



## 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/9424/06/2024

Date: 10.10.2024

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 post of Field Assistant, Laboratory Assistant, Technical Assistant, Project Associate – I/II, Senior Project Associate and Project Scientist I/II on contract basis, initially for a period of one year as per the details provided below:

Post Code	Designation	Vacancies	Qualifications
1.	Field Assistant	1	<p><b>Essential:</b> Graduate Degree in Physics / Earth Science / equivalent from a recognized University / Institute.</p> <p><b>Desirable:</b> Experience in geophysical (gravity / magnetic / seismic) field data collection.</p> <p><b>Nature of work / job requirement:</b> Handling of geophysical instruments and seismological / gravity data collection.</p>
2.	Laboratory Assistant	1	<p><b>Essential:</b> Graduate Degree in Chemistry / Environmental Science / Earth Science from a recognized University / Institute.</p> <p><b>Desirable:</b></p> <ul style="list-style-type: none"> <li>• Experience in environmental sample collection and laboratory analysis.</li> <li>• Experience in using modern analytical instruments such as IRMS.</li> </ul> <p><b>Nature of work / job requirement:</b></p> <ul style="list-style-type: none"> <li>• Laboratory analysis of water/sediment samples.</li> <li>• Sample preparation.</li> <li>• Operating instruments such as IRMS.</li> </ul>
3.	Laboratory Assistant	1	<p><b>Essential:</b> Graduate Degree in Chemistry / Environmental Science / Earth Science from a recognized University / Institute.</p> <p><b>Desirable:</b></p>

			<ul style="list-style-type: none"> <li>• Two years of experience in hydrogeochemical analyses of field samples (water / soil / sediment) along with working knowledge in hydrochemical modeling.</li> <li>• Computer knowledge.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Hydrobiogeochemical analysis of samples.</li> <li>• Analysis of water samples for its suitability for drinking / agricultural / industrial purposes.</li> <li>• Assisting in chemical speciation / pesticide dynamics / pollution studies including microbial pollution.</li> </ul>
4.	Field Assistant	1	<p><b><u>Essential:</u></b> Graduate Degree in Geology / equivalent from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in sample analysis / field work for collecting marine samples.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> To provide assistance in fieldwork and analysis of marine samples.</p>
5.	Technical Assistant	1	<p><b><u>Essential:</u></b> Graduate Degree in Chemistry / Geology / Geophysics from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in geological or geophysical field data collection.</li> <li>• Experience in using GIS tools such as ArcGIS or QGIS.</li> <li>• Experience in water quality analysis.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Regular field visits to collect primary data / conduct geophysical studies.</li> <li>• Water quality analysis.</li> </ul>
6.	Field Assistant	1	<p><b><u>Essential:</u></b> Diploma in Electronics / Electronics and Communication / Computer Science / Instrumentation Engineering / equivalent. OR Graduate Degree in Physics / Electronics / Applied Physics / equivalent from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b> Experience with handling electronic instruments, maintenance and programming for data processing.</p>

			<p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Handling of atmospheric instruments, maintenance and field data collection.</li> <li>• Data processing using MATLAB / Python, etc.</li> </ul>
7.	Technical Assistant	1	<p><b><u>Essential:</u></b> Graduate Degree in Geology / equivalent from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in remote sensing and GIS software with satellite image processing,</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Processing remote sensing / GIS data and field work for verification, etc.</p>
8.	Project Associate-I	1	<p><b><u>Essential:</u></b> Master's Degree in Geology / Applied Geology / Geophysics from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b> Experience in handling GIS-related software / geotechnical analysis.</p> <p><b><u>Nature of work / job requirement:</u></b> Field work, soil sample collection, geotechnical analysis of soils from vulnerable slopes / thematic map preparation and overlaying to yield tangible outputs.</p>
9.	Project Associate-I	1	<p><b><u>Essential:</u></b> Master's Degree in Geology / Applied Geology from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in conducting field surveys, sampling, data collection and sample analysis relating to geological studies.</li> <li>• Skills in handling analytical instruments and hydrogeochemical data synthesis; statistical interpretation using software like Systat and Sigmaplot.</li> <li>• Good knowledge of QGIS, Arc GIS, and other GIS software, satellite data analysis, processing and interpretation, and preparation of geological maps.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Fieldwork for sample collection, sample analysis, and data generation of various river basins of Peninsular India using advanced statistical and geoinformation tools.</p>

10.	Project Associate-I	1	<p><b><u>Essential:</u></b> Master's Degree in Hydrology / Hydrogeology / Earth Science from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in numerical modelling of surface water / groundwater.</li> <li>• Experience in using GIS tools such as ArcGIS or QGIS.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Numerical modelling of coastal catchments using MODFLOW / FEFLOW / GMS.</p>
11.	Project Associate-II	1	<p><b><u>Essential:</u></b> (1) Master's Degree in Geophysics / Marine Geophysics / equivalent from a recognized University / Institute. (2) Two years of research experience in relevant field of seismological tools to decipher the structure.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in handling of large global seismological data, processing and computational skills.</li> <li>• Working knowledge on Linux / Shell Scripting / MATLAB.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Scientific research in the field of seismology to study the lithospheric and mantle structure beneath the Indian Ocean region.</p>
12.	Project Associate-II	1	<p><b><u>Essential:</u></b> (1) Master's Degree in Geophysics / Marine Geophysics / equivalent from a recognized University / Institute. (2) Two years of research experience in gravity and magnetic data collection, data processing and modelling.</p> <p><b><u>Desirable:</u></b> Field experience in gravity / magnetic survey and computational skills.</p> <p><b><u>Nature of work / job requirement:</u></b> Scientific research in the field of gravity / magnetics to study the crustal architecture in the Indian shield region.</p>
13.	Project Associate-II	1	<p><b><u>Essential:</u></b> (1) Master's Degree in Geology / Applied Geology / Opto-electronics / Physics from a recognized University / Institute. (2) Two years of experience in the relevant field in an R&amp;D institute.</p> <p><b><u>Desirable:</u></b></p>

			<ul style="list-style-type: none"> <li>• Experience in handling and maintaining of scientific instruments.</li> <li>• Experience in sedimentary basin analysis.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Basin analysis, preparation of fluid inclusion wafers, micro thermometric analysis.</p>
14.	Project Associate-II	1	<p><b><u>Essential:</u></b> (1) Master's Degree in Hydrology / Climate Science / Environmental Science / Data Science / Agricultural Science / Earth Science from a recognized University / Institute. (2) Two years of experience in the field of hydrology / hydro-climatology from R&amp;D / academic institutes.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in working with physics-based and data-driven models in the areas of hydrology / water resources.</li> <li>• Experience in handling / operating hydrological instruments and conducting field studies.</li> <li>• Knowledge of Python / MATLAB / R.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Numerical modelling of surface and groundwater.</li> <li>• Statistical analysis of hydro-climatological data.</li> <li>• Operating and handling hydrological instruments</li> <li>• Regular field visit to observatories and data collection from instruments.</li> </ul>
15.	Project Associate-II	1	<p><b><u>Essential:</u></b> (1) Master's Degree in Hydrology / Remote Sensing / Agricultural Science / Soil Science / Earth Science from a recognized University / Institute. (2) Two years of experience in research and development in the relevant field from industrial / academic / science and technology organizations.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in the areas of hydrology / agriculture / soil studies / remote sensing.</li> <li>• Experience in handling / operating hydrological instruments and conducting field experiments.</li> <li>• Experience in handling / processing hydrological / remote sensing data.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Regular / continuous field visit to observatories (Attappadi, Munnar and Aduthurai).</li> <li>• Maintenance / upkeep of hydrologic instruments.</li> </ul>

			<ul style="list-style-type: none"> <li>• Conduct field experiments, collect primary / secondary and instrumental data.</li> <li>• Handling and management of data from observatories, quality check.</li> <li>• Liaison with engineers / technicians.</li> </ul>
16.	Project Associate-II	1	<p><b>Essential:</b></p> <p>(1) Master's Degree in Physical Oceanography / Remote Sensing / Data Science / equivalent from a recognized University / Institute. OR B.E / B. Tech in Electronics / Computer Science from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field.</p> <p><b>Desirable:</b></p> <ul style="list-style-type: none"> <li>• Experience in data analysis and programming skill in Python / MATLAB.</li> <li>• Experience in image and video processing.</li> </ul> <p><b>Nature of work / job requirement:</b></p> <ul style="list-style-type: none"> <li>• Processing the satellite imagery, video and image data to study the coastal morphology and rip current processes.</li> <li>• Participating in field works related to coastal studies.</li> </ul>
17.	Project Associate-II	1	<p><b>Essential:</b></p> <p>(1) Master's Degree in Oceanography / Ocean Technology / equivalent from a recognized University / Institute.</p> <p>(2) Two years of experience in the relevant field.</p> <p><b>Desirable:</b></p> <ul style="list-style-type: none"> <li>• Research experience in relevant fields – Oceanography.</li> <li>• Experience in Numerical Modelling (MIKE 21 / Delft / ROMS / LITPACK).</li> <li>• Deployment of oceanographic instruments, post-processing of oceanographic data, data analysis, beach profile measurements, computation of volume changes and shoreline mapping.</li> </ul> <p><b>Nature of work / job requirement:</b></p> <ul style="list-style-type: none"> <li>• Modelling work related to coastal hydrodynamics, oceanographic data collection.</li> <li>• Deployment of instruments and processing of data.</li> <li>• Preparation of technical reports and manuscripts.</li> </ul>
18.	Project Scientist-I	1	<p><b>Essential:</b></p> <p>Doctoral Degree in Seismology / Geophysics / Earth Science from a recognized University / Institute.</p>

			<p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Research experience in relevant field of seismological techniques to decipher the sub-surface structure and anisotropy.</li> <li>• Experience in handling of seismological instruments, data collection, processing and analysis.</li> <li>• Computational skills in modelling, and working knowledge in Linux / Shell Scripting / Python / any programming language.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Scientific research in the field of seismology to study the geodynamic evolution of the Western Ghats and the crustal architecture across the shear zones in southern India.</li> </ul>
19.	Project Scientist-I	1	<p><b><u>Essential:</u></b> Master's Degree in Geology / Applied Geology with minimum 60% marks from a recognized University/Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Doctoral Degree in Geology.</li> <li>• Experience in hydrocarbon / fluid inclusion analysis.</li> <li>• Experience in handling and maintaining scientific instruments meant for microthermometric analyses.</li> <li>• Experience in Raman spectroscopic and fluorescence emission analysis for fluid inclusion studies.</li> <li>• Publications in SCI journals in the relevant field.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Interpretation of fluid inclusion data, micro thermometric analysis, Raman Spectrometry analysis, fluorescence emission measurements.</p>
20.	Project Scientist-I	1	<p><b><u>Essential:</u></b> Doctoral degree in Geology / Earth Science from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Knowledge in the operation and data processing of LA-ICPMS / MC-ICPMS.</li> <li>• Research experience in metamorphic petrology and in-situ U-Pb/Hf geochronology with publications in peer reviewed journals</li> </ul> <p><b><u>Nature of work</u></b> Participate in field works associated with NCESS solid earth core programs, in-situ U-Pb analysis and data interpretation</p>
21.	Project Scientist-I	1	<p><b><u>Essential:</u></b></p>

			<p>Doctoral degree in Geology / Earth Science from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Hands-on experience in operation and data processing in EPMA.</li> <li>• Research experience in igneous/metamorphic petrology with publications in peer reviewed journals</li> </ul> <p><b><u>Nature of work</u></b> Participate in field works associated with NCESS solid earth core programs, analysis of samples using EPMA and data interpretation</p>
22.	Project Scientist-II	1	<p><b><u>Essential:</u></b> (1) Doctoral Degree in Geology OR Master's Degree in Engineering or Technology or equivalent in Engineering Geoscience or Geotechnical Engineering from a recognized University / Institute. (2) Three years of experience in Remote Sensing and GIS.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Expertise in geotechnical analysis and in landslide investigation using AI and geotechnical investigation.</li> <li>• Proficiency in RAAMS software for slope stability analysis of creep movement in landslide prone areas.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b> Field work in landslide prone areas / runoff modelling.</p>
23.	Project Scientist-II	1	<p><b><u>Essential:</u></b> (1) Doctoral Degree in Marine Science / Oceanography / equivalent OR Master's Degree in Engineering or Technology or equivalent in Ocean Technology / Computer Science OR Master's Degree in Marine Science / Oceanography / equivalent with minimum 60% marks from a recognized University / Institute. (2) Three years of experience in relevant field.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in nearshore data collection, deployment of oceanographic instruments, beach and sediment sample collection, post-processing of oceanographic data, beach profile measurements, computation of</li> </ul>



			<p>volume changes, shoreline mapping and data analyses.</p> <ul style="list-style-type: none"> <li>• Experience in numerical modelling (expertise in using modelling software such as MIKE 21 / Delft / ROMS / WAVEWATCH III and LITPACK).</li> <li>• Programming skill in MATLAB and Python.</li> <li>• Experience in sedimentological, geochemical mineralogical shelf / estuarine studies, shoreline evolution, coastal protection studies, research studies related to infra-gravity waves, coastal processes, sediment budgeting, etc.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Marine data collection by deploying oceanographic instruments, post-processing of oceanographic data, data analysis, beach profile measurements, computation of volume changes and shoreline mapping.</li> <li>• Detailed analyses of sedimentological data and interpretation of results.</li> <li>• Numerical modelling of coastal processes, profile changes and shoreline evolution.</li> <li>• Studies related to infra-gravity waves, coastal processes, shelf sea dynamics, etc.</li> <li>• Numerical modelling of coastal processes and hydrodynamics inside the port area.</li> <li>• Sediment budgeting studies.</li> <li>• Participation in research cruises.</li> <li>• Preparation of technical reports and research publications.</li> </ul>
APP 01	Field Assistant	1	<p><b><u>Essential:</u></b> 3 year's Diploma in Engineering or Graduate Degree in Science from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in conducting field works in mountainous terrain.</li> <li>• Familiarity with or resident of Chamoli/ Gharwal region of Uttarakhand state.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Regular / continuous field visit to mountainous catchments in Uttarakhand.</li> </ul> <p>Conduct social survey, field experiments, collect primary / secondary data.</p>
APP 02	Senior Project Associate	1	<p><b><u>Essential:</u></b> (1) Bachelor's Degree in Civil Engineering from a recognized University / Institute.</p>

			<p>(2) Four years of experience in Hydrological Modelling from R&amp;D in industrial/ academic institutes or science and technology organizations.</p> <p>OR</p> <p>(1) ME / M.Tech in Civil Engineering from a recognized University / Institute.</p> <p>(2) Two years of experience in Hydrological Modelling from R&amp;D in industrial/ academic institutes or science and technology organizations.</p> <p>OR</p> <p>Doctoral Degree in Engineering / Earth Sciences / equivalent from a recognized University / Institute.</p> <p><b><u>Desirable:</u></b></p> <ul style="list-style-type: none"> <li>• Experience in hydrological modelling / flood modelling.</li> <li>• Experience in working with MIKE FLOOD / MIKE SHE models.</li> <li>• Familiarity with or resident of Chamoli / Gharwal region of Uttarakhand state.</li> </ul> <p><b><u>Nature of work / job requirement:</u></b></p> <ul style="list-style-type: none"> <li>• Flood modelling of mountainous river catchments. Field work and data collection in Chamoli / Gharwal region of Uttarakhand state.</li> </ul>
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For Project Scientist-I posts, candidates who have submitted their PhD thesis can also apply. For Project Scientist-II posts, candidates without minimum 3 years of experience can also apply, if found otherwise suitable for the project, then the candidate will be selected as Project Scientist-I.

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

<b>Designation</b>	<b>Age Limit (as on last date of receipt of online application)</b>	<b>Remuneration</b>
Laboratory Assistant / Field Assistant/Technical Assistant	50	Rs. 20,000/- plus HRA *
Project Associate-I	35	(1) 31,000/- + HRA to Scholars who are selected through <ol style="list-style-type: none"> <li>a. National Eligibility Tests -CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or</li> <li>b. A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.</li> </ol>

		(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 **
Project Scientist-II	40	Rs.67,000/- plus HRA **
Senior Project Associate	40	Rs.42,000/- plus HRA
Age relaxation for SC/ST/OBC candidates as per GoI Rules.		

\* Increment of 15% for 3 years of experience with maximum ceiling of 4 such revisions i.e., up to 12 years of experience.

\*\* 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](http://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](http://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 14.11.2024.**

**Senior Manager, NCESS**