email:		Email:	
Phone (Landline) with STD Code :		Phone (Landline) with STD Code :	
Mobile Ph:		Mobile Ph:	

Declaration: I hereby declare that all the entries made by me in this application are true to the best of my knowledge and belief. If anything is found false at any stage, my candidature may be cancelled without assigning any reason thereof.

Date: _____

Signature of the applicant