

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY (Ministry of Earth Sciences, Government of India)

NIOT Campus, Velachery-Tambaram Main Road, Pallikaranai, Chennai – 600 100 Phone 3300 91-44-6678 : Fax-91-44 : 6678 3308 E-mail: <u>recruitment@niot.res.in</u>

ADVERTISEMENT No. NIOT/E&P/02/2021 (Project)

National Institute of Ocean Technology (NIOT), Chennai, an autonomous body under the Ministry of Earth Sciences, Govt. of India, invites online applications through the website link <u>https://www.niot.res.in/index.php/recruitment</u> for the following positions in various disciplines on contract basis for various projects carried out by NIOT as mentioned below:-

SI.	Name of the Posts	No. of posts & Category
1	Project Scientist – III	04 posts (UR)
2	Project Scientist – II	30 posts (UR)
3	Project Scientist – I	73 posts (OBC – 19; SC – 10; ST – 5; EWS – 7; UR – 32)
4	Project Scientific Assistant	64 posts (OBC – 17; SC – 9; ST – 4; EWS – 6; UR – 28)
5	Project Technician	28 posts (OBC – 7; SC – 4; ST – 2; EWS – 2; UR – 13)
6	Project Jr. Asst.	25 posts (OBC – 6; SC – 3; ST – 1; EWS – 2; UR – 13)
7	Research Associate	03 posts (UR)
8	Senior Research Fellow	08 posts (OBC – 2; SC – 1; UR – 5)
9	Junior Research Fellow	02 posts (UR)
	Total	237

UR – Un Reserved; OBC: Other Backward Class; SC: Scheduled Castes; ST: Scheduled Tribes; EWS: Economically Weaker Section

The number of posts may vary based on requirements of the projects. Requirements of qualifications, age, experience, consolidated emoluments, reservation to SC/ST/OBC/and other categories, etc. have been indicated in the detailed advertisement on web-link https://www.niot.res.in/index.php/recruitment. Interested and eligible candidates may apply through online latest by **13/09/2021.**

Director



NATIONAL INSTITUTE OF OCEAN TECHNOLOGY (Ministry of Earth Sciences, Government of India) us, Velachery-Tambaram Main Road, Pallikaranai, Chennai – 600 100

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National Institute of Ocean Technology (NIOT), Chennai, an autonomous R&D organization under the Ministry of Earth Sciences, Govt. of India ,invites online applications through the website link <u>https://www.niot.res.in/index.php/recruitment</u> for the following positions in various disciplines on contract basis for various projects carried out by NIOT for the plan year 2021-2026 as mentioned below:-

SI.	Name of the Posts	No. of posts & Category		
1	Project Scientist – III	04 posts (UR)		
2	Project Scientist – II	30 posts (UR)		
3	Project Scientist – I	73 posts (OBC – 19; SC – 10; ST – 5; EWS – 7; UR – 32)		
4	Project Scientific Assistant	64 posts (OBC – 17; SC – 9; ST – 4; EWS – 6; UR – 28)		
5	Project Technician	28 posts (OBC – 7; SC – 4; ST – 2; EWS – 2; UR – 13)		
6	Project Jr. Asst.	25 posts (OBC – 6; SC – 3; ST – 1; EWS – 2; UR – 13)		
7	Research Associate	03 posts (UR)		
8	Senior Research Fellow	08 posts (OBC – 2; SC – 1; UR – 5)		
9	Junior Research Fellow	02 posts (UR)		
	Total	237		

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Please read the terms and conditions and the instructions for how to apply carefully.

Details of the posts with discipline, Essential qualification, age limit and the job- requirements

<u>etc.,</u>

Name of the Post	:	Project Scientist – III
Number of Post(s)	:	04 (Un-reserved)
Emoluments	:	Rs. 78,000/- + HRA (Increment of 5% for every two years of experience subject to performance review)
Maximum age limit	:	45 years

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
Life Science (4 posts)	M.Sc., in Marine Biology / Microbiology /Biochemistry	Ph. D. in the field of marine algae /finfish	• Planning and carrying out R&D related to marine microbes/marine algal/
(Un-reserved) Post code: 01 (2 posts at ACOSTI, Port Blair Islands)	Zoology aquaculture/ B.Tech. in Bio technology/ from a recognized university / Institute with at least (60%)marks in the qualifying degree level. with Seven years' experience in Research &Development in the fields of marine microbes/ marine algal / marine fish culture/ Ballast water treatment.	culture/Ballast water treatment / microbiology from recognized University.	 offshore cage culture/Ballast water treatment Culture and marine microbes/ phytoplankton/zooplankton/finfish breeding, larval rearing and cage culture. Organizing scientific cruises / execution of field studies Interpretation of results and preparation of technical report

Name of the Post Number of Post(s) Emoluments	: : :	Project Scientist – II 30 (Un-reserved) Rs. 67,000/- + HRA (Increment of 5% for every two years of experience subject to performance review)
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Maximum age limit

: 40 Years

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
Mechanical (8 Posts) (Un-reserved) Post code: 02	B.E. / B.Tech. in Mechanical Engg. from a recognized university / Institute with atleast(60%) marks in the qualifying degree level. With Three years' experience in Research & Development, Survey / Planning, supervision or training in the relevant field.	M.E. / M.Tech. in Mechanical / Thermal / Production / Marine / Naval Architecture/ Ocean Engg./ Industrial Engineering from a recognized University / Institute MoT [Marine Officers' Training] qualification from a recognized Institute.	 Design / Development / Analysis of Mechanical Systems / Sub systems / Offshore, Floating Structures / Underwater components Thermal systems / equipments, Design of rotating machinery. Assembly, Fabrication, Integration, evaluation, testing and commissioning and monitoring of systems / equipments and various other components for Desalination and OTEC Plants, and also experimental techniques for underwater components Management, operation, maintenance and trouble shooting of research vessels; follow-ups, documentation, inspection and monitoring of ship building / dry- dock & afloat repairs process. Deployment and retrieval of floating and underwater systems, offshore data collection platforms, Ship cruises for scientific works and planning. Hands on experience in codes and standards (ASME, HTRI, BIS, etc) and in

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
			softwares such as - Autocad, Solidworks, Catia, PRO-E - ANSYS, COMSOL, - ANSYS-AQWA, Orcaflex, MATLAB, Simulink, - MARPOL & SOLAS regulations, Various ship maintenance engineering solutions & Safety at Sea, Knowledge on Assembly & integration of Shipboard machinery, Welding technology & Ship technology, and / or experience of sailing onboard Ships.
Civil (3 Posts) (Un-reserved) Post code: 03	B.E. / B.Tech. in Civil Engg. from a recognized university / Institute with at least (60%) marks in the qualifying degree level. with Three years' experience in Research & Development, Survey / Planning, supervision or training in the relevant field.	M.E. / M.Tech. in Civil / Structural/ Ocean Engg./Geotechnical/ from a recognized university or institute.	 Coastal processes modelling, hydrodynamic modelling related to ocean /coastal engineering and numerical studies for fixed / floating structures. Planning, coordination and conduct of Field survey/ Oceanographic deployment / retrieval operations, Laboratory studies, Instrumentation and Data analysis. Co-ordination, analysis, design and execution of Civil / Structural works in mainland/islands. Design, Analysis and numerical modelling of the offshore components such as moorings, pipelines and fixed/floating structures. Planning, analysis and design foundations for the onshore and offshore structures. Field and in situ onshore and offshore geotechnical investigations.
ECE / E&I (5 Posts) (Un-reserved) Post code: 04	B.E. / B.Tech. in Electronics and Instrumentation / communication Engg. from a recognized University with at least 60% marks in the qualifying degree level. With Three years' experience in Research &Development, Survey / Planning, supervision or training in the relevant field.	M.E./M.Tech. in Electronics & Communication / Electronics / Applied Electronics/ VLSI Design/ Embedded system design/ Instrumentation & Control/ Communication systems from a recognized university or institute.	 Embedded System design Programming and verification of C/C++/MATLAB/PYTHON/Java Data acquisition/ SCADA /LabView Signal and image processing Satellite communications Circuit design with ORCAD, Pspice Planning, coordination and participating In field studies in coastal regions and scientific cruises. Installation of systems on-board ships Calibration and testing of underwater acoustic sensors / accreditation processes
Geology / GIS Remote Sensing (2 Posts) (Un-reserved) Post code: 05	M.Sc. in Geology/Applied Geology/Marine Geology/ Marine Geophysics from a recognized university /institute with at least 60% marks in the qualifying degree level. With Three years' experience in Research & Development similar to the described	Ph.D in Geology/ Marine Geology/ Applied Geology/ Marine Geophysics from a recognized university/institute M.E./M.Tech/MS in Geoinformatics/ Geomatics/ GIS/ Remote Sensing from a recognized university	 Coastal geomorphology and coastal process related data collection, processing, interpretation and report writing Topographic and bathymetry data collection and processing Satellite image processing, handling GIS systems like ARC GIS, QGIS, ERDAS etc Preparation of thematic map for coastal sediment dynamics and oceanographic studies

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
	job requirements OR B.E./B.Tech. in Geo- informatics/Geomatics from a recognized university/institute with at least 60 % marks in the qualifying degree level. With Three years' experience in Research & Development similar to the described	/institute.	
Life Science (6 Posts) (Un-reserved) Post code: 06 (3 posts at ACOSTI, Port Blair Islands)	job requirements M.Sc. in Marine Biology/ Marine Science /Microbiology/ Zoology / Aquaculture or B.Tech. in Biotechnology/ / Bioinformatics from a recognized university/Institute with at least 60% marks in the qualifying degree level. With Three years' experience in Research & Development	Ph.D./M.Tech., in marine algae / fin fish culture/ Ballast water treatment/ biotechnology / microbiology from a recognized university or institute.	 R&D related to marine microbes / marine algal / offshore cage culture / Ballast water treatment Culture and marine microbes/ phytoplankton / zooplankton/ finfish breeding, larval rearing and cage culture. Organizing scientific cruises / execution field studies Interpretation of results and preparation of technical report
Physical Oceanography (5 Posts) (Un-reserved) Post code: 07	in the fields of marine microbes / marine algal / marine fish culture / Ballast water treatment. Masters Degree in Oceanography / Physical Oceanography / Physics/ Chemical Oceanography/ Ocean Technology / Ocean Science from a recognized University / Institute with at least 60% marks in the qualifying degree level. With Three years' experience in Research & Development, planning and management in industry and/or the area of work as per the job requirement.	Doctorate in Marine sciences/ Oceanography / Physical Oceanography/ Physics from a recognized University / Institute. Relevant computer programming skills Good knowledge in MATLAB and data processing methodologies	 Oceanographic data collection, data processing, quality control and application of numeric models. Analysing oceanographic data using tools like MATLAB, Ferret etc. Participating in cruises for the data collection and maintenance of ocean observation platforms. To interact with port officials/ship agent Coastal processes modeling, planning, coordinating and managing field data collection programs, hydrodynamic modeling related to ocean /coastal engineering. Carryout oceanographic survey, and data collection at costal /offshore locations, involve in Laboratory studies, Instrumentation, Site assessment studies/CRZ/GIS. Good knowledge in software tools like Matlab, C, Fortran, etc Planning and execution of sea trials and field experiments. Oceanographic and acoustic data

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
			 processing & analysis, Satellite data processing Scientific / technical report preparation and any other project related documentation Coastal processes modelling, planning, coordinating and managing field data collection programs, seabed engineering investigations, bathymetry and topography survey, hydrodynamic modelling related to ocean/coastal engineering.
Petroleum (1 Post) (Un-reserved) Post code: 08	B.E./B.Tech. in Chemical/ Petroleum Engineering from a recognized University with at least 60% marks in the qualifying degree level. With Three years experience in Research & Development, industry and/or the area of work as per the job requirement.	M.E./M.Tech. in Petroleum engineering from a recognized University.	 Coordination for technology development for Gas Hydrate research, thermal stimulation and depressurization techniques Handling high pressure and low temperature reactor/autoclave HandlingCFDsoftware'slikefluent;reserv oirmodelingsoftwareformethanehydrate kinetics studies Handling FORTRAN based software TOUGH+Hydrate Life support system design for enclosed space and usage of the related sensors and life saving apparatus

Name of the Post :		Project Scientist – I	
Number of Post(s)	73 (UR-32; OBC-19; SC-10; ST-05; EWS-07)		
		(Two posts will be suitable for PwD-OH category.)	
Emoluments :		Rs. 56,000/- + HRA (Increment of 5% for every two years of	
		experience subject to performance review)	
Maximum age limit :		35 (Age relaxation as per Govt. of India norms)	
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Discipline / Esser	ntial Oua	ification Desirable Job Requirement	

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
Mechanical / Thermal (15 Posts) (OBC - 4 SC - 2 ST - 1 EWS - 2 UR - 6) Post code: 09	B.E. / B.Tech. in Mechanical Engg. from a recognized University / Institute with at least 60% marks in the qualifying degree level.	 M.E. / M.Tech. from a recognized University / Institute in any of the following disciplines: Mechanical Engineering Thermal Engineering Production Engineering Engg. Design / Computer Aided Design. Naval Architecture / Ocean Engg. Aeronautical Engg. 	 Design, Analysis and Development of Mechanical Systems / Sub systems for Components such as moorings, fixed / floating / underwater /offshore structures thermal systems / components Fabrication, Assembly, Integration and Testing of Systems / Subsystems / Components in the Lab / Sea / project sites in Mainland / Islands. To participate in cruises Field survey / deployment / retrieval operations. To assist in retrieval and deployment of Oceanographic equipment / underwater systems, offshore data collection & participation in ship cruises Cruise onboard NIOT research vessels/ Monitor & maintenance of ships and to troubleshoot ship board machineries To supervise the dry-dock works, construction of ships / Maintain and control inventory/Liaise with IRS/DNV. Working knowledge of FEA software like ANSYS FEM softwares like Fluent, CFX, Ansys- Mechanical, 3D-CAD modelling of components and integrated mechanical systems using Inventor, Solidworks, Autocad, ProE, Catia Ansys Aqua, Orcaflex, Matlab, Simulink MARPOL & SOLAS regulations, Knowledge on Welding technology & Other technical
Civil (13 Posts) (OBC - 3 SC - 2 ST - 1 EWS - 1 UR - 6) Post code: 10 (1 post at Lakshadweep Island)	B.E./B.Tech. in Civil Engg. from a recognized university / Institute with at least 60% marks in the qualifying degree level.	M.E/M.Tech. in Civil in any of the following disciplines: 1. Ocean Engineering /technology 2. Geotechnical Engineering 3. Structural Engineering / Offshore structures 4. Ports and Harbor Engineering 5. Water resource Engineering and relevant Experience in areas given in job requirements	 Ship technology. Coastal processes modeling, hydrodynamic modeling and design of ocean / coastal structures. Analysis, Design and execution of nearshore/ onshore and offshore Civil / Structural works in mainland/islands. Analysis and Design of offshore components such as moorings, pipelines and fixed/floating structures. Analysis and design of foundations for onshore and offshore structures,. Field surveys /deployment / retrieval operations at coastal / offshore locations, Laboratory analysis, Instrumentation, Insitu and field onshore and offshore geotechnical investigations Planning/Preparation of construction schedules, drawings, BOQ and estimations.

Naval	B.E/B.Tech. in	Knowledge in BIS standards for structural works and/or DNV/API standards for offshore component design. Knowledge in software like STAAD PRO, ANSYS, SACS, ORCAFLEX, MOSES, PLAXIS, AUTOCAD (2D & 3D) M.E./M.Tech. in Ocean	 Site assessment studies and studies related to CRZ/EIA and use of GIS tools Working on software like STAAD PRO, ANSYS, SACS, ORCAFLEX, MOSES, PLAXIS, AUTOCAD (2D & 3D) Use of DNV / API standards for offshore component design. Use of software tools like Matlab, C, Fortran, etc Work in various coastal sites including islands of Lakshadweep and Andamans Analysis and design of offshore
Architect / Ocean Engineering (1 post) (OBC - 1) Post code: 11	Mechanical/ Civil/ Ocean Engineering and Naval Architecture from a recognized University / Institute with at least 60% marks in the qualifying degree level.	Engineering/ Ocean Technology/ Ocean Engineering and Naval Architecture	 components such as moorings, fixed / floating structures, design of submarine pipeline and response analysis of floating systems. Various site related activities in project sites at Islands/Mainland. Working on software like ANSYS, SACS, ORCAFLEX, MOSES, AUTOCAD (2D & 3D).
ECE / E&I (11 Posts) (OBC - 3 SC - 2 ST - 1 EWS - 1 UR - 4) Post code: 12	B.E/B.Tech. in Electronics & Communication / Instrumentation Engg. from a recognized University / Institute with at least 60% marks in the qualifying degree level.	M.E./MTech. in Electronics & Communication / Electronics / Applied Electronics/ VLSI Design/ Embedded system design/ Instrumentation & Control / Communication systems	The job involves carrying out : • Embedded System design • Programming in C/C++/MATLAB/PYTHON/ Java. • SCADA /LabView • Signal processing • Satellite communications • Circuit design with ORCAD • Installation of systems on-board ships • Field studies coastal regions/ Participation in scientific cruises including data buoys.
Electrical (1 Post) (Un-reserved) Post code: 13	B.E/B.Tech. in Electrical / Electrical & Electronics Engg. from a recognized University / Institute with atleast 60% marks in the qualifying degree level.	M.E in Power Electronics /Power system	 Working in design, selection and operation of Rotating machines Transformers SCADA/ Data loggers MATLAB/Simulink Protection Coordination (ETAP/SKM) Programmable logic controllers Installation and maintenance of on- grid/off-grid renewable electrical systems and desalination plants in islands and mainland Participation in offshore scientific cruises.
Computer Science (3 Posts) (OBC - 1 UR - 2) Post code: 14	B.E. / B.Tech. / M.Sc. / MCA in Computer Sciences / Information Technology from a recognized University with atleast 60% marks in the qualifying degree level.	M.E. / M.Tech. in Computer Science & Engg. / in any of the following: JavaScript, PHP, SQL, and maintain IT infrastructure Administration / working of Linux OS	 Programming in SQL, MySQL, Java/ PHP; Maintaining IT infrastructure; Database Management, application software development, Knowledge in data plotting, scientific software (e.g Python / Matlab); Administration / working of Linux OS systems. Programming in Microsoft Technologies

Geology / GIS Remote Sensing (4 Posts) (OBC - 1 SC - 1 UR - 2) Post code: 15	M.Sc. in Geology / Applied Geology / Marine Geology / Marine Geology / Marine Geophysics from a recognized university /institute with atleast 60% marks in the qualifying degree level. OR B.E./B.Tech. degree in Geoinformatics/ Geomatics from a recognized university/institute with atleast 60% marks in the qualifying degree level.	system Software Development using Asp.net, VB.net; code testing and debugging. Ph.D. in Geology/ Marine Geology/ Applied Geology/ Marine Geophysics from a recognized university/institute M.E./M.Tech/MS in Geoinformatics /Geomatics/GIS/ Remote Sensing from a recognized university /institute	 platform (i.e. ASP.NET, C#, ADO.NET, Entity Framework, MVC), Unix/Linux, core java VBA, Mobile apps development, Software development, maintenance, fixing of errors, generating reports, and end user support based on bugs reported Writing program codes, review & improvement of existing software, backup and maintenance; testing the product in controlled, real situations before going live; preparation of training manuals for users Planning for seabed sampling, mapping with hydrographic, geological and geophysical survey equipments for data acquisition and data processing with PDS 2000 etc Handling sensors and sampling devices in underwater vehicle for deep sea exploration Coastal geomorphology and coastal process related data collection, sediment analysis and generation of data sets and maps Gas hydrates research, reservoir modeling studies, subsidence observation using PLAXIS etc Satellite image processing, handling GIS systems like ARC GIS, QGIS, ERDAS etc and preparation of thematic maps
Applied Geology/ Marine Geophysics (1 Post) (UR – 1) Post code: 16	Masters Degree in Applied Geology / Marine Geophysics from a recognized University / Institute with atleast 60% marks in the qualifying degree level.	Ph.D. in Applied Geology / Marine Geophysics from a recognized University /Institute.	 and preparation of thematic maps Sea bed mapping systems, design of sampling devices for underwater vehicles, data collection and interpretation with scientific sensors for deep ocean mineral exploration Reservoir modeling studies and Gas Hydrate research, Environmental Impact studies and subsidence analysis using software like PLAXIS, handling high pressure and low temperature reactor/autoclave. Oceanographic sensors based data collection and processing Handling of GIS software like ArcGIS, QGIS, ERDAS, etc. Planning for swath bathymetry (MBES) data collection; hydropgraphic and geophysical data acquisition, process multi-beam, sub bottom, side scan data and preparation of DTMs Knowledge in Life support system design for enclosed space and usage of the related sensors and life saving apparatus
Physical Oceanography (8 Posts) Chemical Oceanography (2 Posts) (OBC - 3 SC - 2	Master's Degree in Oceanography/ Physical Oceanography/ Chemical oceanography/Physics/ Ocean Technology/ Ocean science from a recognized university with at least 60% marks in the	• Ph. D in Oceanography / Physical Oceanography/ Physics / Chemical Oceanography / Ocean science / Marine sciences from	 apparatus Coastal processes modelling, planning, coordinating and managing field data collection programs, hydrodynamic modelling related to ocean /coastal engineering. Carryout oceanographic survey, and data collection at costal / offshore locations, involve in Laboratory studies,

ST – 1	qualifying degree level	a recognized	Instrumentation, Site assessment
EWS – 1	qualitying degree lever	University / Institute.	studies / CRZ / GIS related surveys
UR – 3)		• Two years of relevant	• Physico-chemical analysis of seawater
UR – 3) Post code: 17		 Two years of relevant experience in R&D in industrial or S&T organizations and scientific activities and services Working Knowledge in MATLAB / C / Fortran and data processing methodologies. Experience in Python & R Programming, Ferret, and related software. 	 and sediment. EIA studies related to coastal and marine environment. Metal analysis marine waters / sediment. Field Sample collection and Analysis of nutrients, metals, pesticides, etc. in sea water and sediments. Experience in handling of Spectrophotometer, AAS/ICPMS, GC Oceanographic/acoustic Data Processing and Analysis.
			 Participating in cruises for the data collection and maintenance of ocean observation platforms
Life Science (7 Posts) (OBC - 1 SC - 1 ST - 1 EWS - 1 UR - 3) Post code: 18 (4 posts at ACOSTI, Port Blair Islands	M.Sc. in Marine Biology/ Marine Science/ Aquaculture/Zoology/ Botany from a recognized university / Institute with at least 60% marks in the qualifying degree level	Ph.D. Marine Biology/ Aquaculture/Zoology/ Botany	 Isolation and culture of marine micro & macro algal, breeding, larval rearing of finfish and offshore cage culture. Physico-chemical analysis of seawater and analysis and culture of phytoplankton / zooplankton for ballast treatment testing Participation in scientific cruise and field studies.
Biotechnology (5 Posts) (OBC – 1 EWS – 1 UR – 3) Post code: 19 (2 posts at ACOSTI, Port Blair Islands)	M.Sc. / B.Tech. in Microbiology / Biotechnology / Bioinformatics from a recognized university / Institute with at least 60% marks in the qualifying degree level	Ph.D./M.Tech. in Biotechnology/Bioinfor matics.	 Isolation, culture, characterization, molecular and genomic analysis of marine microbes Participation in scientific cruise and field studies Interpretation of results / compilation of reports

Chemistry (1 Post) (OBC - 1) Post code: 20	M.Sc. in Organic Chemistry from a recognized university / Institute with at least 60% marks in the qualifying degree level	Ph.D. in Organic Chemistry.	 Isolation, purification and characterization of bioactive marine natural products by chromatographic / spectroscopic techniques. Physico-chemical analysis of seawater /estimation, Chlorine/Bromine and their bio-products by analytical techniques. Participation in scientific cruise and field studies.
Petroleum (1 Post) (UR -1) Post code: 21	B.E/B.Tech.in Chemical/ Petroleum Engineering from a recognized University/Institute with at least 60% marks in the qualifying degree level	M.E./M.Tech. in Petroleum engineering from a recognized University	julius ju

Name of the Post	:	Project Scientific Assistant
No. of Post(s)	:	64 (UR-28; OBC-17; SC-09; ST-04; EWS-06)
		(One post will be suitable for PwD-OH category.)
Emoluments	:	Rs. 20,000/- + HRA (Increment of 15% for 3 years of experience
		with maximum ceiling of 4 such revision, i.e., up to 12 years of
		experience subject to performance review)
Maximum age limit	:	50 (Age relaxation as per Govt. of India norms)

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
Mechanical (14 Posts) (OBC - 4 SC - 2 ST - 1 EWS - 1 UR - 6) Post code: 22 (1 post at Lakshadweep Island)	Three years Diploma in Mechanical / Mechatronics / Automobile Engineering from a recognized Institute with 60% marks.	 Any higher qualification in the relevant discipline/field. Knowledge in software like AUTOCAD (2D & 3D) is desirable. Experience in assembly, integration, testing, and field operations, Maintenance of mechanical systems at R&D Institute, Industry and /or the area of work as per the job requirement. 	 Erection and commissioning of equipments / machineries in project sites at Islands / Mainland. Site supervision including reading specifications, drawings, supervising the Manufacturing / Fabrication / Assembly / Integration and testing activity in shop floor, ensuring quality, co-ordination between various inspection agencies and contractors. Operation and maintenance of power / process plants at Islands / Mainland. Preparation of mechanical 2D and 3D Drawings / Modeling using Autocad / Inventor / Solid works / Catia / Pro E etc. Maintenance of EOT crane, Positioning systems, Fabrication / Assembly / Integration and testing of mechanical sub systems for underwater applications, To assist in retrieval and deployment of Oceanographic equipment, offshore data collection and participation in ship cruises
Civil (12 Posts) (OBC - 3 SC - 2 ST - 1 EWS - 1 UR - 5) Post code: 23	Three years Diploma in Civil Engineering from a recognized Institute with 60% marks.	 Any higher qualification in the relevant discipline/field. Knowledge in AUTOCAD (2D & 3D) Experience in oil and gas / offshore industries or R&D in Ocean Engineering / Technology. 	 Knowledge in site execution including preparation of estimates, specifications and drawings as per CPWD codal provisions, supervising the construction/fabrication activities, quality control/assurance, recording measurements in M-book and bill preparation, co-ordination between various agencies and contractors. Carrying out oceanographic survey including bathymetry studies, data collection, field installation and retrieval operations in coastal / offshore locations. Operation, maintenance and inspection of scientific equipments and to participate in the scientific cruises, dry dock works and construction of ships / maintain and control inventory. Assist laboratory operations / instrument maintenance, diving skill.

			NOTE: Involves work in various project sites at Islands/Mainland.
ECE / E&I (8 Posts) (OBC - 2 SC - 1 EWS - 1 UR - 4) Post code: 24	Three years Diploma in Electronics& Communication/Electronic s & Instrumentation engineering from a recognized Institute with 60% marks.	Experience of 2 years in R&D, Industry and/or higher qualification as per the job requirement.	 Assembly, Integration and testing of Marine Electronics Systems/sub systems, data acquisition systems Underwater systems, deployment / retrieval operations, calibration, tests & trials of electronics subsea system. Participation in cruises for the maintenance of ocean observation platforms. Working with Data/Tsunami buoy systems, Data Acquisition & Control and Telemetry System for offshore data platforms. Handling Meteorological and Oceanographic sensors. Installation of instruments and Calibration, and Implementation of Data acquisition, Instrumentation & control systems for Island based desalination plants Software skills in ORCAD/PADS/LabView/ PLC Participation in offshore scientific cruises.
Electrical (7 posts) (OBC - 2 SC - 1 EWS - 1 UR - 3) Post code: 25 (1 post at Lakshadweep Island)	Three years Diploma in Electrical Engineering / Electrical & Electronics engineering from a recognized Institute with 60% marks.	Experience of 2 years in R&D, Industry and/or higher qualification as per the job requirement.	 Installation and maintenance of on- grid/off-grid renewable electrical systems and desalination plants in islands and mainland. Operation and maintenance of Genset, Transformer, rotating machine and drives. Testing of electrical and acoustical parameters for underwater acoustic sensors, Laboratory accreditation processes, Monitoring laboratory environmental parameters and maintenance of records etc. Handling of electrical /electronic systems in laboratory Software skills in Electrical CAD , ORCAD PSpice, GNU Octave. Participation in offshore scientific cruises.
Computer Science (7 Posts) (OBC - 2 SC - 1 EWS - 1 UR - 3) Post code: 26	Three years Diploma / BCA in Computer Science from a recognized Institute with 60% marks.	 Any higher qualification related to job requirement Experience in data acquisition and control systems/ remote control sensors and instrumentation/ software testing and R&D. 	 Knowledge in Programming, maintenance of IT infrastructure operations and Data base Management and, Application Software development Knowledge in data plotting, scientific software (eg Python/Matlab/Ferret/Origin) Middleware development, Scientific Data Plotting Knowledge in Microsoft Technologies platform, SQL, MySQL, Unix/Linux, Core Java, VBA, RDBMS, etc. Software development, maintenance, fixing of errors, generating reports, and end user support based on bugs reported writing program codes, review &

Life Sciences (13 Posts) (OBC - 4 SC - 2 ST - 1 EWS - 1 UR - 5) Post code:	Bachelor's degree in Microbiology or Biotechnology / Bioinformatics from a recognized University/Board / National laboratories with 60% marks. Bachelor's degree in Marine Biology / Aquaculture / Zoology / Botany from a recognized University / National laboratories with 60%	 Master's degree in Microbiology / Biotechnology / Bioinformatics from a recognized University /National laboratories. Two years experience (after obtaining essential educational qualification) in Research and Development in the area listed in job requirement. Master's degree in Marine Biology/ Aquaculture / Botany /Zoology from a recognized University 	improvement of existing softwares, backup and maintenance; testing the product in controlled, real situations before going live; preparation of training manuals for users Should be capable of carrying out preparatory works in the laboratory for research and development pertaining to marine microbes and participation in scientific cruise / and field work. Should be capable of carrying out preparatory works in the laboratory for research and development pertaining to marine microbes and participation in scientific cruise / and field work.
27 (5 posts at ACOSTI, Port Blair Islands	laboratories with 60% marks.	 /National laboratories. Two years experience (after obtaining essential educational qualification) in Research and Development in the area listed in job requirement. SCUBA diving certification with not less than 25 logged dive 	analysis of seawater / participation in scientific cruise / SCUBA diving and field work.
Chemistry (2 Posts) (ST – 1 UR – 1) Post code: 28 (1 post at ACOSTI, Port Blair Islands	Bachelor's degree in chemistry from a recognized University / National laboratories with 60% marks.	 dive. Master's degree in chemistry from a recognized University / National laboratories. Two years experience (after obtaining essential educational qualification) in Research and Development in the area listed in job 	Should be capable of carrying out preparatory works in the laboratory for research and development pertaining to purification and characterization of marine natural products / physicochemical analysis of seawater and participation in scientific cruise and field work.

Ocean Technology (1 Post) (Un-reserved)	Bachelor's degree in Ocean Science &Technology from a recognized University /Institute with 60% marks.	 Any higher qualification related to job requirement. Three years of experience in oil 	 Oceanographic data collection, processing for coastal process studies. Planning for swath bathymetry(MBES)data collection;
Post code: 29	indi ito.	and gas / offshore industries or R&D in Ocean Engineering/ Technology.	 data acquisition, process multibeam data and preparation of DTMs; Operation, maintenance and inspection of scientific equipments onboard / to participate in the scientific cruises, dry-dock works and construction of ships/Maintain and control inventory.

Name of the Post
No. of Post(s)
Emoluments
Maximum age limit

: : :

:

Project Technician 28 (UR-13; OBC-07; SC-04; ST-02; EWS-02) Rs. 17,000/- + HRA 50 (Age relaxation as per Govt. of India norms)

Discipline / Reservation	Essential Qualification	Desirable	Job Requirement
Welder (2 Posts) (OBC - 1 UR - 1) Post code: 30	10 th standard with two years ITI Tradesman Course in Welder approved by National Council for Vocational Training or its equivalent from recognized Institutions.	IBR certified / welding by TIG/MIG Two years experience	Candidate needs to work at various project sites at Islands/Mainland. Gas cutting and Welding of MS and SS components. Reading and understanding engineering drawings and symbols.
Fitter (7 Posts) (OBC -1 SC - 1 ST - 1 EWS - 1 UR - 3) Post code: 31 (1 post at Lakshadweep Islands)	10 th standard with two years ITI Tradesman Course in Fitter approved by National Council for Vocational Training or its equivalent from recognized Institutions.	Basic reading of Engineering drawing, Basic knowledge in manufacturing tools and process. Two years experience in assembly of mechanical systems	Candidate needs to work at various project sites at Islands/Mainland. Dismantling, Repairing and reassembling equipment such as Rotating machinery systems, plant equipments and assisting field testing operation of varies mechanical systems and sub systems Participating in cruises for the deployment & retrieval operations
Air Conditioning (2 Posts) (OBC – 1 UR – 1) Post code: 32 (1 post at ACOSTI, Port Blair Islands)	10 th standard with two years ITI Tradesman Course in Refrigeration / Air Conditioning approved by National Council for Vocational Training or its equivalent from recognized Institutions.	Two years Experience in handling Industrial Air conditioning systems	Candidate needs to work at various project sites at Islands/Mainland. Installation, operation and air conditioning systems. Reading and understanding of engineering drawings, symbols and support scientist in scientific cruises operation and field work.
Mechanical (2 Posts) (OBC – 1 UR – 1) Post code: 33	10 th standard with two years ITI Tradesman Course in Draftsman- Mechanical approved by National Council for Vocational Training or its equivalent from recognized Institutions.	Two years Experience in ACAD, 2D and 3D is desirable. / Knowledge in 3D Modelling software such as Inventor, Solid works	Candidate needs to work at various project sites at Islands/Mainland. Knowledge in reading and understanding engineering drawing and symbols. Drafting components, general assembly and fabrication drawings etc.,

	10 th standard with two years ITI Tradesman Course in Machinist approved by National Council for Vocational Training or its equivalent from recognized Institutions.	Two years Experience in Turning, drilling, surface grinding and milling trouble shooting and maintenance work at industries / R&D. Experience in assembly, integration and testing of mechanical systems and rotating machinery and in hydraulic systems;	Candidate needs to work at various project sites at Islands/Mainland. Turning, drilling, surface grinding and milling of mechanical system components Overseeing fabrication / installation of mechanical systems.
Civil (3 Posts) (OBC – 1 SC – 1 UR – 1) Post code: 34 (1 post at ACOSTI, Port Blair Islands	10 th standard with two years ITI Tradesman Course in Draftsman-Civil approved by National Council for Vocational Training or its equivalent from recognized Institutions.	Two years experience in Research and Development, Industry in the area listed in job requirement. Knowledge in AUTOCAD (2D & 3D)	 Preparation of drawings for concrete and steel structures etc. Preparation of bar bending schedules and estimation. Operation/maintenance of plumbing works and support scientists in scientific cruises operation and field work. NOTE: Candidate needs to work at various project sites at Islands/Mainland.
Electrical (9 Posts) (OBC- 1 SC - 2 ST - 1 EWS - 1 UR - 4) Post code: 35 (1 post at Lakshadweep Islands And 1 post at ACOSTI, Port Blair Islands)	10 th Standard with two years ITI Tradesman Course in Electrician approved by National Council for Vocational Training or its equivalent from recognized Institutions.	2 years work experience in Operation / maintenance of electrical equipments, Wiring of control panels, Industrial wiring, cable termination, assembly and integration of electrical system, handling of low and high voltage equipment.	Candidate needs to work at various project sites at Islands/Mainland. Assembly and Integration of the electrical system, Wiring of control panels, Industrial wiring, cable termination, low and high voltage system erection. Maintenance of Electrical installations, Generators, Transformers, etc., onshore, on board ships and Offshore installations and handlings.
Electronics (3 Posts) (OBC – 1 UR – 2) Post code: 36	10 th Standard with two years ITI Tradesman Course in Electronics / Instrumentation approved by National Council for Vocational Training or its equivalent from a recognized Institutions.	Two years work experience in Operation /maintenance of electronics equipments. Wiring, assembly and integration of control panels and circuit boards. Instrumentation cable glanding, termination. Calibration and erection of sensors.	Candidate needs to work at various project sites at Islands/Mainland. Industrial panel wiring and Interfacing, PCB soldering and Assembly, Handling of electronic instruments, Assembly, testing and calibration of instruments/Sensors, Interfacing and panel wiring, Installations of electronic systems on board ships, Offshore installations and handlings.

	Handling	of
	instrumentation	and
	control,	data
	acquisition system	ns.

Name of the Post	:	Project Junior Assistant
Post Code No. of Post(s)	:	37 25 (UR-13; OBC-06; SC-03; ST-01; EWS-02)
NO. 01 FOSUS)	:	(One post will be suitable for PwD-OH category.) (2 posts at ACOSTI, Port Blair Islands)
Emoluments Maximum age limit	:	Rs. 18,000/- + HRA 50 (Age relaxation as per Govt. of India norms)

Essential Qualification Desirable		Job Requirement
Any degree from a recognized Board or University	 Working experience of 2 years in organization of repute Working knowledge of Computer, stenography and typing 	 Knowledge in Office and accounting procedures Knowledge of word processing and data entry Secretarial Assistance in carrying out the day to day functions of the Institute in Finance and Accounts, Stores and Purchase and Establishment Sections and Scientific groups.

Name of the Post	:	Research Associate (RA)
No. of Post(s)	:	3 (Un-reserved)
Emoluments	:	Rs. 47,000/- + HRA
Maximum age limit	:	35

Discipline /	Essential Qualification	Job Requirement
Reservation		
Oceanography / Physical	Doctoral Degree in Oceanography/ Physical Oceanography/Physics /Oceanic Sciences Or	Oceanographic/acoustic Data processing and analysis ; Working knowledge in Softwares such as Ferret,
Oceanography	M.Tech- Ocean Technology with three years	GRADS, ODV etc.
/Physics	R&D experience, after acquiring M.Tech	Programming Languages: MATLAB, Fortan, C
(1 Post)	and having at least one publication in SCI	C++.
(Unreserved)	Journal	Numerical modeling of oceanographic processes/ Sound propagation modeling Participation in scientific cruise and field studies.
Post code:		
38		
LIFE SCIENCE	Ph.D. in Marine Biology/	Research / analysis works in the laboratory in
(2 Posts)	/Microbiology/Biochemistry/Zoology, Or	marine microbes / algae isolation, culture and characterization isolation culture / marine finfish
(Unreserved)	M. Tech. in Biotechnology / Bioinformatics from a recognized University / National	breading, larval rearing and cage culture / physicochemical.
Post code:	laboratories with three years R&D	F2
39	experience after acquiring M.Tech. and having one publication in SCI journal.	Participation in scientific cruise and field studies.
(1 post at ACOSTI, Port Blair Islands)		

Name of the Post	:	Senior Research Fellow (SRF)
No. of Post(s)	:	8 (UR-5; OBC-2; SC-1)
Emoluments	:	Rs. 35,000/- + HRA
Maximum age limit	:	32

Discipline / Reservation	Essential Qualification		Job Requirement
Oceanography (4 Posts)	M.Sc. in Oceanography / Physical oceanography / Atmospheric science / Meteorology / Mathematics with at least 60% with two years of research experience and having cleared any one of the following examination.	•	Oceanographic data collection, data processing and quality control. Analyzing meteorological and oceanographic data. Field observation activities. Preferable programming language (e.g. Python, Matlab, Ferret)
Post code: 40	 a. CSIR-UGC NET including lectureship (Assistant Professorship) and GATE b. National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, CMR, IIT, IISc, IISER, etc., 	•	Experience in Oceanographic data analysis, Time series analysis, Software Ferret, GRADS, ODV etc. Programming Languages: MATLAB.
Life Sciences (4 Posts)	M.Sc. in Life / Chemical Sciences with at least 60% (OR) B.E./B.Tech. in Biotechnology/ Genetics/ Bioinformatics / Pharmaceutical from a recognized university / Institute with at least 60% marks with two years of	•	Research works in the laboratory in marine microbes / algae isolation, culture and characterization isolation culture / marine finfish breading, larval rearing and cage culture / physicochemical physico- chemical analysis of seawater, sediment and biological analysis.
Post code: 41 (2 posts at ACOSTI, Port Blair Islands)	research experience and having cleared any one of the following examination. a. CSIR-UGC NET including lectureship (Assistant Professorship) and GATE b. National level examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, CMR, IIT, IISc, IISER, etc.,	•	Participation in scientific cruise and field studies.

Name of the Post	:	Junior Research Fellow (JRF)
No. of Post(s)	:	2 (Unreserved)
Emoluments	:	Rs. 31,000/- + HRA
Maximum age limit	:	28

Discipline /	Essential Qualification	Job Requirement
Reservation		
LIFE SCIENCES (2 Posts)	 M.Sc. in Life / Chemical Sciences, (OR) B.Tech. Biotechnology / Genetics / Bioinformatics / Pharmaceutical with at least 60% marks 	 Research / analysis related to marine microbial / marine micro & macro algal / marine fin fish culture. Participation in scientific cruise and field
(Unreserved)	 having cleared any one of the following examination. CSIR-UGC NET including lectureship	studies.
Post code: 42	(Assistant Professorship) and GATENational level examinations conducted by Central Government Departments	
(1 post at ACOSTI, Port Blair Islands)	and their Agencies and Institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, CMR, IIT, IISc, IISER, etc.,	

How to apply for the posts:

- 1) The application form is available online on NIOT website <u>https://www.niot.res.in/index.php/recruitment</u>
- 2) The candidate must read the instructions thoroughly before the filling the application forms.
- 3) The candidate is requested to visit NIOT website periodically to keep track of new announcements and changes, if any.
- 4) In case of any difficulty in filling the online application form, please send an e-mail to recruitment@niot.res.in indicating the problem faced.
- 5) The candidate has to fill the application online and upload recent passport size colour photograph and scanned copies of the documents listed below:-
 - (i) Educational Qualification Certificates from 10th Standard onwards.
 - Mark Lists for all semesters or Consolidated mark lists issued by the University. & Degree Certificate
 - (iii) Experience certificates issued by the Employer as per the format.

(Please note that salary slips, appointment orders/ Relieving orders issued will not be construed as experience certificate)

- (iv) Certificate in prescribed format (in respect of candidates seeking relaxation for Central Government Employees)
- (v) Certificate in prescribed format (in respect of candidates claiming reservation under OBC/SC/ST/EWS Category)
- (vi) Certificate in prescribed format (in respect of candidates seeking relaxation as Exservicemen & PwD category)
- (vii) Copies of Publications/ Reprints of the Journal.
- 6) On submitting the completed application, an online Registration Number will be provided by the system. The candidates must take note of the same.
- 7) Request for change/correction in the Application Form will not be entertained under any circumstance. Therefore, the candidate must ensure the accuracy of the data entered and the documents uploaded.
- 8) Incomplete applications without uploading the required documents, photographs etc will be treated as invalid and rejected.

Terms and conditions.

- 1. The candidate must be a CITIZEN OF INDIA.
- 2. The candidate must ensure that he is eligible in all respect for that post and if it is found not eligible any aspect at any stage, his candidature will be summarily rejected and cancelled without further correspondence.
- 3. The applicant should produce the original certificates uploaded in the on-line application as and when required. If original certificates are not produced or discrepancies are found in the certificates, the supporting documents or concealing of facts are noticed, the candidature will be summarily disqualified and rejected.

- 4. The Crucial Date for determining the possession of 'AGE AND ESSENTIAL QUALIFICATION (EQs)/EXPERIENCE' will be the closing date for on line application. The applicants should not have exceeded the maximum age limit on the crucial date. The Date of Birth as recorded in the 10thStd/Matriculation/Transfer certificate/Certificate of Domicile/Birth Certificate issued by the competent authority will be accepted as proof of age.
- 5. Reservations shall be applied to all the posts except for Project Scientist III and Project Scientist II.
- 6. The upper age limit in respect of the OBC/SC/ST categories and for Ex-servicemen, Person with Disabilities and other specified categories shall be relaxable in accordance with the orders issued by the Central Govt. from time to time in this regard.
- 7. The candidates seeking reservation and claiming relaxation must produce the required certificate in the prescribed format duly signed by the issuing authority at the time of submission of application.
- 8. The prescribed educational qualifications are the minimum and mere possession of the education qualifications and requisite experience will not entitle any right to be called for test/interview or selection.
- 9. Applicant should ensure that he/she possess essential educational qualification and the experience in the relevant area as required to the post.
- 10. In case, the particular institute does not follow percentage system for awarding marks, the percentage arrived will be taken as per conversion formula mentioned in the certificate of marks. In case where conversion formula is not available, the percentage will be reckoned by multiplying the CGPA * 9.5.
- 11. Experience claimed by the candidate will be counted only from the date on which the candidate has acquired the minimum educational qualification required for the post. Doctorate Degree in the relevant area of research will count as 3 years' experience for Scientific Posts.
- 12. The candidates selected are liable to work anywhere in India, in any of the Centre, Project sites of NIOT. 2 posts in Project Scientist-III, 3 posts in Project Scientist-II, 6 posts in Project Scientist-I, 6 Posts in Project Scientific Assistant, 3 Posts in Project Technician, 2 posts in Project Junior Assistant, 1 post in Research Associate, 2 Posts in Senior Research Fellow and 1 post in Junior Research Fellow are meant for the Atal Centre for Science & Technology for Islands (ACOSTI) in Port Blair. Similarly, 1 post in Project Scientist-I (Civil), 1 post in Project Scientific Assistant (Mechanical) and 1 post in Project Scientific Assistant (Electrical), 1 post in Project Technician (Mechanical) and 1 post in Project Technician (Electrical) will be stationed in Lakshadweep Islands.
- 13. The candidates will be required to participate in scientific cruises, field visits, survey etc in ships, boats.
- 14. NIOT strives to have gender balance and Women candidates fulfilling the requirements are encouraged to apply for the post.
- 15. Candidates who are employed in Government/ autonomous Institutions and PSU should submit NOC from the employer for applying for the post.
- 16. If the number of applications are very large, the screening or selection committee may fix suitable norms for short listing the candidates for the Interview or Test or both as the case may be, depending upon the number of candidates applied for the post and the vacancies available so as to restrict the number of candidates to a manageable & reasonable level.
- 17. The selection of the posts of Project Scientists and Research Fellows will be based on the performance in the interview (online/Offline). In respect of the other posts, the selection will be based on the marks obtained in the written test/Trade/Skill test (Online/Offline). The skill test will be of qualifying nature.
- 18. No TA/DA will be paid towards attending the Interview / Written examination.

- 19. The posts advertised are temporary in nature and the appointment will be contract basis for fixed tenure which is co-terminus with the project, for the plan period 2021-2026. The completion of tenure of contract will not confer right for regularization or permanency in NIOT. Further, the contract will be offered initially for a period of one year and the same will be renewed on evaluating the performance of the candidates periodically.
- 20. The number of posts mentioned in the advertisement are tentative and may increase or decrease depending upon the requirements/sanction by Ministry of Earth Sciences. NIOT reserves the right not to fill up the post without assigning any reasons what so ever.
- 21. Canvassing in any form will be treated as disqualification.
- 22. Any unsolicited communication regarding this advertisement is strictly prohibited.
- 23. The decision of NIOT in all matters relating to eligibility, acceptance or rejection the application shall be final and no enquiry or correspondence will be entertained in this connection from any individual or his/her agency.
- 24. The call letter for Interview/ test will be communicated through the registered email.

Last date and Time for online applications : 13/09/2021 5.00 pm