



राष्ट्रीय पृथ्वी विज्ञान अध्ययन केन्द्र

पृथ्वी विज्ञान मंत्रालय, भारत सरकार

आक्कुलम, तिरुवनंतपुरम - ६९५०११, केरल

NATIONAL CENTRE FOR EARTH SCIENCE STUDIES

Ministry of Earth Sciences, Government of India

Akkulam, Thiruvananthapuram - 695011, Kerala

No. NCESS/P&GA/9424/10/2024

Date: 16.12.2024

National Centre for Earth Science Studies (NCESS) situated at Thiruvananthapuram is an autonomous research centre functioning under the Ministry of Earth Sciences (MoES), Government of India. NCESS invites applications for the posts of Project Associate – I/II and Project Scientist I on contract basis, initially for a period of one year as per the details provided below:

Post Code	Designation	Vacancies	Qualifications
1.	Project Associate-I	1	<p>Essential: Bachelor's Degree in Engineering or Technology or equivalent in Electronics / Instrumentation / equivalent from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> Experience in working with sensors, minor repair works, maintenance of sensors. <p>Nature of Job: Regular maintenance and service of sensors and instruments deployed in lab and field.</p>
2.	Project Associate-II	2	<p>Essential: (1) Master's Degree in Geology from a recognized University / Institute. (2) Two years of experience in igneous / metamorphic petrology and geochemistry.</p> <p>Desirable:</p> <ul style="list-style-type: none"> Experience in sample preparation for geochemical analysis. Knowledge in geothermobarometry, petrological modelling and in EPMA / SEM. <p>Nature of Job: Geological field work, sample collection, sample processing and analysis for generating petrological, geochemical and isotopic data for NCESS solid earth core projects.</p>
3.	Project Associate-II	1	<p>Essential: (1) Master's Degree in Geology / Analytical Chemistry / Earth Science from a recognized University / Institute. (2) Two years of experience in sample preparation for isotopic studies using ion exchange chromatography.</p>

			<p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in clean lab procedures. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Involvement in the day-to-day operation and maintenance of Class 10000 clean lab in NCESS. Processing of samples for isotopic studies.
4.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Geophysics / Marine Geophysics from a recognized University / Institute.</p> <p>(2) Two years of experience in shallow subsurface geophysical studies.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in handling / operating instruments for electrical resistivity / GPR / gravity / magnetic surveys. • Experience in processing geophysical data with knowledge in LINUX / MATLAB. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Participation in geophysical field investigations for subsurface mapping and geotechnical studies. Involvement in the handling, processing and interpretation of geophysical data.
5.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Geology / Applied Geology from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field in an R&D institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in handling GIS software / geotechnical analysis / structural geology. <p><u>Nature of Job:</u></p> <p>Field work, soil sample collection, geotechnical analysis of soils from vulnerable slopes / thematic map preparation and overlaying to yield tangible outputs.</p>
6.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Hydrology / Remote Sensing / Agricultural Science / Soil Science / Earth Science from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field from R&D in industrial / academic institutes or science and technology organizations.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in the areas of hydrology / agriculture / soil studies and remote sensing. • Experience in handling / processing hydrological / remote sensing data. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Regular / continuous field visit to observatories (Attappadi, Munnar and Aduthurai).

			<ul style="list-style-type: none"> Conduct field experiments, collect primary / secondary and instrumental data. <p>Handling and management of data from observatories, quality check and liaison with engineers / technicians.</p>
7.	Project Associate-II	1	<p>Essential:</p> <p>(1) Master's Degree in Earth Science / Chemistry from a recognized University / Institute.</p> <p>(2) Two years research experience in Environmental Chemistry.</p> <p>Desirable:</p> <ul style="list-style-type: none"> Hands-on experience as a lead chemist in reputable research laboratories, including expertise with instruments such as ion chromatographs, elemental analyzers, and spectrophotometers. Strong knowledge of instrumental methods of chemical analysis and fieldwork experience. <p>Nature of Job:</p> <p>Assisting with the management of the instrumentation lab, including documentation, report preparation, and lab accreditation tasks.</p>
8.	Project Associate-II	1	<p>Essential:</p> <p>(1) Master's Degree with specialization in Remote Sensing / Geoinformatics from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field.</p> <p>Desirable:</p> <ul style="list-style-type: none"> One year research experience in remote sensing. <p>Nature of Job:</p> <p>Processing satellite data, preparation of reports, scientific publications, etc.</p>
9.	Project Associate-II	1	<p>Essential:</p> <p>(1) Master's Degree with specialization in Geology / Marine Geology from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field.</p> <p>Desirable:</p> <ul style="list-style-type: none"> Research experience in relevant fields of sediment geochemistry. <p>Nature of Job:</p> <ul style="list-style-type: none"> To undertake scientific expeditions for the acquisition of geological data. <p>Processing, analysis and interpretation of geochemical data, leading to publications.</p>
10.	Project Associate-II	1	<p>Essential:</p> <p>(1) Master's Degree in Physical Oceanography / Remote Sensing / Data Science / equivalent from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field.</p> <p>Desirable:</p>

			<ul style="list-style-type: none"> • Experience in data analysis and programming skill in Python / MATLAB. • Experience in image and video processing. • Experience in deployment of oceanographic instruments, post-processing of oceanographic data, data analysis, beach profile measurements, computation of volume changes and shoreline mapping. • Experience in DGPS and bathymetry survey. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Support coastal field works, processing the satellite imagery, video and image data to study the coastal morphology and rip current processes. <p>Participating in field works related to coastal studies.</p>
11.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Atmospheric Science / Meteorology / Physics / Geophysics / equivalent from a recognized University / Institute.</p> <p>(2) Two years of experience in relevant field.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in the atmospheric data processing and analysis related to monsoon / microphysics / aerosols using reanalysis / ground-based observations. <p><u>Nature of Job:</u></p> <p>Participate in the remote field operations and data collection, processing and management.</p>
12.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Meteorology / Atmospheric Science / Physics / Geophysics / equivalent from a recognized University / Institute.</p> <p>(2) Two years of experience in meteorology / atmospheric sciences.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in weather instrument handling / maintenance / data collection. • Good proficiency in programming languages like Python / Fortran / C / C++ / MATLAB. <p><u>Nature of Job:</u></p> <p>Participate in radiosonde launching, remote field operations, data collection and thunderstorm research.</p>
13.	Project Associate-II	1	<p><u>Essential:</u></p> <p>(1) Master's Degree in Chemistry / Environmental Science / Earth Science from a recognized University / Institute.</p> <p>(2) Two years of experience relevant field.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in working with geochemical tracers, isotopes, and hydrochemical analysis.

			<ul style="list-style-type: none"> • Experience in conducting field sampling and field experiments. <p><u>Nature of Job:</u> Regular field visits to collect primary data and perform in-situ and laboratory-based water quality analysis.</p>
14.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral Degree in Geology / Earth Science from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Hands-on experience in operation and data processing of EPMA / SEM. • Research experience in igneous / metamorphic petrology with publications in peer-reviewed journals. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Participate in field works associated with NCESS solid earth core programs. Analysis of sample using EPMA / SEM and data interpretation.
15.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral Degree in Geology / Earth Science from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Research experience structural geology and tectonics with publications in peer-reviewed journals. • Field experience in Archean cratons and Proterozoic mobile belts with knowledge in handling geochemical, geochronological and structural data. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Participate in field works associated with NCESS solid earth core programs. Analysis of sample using EPMA / SEM and data interpretation.
16.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral degree in Seismology / Geophysics / Earth Science from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Research experience in relevant field of seismological techniques, inversion and AI / ML to decipher the sub-surface structure and anisotropy. • Experience in handling of seismological instruments, data collection, processing and analysis. • Computational skills in modelling, working knowledge on Linux / Shell Scripting / Python or any programming language. <p><u>Nature of Job:</u></p>

			Scientific research in the field of seismology to study the geodynamics and tectonics of the Indian Ocean and fieldwork.
17.	Project Scientist-I	1	<p>Essential: Doctoral degree in Geophysics / Earth Science with specialization in gravity, magnetics or potential fields from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Hands on experience in latest gravimeter and magnetometer. • Experience in combining geophysical data from aero and satellite observations with in-situ observations and land / marine field experience. <p>Nature of Job: Scientific research using numerical methods such as inversion or machine learning for understanding the lithosphere, near-surface structures and land / marine fieldwork.</p>
18.	Project Scientist-I	1	<p>Essential: Master's Degree in Geology / Applied Geology / Remote Sensing with minimum 60% marks from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Doctoral Degree with specialization in numerical modelling studies on water / hydrogeology. • Good knowledge of QGIS, Arc GIS, and other GIS software, satellite data analysis, processing and interpretation, and preparation of geological maps. <p>Nature of Job: Fieldwork for sample collection, sample analysis, and data generation of various river basins of Peninsular India.</p>
19.	Project Scientist-I	1	<p>Essential: Doctoral Degree in Earth Science / related fields with specialization in isotopic geochemistry from a recognized University / Institute</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Expertise in geochemical studies using non-conventional isotopes, tracing of water-rock interactions, geochemical modelling, soil and regolith mineralogy, weathering processes, use of carbon and nitrogen stable isotopes for studying biogeochemical cycles. • Publications in peer reviewed journals. <p>Nature of Job:</p> <ul style="list-style-type: none"> • Geochemical and isotopic analysis of water / sediment / soil from Critical Zone Observatories. • Field sampling of water / sediment / soil for geochemical analysis. <p>Research Publications.</p>

20.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral Degree with specialization in Hydrology from a recognized University / Institute.</p> <p>OR Master's Degree in Engineering or Technology or equivalent in Environmental Engineering from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Experience in hydrological modelling, specifically groundwater modelling. • Knowledge of statistical methods / tools, MODFLOW, SWAT, MIKE SHE. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Numerical modelling of the interactions between surface and sub-surface waters. <p>Field works for hydrological data collection.</p>
21.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral Degree in Hydrology / Water Resources / Climatology with specialization in hydrological modelling and hydro-climatology or related fields from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Expertise in working on modelling of river basins, data driven models, statistical analysis of hydroclimatic variables. • Publications in peer reviewed journals. <p><u>Nature of Job:</u> Modelling of selected river basins, statistical analysis of large scale hydrological and climatological variables and conducting field experiments.</p>
22.	Project Scientist-I	1	<p><u>Essential:</u> Master's Degree in Earth Science / Chemistry with minimum 60% marks from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Doctoral Degree in Earth Science / Chemistry and/or four years research experience in managing chromatography lab / expertise / hands-on experience in MS Techniques (LC-MS / GC-MS). • Publications in high impact journals. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Managing the chromatography lab, including the routine analysis of environmental samples using LC-MS, GC-MS, GC, and UHPLC. • Responsibilities include equipment maintenance, operating procedures, and training end users. <p>Overseeing sample collection from the field / data interpretation.</p>
23.	Project Scientist-I	1	<p><u>Essential:</u></p>

			<p>Master's Degree in Geology / Applied Geology / Environmental Sciences / Earth Sciences / Geoinformatics / Remote Sensing & GIS with minimum 60% marks from a recognized University / Institute.</p> <p>OR</p> <p>Bachelor's Degree in Engineering or Technology or equivalent in Geoinformatics / Remote Sensing & GIS with minimum 60% marks from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Doctoral Degree in Applied Geology / Hydrogeology / Environmental Sciences / Earth Sciences. <p>Nature of Job:</p> <ul style="list-style-type: none"> • Field surveying, Groundwater samplings, and laboratory analysis. • Multivariate statistical analysis of hydrochemical data. <p>LULC change detection using satellite images, GIS analysis of soil erosion.</p>
24.	Project Scientist-I	1	<p>Essential:</p> <p>Master's Degree in Remote Sensing / Geoinformatics / Geology / equivalent with minimum 60% marks from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Doctoral Degree in Remote Sensing / Geoinformatics / Geology / equivalent. • Proven experience in remote sensing, GIS, processing and analysis of satellite images. • Demonstrated excellence in research as evidenced through publication in high impact journals. <p>Nature of Job:</p> <p>Processing and analysing remote sensing data, GIS analysis, and involvement in CGL research programs.</p>
25.	Project Scientist-I	2	<p>Essential:</p> <p>Master's Degree with specialization in Geology / Marine Geology with minimum 60% marks from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Doctoral Degree in Geology / Marine Geology. • Demonstrated excellence in research as evidenced through publications in peer-reviewed journals. • Research experience in relevant fields of sediment geochemistry. <p>Nature of Job:</p> <p>To undertake scientific expeditions for the acquisition of geological data, processing analysis, and interpretation of geochemical data, leading to publications.</p>
26.	Project Scientist-I	1	<p>Essential:</p>

			<p>Master's Degree in Physical Oceanography with minimum 60% marks from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Doctoral Degree in Physical Oceanography and / or four years of research experience in relevant field of coastal oceanography. • Field experience in deployment and maintenance of oceanographic instruments. • Proven experience in remote sensing, GIS, processing and analysis of satellite images / video imagery. • Programming skill in Python / MATLAB. • Experience in numerical modelling – MIKE 21 / Delft 3D, X beach, etc. • Demonstrated excellence in research as evidenced through publication in high impact journals. <p><u>Nature of Job:</u> Assist the scientists in the studies of coastal ocean processes, establishing coastal monitoring network, participating in field data collections, setup of numerical models for various nearshore regions and processing coastal video imagery / satellite data, coastal processes studies, that leads to publications and scientific reports.</p>
27.	Project Scientist-I	1	<p><u>Essential:</u> Doctoral Degree in Atmospheric Science / Meteorology / Physics / Geophysics / equivalent from a recognized University / Institute.</p> <p>OR Master's Degree in Physics / Electronics / Atmospheric Science / Geophysics / with minimum 60% marks from a recognized University / Institute.</p> <p>OR Bachelor's Degree in Engineering or Technology or equivalent in Electronics / Instrumentation / Electrical & Electronics / Electronics & Telecommunication with minimum 60% marks from a recognized University / Institute.</p> <p><u>Desirable:</u></p> <ul style="list-style-type: none"> • Knowledge in programming languages like Python / Fortran-90 / C / C++, shell scripting and meteorological data analysis tools like GrADS, NCL, NCO, CDO, etc. • Publications in SCI index journals in the relevant field. • Good knowledge in numerical weather prediction models. <p><u>Nature of Job:</u></p> <ul style="list-style-type: none"> • Installation, operation, maintenance and calibration of atmospheric instruments relevant to weather

			parameter, cloud and precipitation from High-Altitude Cloud Physics Observatory in Munnar. Maintenance of the station and routine field work in the atmospheric observatories of NCESS.
28.	Project Scientist-I	1	<p>Essential: Doctoral Degree in Meteorology / Atmospheric Sciences / Physics / Earth Sciences / Marine Sciences / Geophysics / equivalent from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Previous research experience in tropical weather systems. • Relevant peer-reviewed publications in thunderstorms / lightning / clouds / Doppler Weather Radar / convective weather systems. <p>Nature of Job: Participate in convective weather system research and remote field campaigns.</p>
29.	Project Scientist-I	1	<p>Essential: Doctoral Degree in Earth Science / Biogeochemistry / Marine Chemistry / Oceanography / equivalent with expertise in nutrient cycling, marine biogeochemical processes from a recognized University / Institute.</p> <p>Desirable:</p> <ul style="list-style-type: none"> • Familiarity with instrumentation for in-situ nutrient monitoring, proficiency in analytical techniques for measuring nutrient concentrations, and a strong record of peer-reviewed publications in biogeochemistry or oceanography. • Experience with isotopic techniques to trace nutrient sources and pathways. <p>Nature of Job: Biogeochemical studies of coastal waters, field experiments and coastal water sampling.</p>

* For Project Scientist-I posts, candidates who have submitted their Ph.D. thesis can also apply.

Age limit and Remuneration (DST OM SR/S9/Z-05/2019 dt. 10.07.2020)

Designation	Age Limit (as on last date of receipt of online application)	Remuneration
Project Associate-I	35	(1) 31,000/- + HRA to Scholars who are selected through a. National Eligibility Tests -CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or b. A selection process through National level examinations conducted by

		Central Government Departments and their Agencies and Institutions. (2) 25,000/- + HRA for others who do not fall under (1) above.
Project Associate-II	35	(1) 35,000/- + HRA to Scholars who are selected through a. National Eligibility Tests -CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or b. A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions. (2) 28,000/- + HRA for others who do not fall under (1) above.
Project Scientist-I	35	Rs.56,000/- plus HRA **
Age relaxation for SC/ST/OBC candidates as per GoI Rules.		

** Increment of 5% for every 2 years of experience subject to performance review.

Interested candidates should submit their application ONLINE. The decision of the Director, NCESS in all matters relating to eligibility, acceptance or rejection of applications shall be final and no enquiry or correspondence will be entertained in this connection from any individual.

Note:

1. Prospective candidates should regularly visit NCESS website (www.ncess.gov.in) for further changes, if any.
2. Interview if not conducted on the specified day due to any unforeseen reasons will be held on the next working day.
3. Candidates should have a valid email-id and mobile number which should be kept active till the declaration of the final result. All communications relating to this advertisement shall be sent by email-id / mobile SMS mentioned by the candidate in his application.
4. Crucial date for determination of essential qualification and age limit will be the date of closure of application.
5. Relaxation in upper age limit for the disabled, employees of Govt. Organizations, ex-servicemen and Kashmiri Migrants will be as in O.M. No. 15012/2/2010-Estt.(D) dated 27.3.2012 of Dept. of Personnel & Training, Government of India.
6. The prescribed essential qualifications are minimum and mere possession of the same does not entitle candidates to be called for written test/interview.
7. Director, NCESS reserves the right to cancel the recruitment process without assigning any reason thereof or modify the number of vacancies to be filled.
8. If the number of applications received in response to the advertisement is large, NCESS 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.

9. *The shortlisted candidates will be called for a written test / interview as decided by NCESS.*
10. *The names of candidates short-listed for written test / interview, as the case may be, will be notified in the NCESS website (www.ncess.gov.in) and an intimation to this effect will be sent through the email-id furnished by the candidate.*
11. *Canvassing in any form and /or bringing any influence, political or otherwise will be treated as disqualification. No interim correspondence/inquiry will be entertained.*
12. *Candidates will have to produce the proof of details furnished in their applications, in original, as and when required.*
13. *NCESS reserves the right not to fill up the post without assigning any reasons.*
14. *The number of vacancies mentioned in the advertisement may vary depending upon the requirements as approved by the Government.*

How to Apply:

- a) The application will be accepted online only. The online application link will be opened shortly and circulated through the NCESS website. Applicants are requested to carefully go through the full text of the advertisement and the instructions in particular. To apply, the applicant must fill the online application and upload scanned images of photograph, signature and relevant self-attested copies of mark sheets (for all semesters) and Provisional/Degree certificate for academic/professional qualifications, proof of date of birth, experience certificate, caste certificate etc. If the certificates are in a language other than English, attested translation should be uploaded.
- b) The photograph and signature should be in .jpg format with a file size limit of less than 100 KB. All certificates should be in .pdf format of each file less than 300 KB.
- c) Applications received through email or received after due date will be rejected.
- d) The candidates should produce their original certificates if selected for joining. Non-production of the original certificates / production of original certificates at variance with the online submission details will result in disallowing the candidate to join for duty.
- e) In case of difficulty in the submission of online application form (not for other queries), please email to [**vacancies.ncess@gmail.com**](mailto:vacancies.ncess@gmail.com)

Last date for submitting ONLINE application: 5 PM on 31.01.2025

Senior Manager, NCESS