



## NATIONAL INSTITUTE OF OCEAN TECHNOLOGY

(Ministry of Earth Sciences, Govt. of India)

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### ADVERTISEMENT No. NIOT/E&P/03/Recruitment/2017 (Project)

National Institute of Ocean Technology (NIOT), Chennai an Autonomous Body under Ministry of Earth Sciences (MoES), Govt. of India is proposed to engage Indian Nationals to the following positions in different disciplines on contract basis with consolidated emoluments.

Sl. No.	Name of the Post	No. of positions
1	Project Scientists	106
2	Project Scientific Assistants	48
3	Project Technicians	21
4	Project Administration	28
	<b>Total</b>	<b>203</b>

Requirements of qualifications, experience, consolidated emoluments, reservation to SC/ST/OBC/PH categories, etc. have been indicated in the detailed advertisement on web-link <https://www.niot.res.in>. Interested and eligible candidates may apply online latest by **30.10.2017** and forward a signed hard copy of the printout of the online application to "The Director, National Institute of Ocean Technology" to receive not later than **06.11.2017** along with attested copies of all the requisite certificates. For those in Assam, Meghalaya, Arunachal Pradesh, Mizoram, Manipur, Nagaland, Tripura, Sikkim, Ladakh Division of Jammu and Kashmir State Lahaul and Spiti District and Pangti Sub-division of Chamba District of Himachal Pradesh, Andaman and Nicobar Islands and the Union Territory of Lakshadweep the last date of receipt of hard copy will be **13.11.2017**.

Director

# NATIONAL INSTITUTE OF OCEAN TECHNOLOGY, CHENNAI

## Recruitment for various Project posts on contract mode

National Institute of Ocean Technology (NIOT), is an autonomous and Research and Development Institute under Ministry of Earth Sciences (MoES). NIOT invites on-line applications from bright and energetic Indian nationals for different categories of post to engage them on contract mode for various ongoing projects of NIOT in the disciplines of Mechanical, Electrical, Electronics, Instrumentation, Civil, Computer Science, Life/Chemical Science, etc. The engagement is on time bound at the fixed emoluments as shown against each position in the following statement. The emoluments of the various positions are however subject to revision, if any, by MoES. The detailed requirements of the posts have been uploaded on the link <https://www.niot.res.in/index.php/recruitment> of our website.

### Project Scientist - II

Post Code	Name of the post	No. of post(s)	Emoluments	Maximum age as on 30.10.2017	Essential/Requisite Qualification	Desirable	Job Requirement
	Project Scientist-II (Mechanical)	<b>02 (Unreserved)</b>	Rs. 65000 + HRA	Below 40 years	i) Bachelor's degree in engineering or Technology in Mechanical / Production / Aeronautical / Automobile/ Naval Architecture/Ocean / Industrial Engineering or equivalent from a recognized University / Institute with at least first class not less than 60% marks. ii) Minimum three years experience in R&D, industry and/or the area of work as per the job requirement.	Master's degree in engineering or Technology in Mechanical / Production / Aeronautical / Automobile/ Naval Architecture/Ocean / Industrial Engineering or equivalent from a recognized University / Institute.	i) Design and development of surface and underwater systems, structures, vehicles, mechanical systems and associated sub-components using software such as Ansys / Abacus/ANSYS WORKBENCH/ and detailed static, dynamic and harmonic analysis. Also to work in software like Autocad, ANSYS, Solidworks, OrcaFlex, MATLAB, Catia, Simulink, PRO-E, etc. ii) Management, operation and maintenance and trouble shooting of research vessels; follow-ups, documentation, inspection and monitoring of ship building process iii) To execute assembly, integration, testing, deployment and retrieval of offshore data collection platforms Participate in ship cruises, cruise planning, interaction with ports / agents. and Must have working knowledge and software familiarization in analysis of flow behavior in pipes, single and multi-phase flow, steady and unsteady flow, and fluid structure analysis using star CCM+ or ANSYS FLUENT and also undertake detailed hydrodynamic and stability analysis. Coordination of manufacturing / procurement, integration

							and testing of developed components / systems for underwater vehicles in the lab and sea. iv) <u>Desirable</u> : Knowledge of API/DNV/ABS code for offshore systems and/or experience of working in oil and gas/offshore/ocean engineering
Project Scientist–II (Electrical)	<b>02 (Unreserved)</b>	Rs. 65000 + HRA	Below 40 years	<ul style="list-style-type: none"> <li>i) Bachelor's degree in engineering or Technology in Electrical Engineering / Electrical &amp; Electronics Engineering or equivalent from a recognized University / Institute with at least first class not less than 60% marks.</li> <li>ii) Minimum three years experience in R&amp;D, industry and/or the area of work as per the job requirement.</li> </ul>	<ul style="list-style-type: none"> <li>i) Master's degree in engineering or Technology in Electrical Engineering/ Power Electronics and drives/ Power Systems/ High Voltage Engineering/ Control and Instrumentation or equivalent from a recognized University / Institute.</li> </ul>	<ul style="list-style-type: none"> <li>i) Design, integration, assembly, testing, operation and maintenance of marine and subsea Electrical systems, Power electronic converters, Solid state drives, power transmission systems, Brushless DC motor controllers, Permanent magnet synchronous Generators, medium voltage high frequency systems, Renewable energy systems (small/off/on grid).</li> <li>ii) Simulation, modeling and analysis using softwares like Magnet, Motor Solve, Thermnet and Speed, PSIM, MATLAB, Simulink / Usage of softwares like and NI Labview, Electrical CAD</li> <li>iii) Design and implementation of Instrumentation and closed loop control for medium voltage Electrical systems, design of instrumentation system for desalination plants.</li> <li>iv) Undertake field testing of the systems/ equipments developed by NIOT onboard designated ship/ platform at sea.</li> </ul>	
Project Scientist–II (Oceanography / Physical Oceanography)	<b>01 (Unreserved)</b>	Rs. 65000 + HRA	Below 40 years	<ul style="list-style-type: none"> <li>i) Master's degree in Oceanography / Physical Oceanography / Ocean Technology / Oceanic Sciences or equivalent from a recognized University / Institute with at least first class not less than 60% marks.</li> <li>ii) Minimum three years experience in R&amp;D, industry and/or the area of work as per the job requirement.</li> </ul>	<ul style="list-style-type: none"> <li>i) Doctorate in Marine sciences / Oceanography / Physical Oceanography or equivalent from a recognized University / Institute.</li> </ul>	<ul style="list-style-type: none"> <li>i) Oceanographic data collection, processing, quality control and application of numeric models.</li> <li>ii) Analyzing oceanographic data using tools like MATLAB, Ferret, numerical sound propagation modeling and simulations, etc.</li> <li>iii) Participating in cruises for the maintenance of ocean observation platforms.</li> <li>iv) Coastal processes modeling, planning, coordinating and managing field data collection programs, Handling HF radar systems, seabed engineering investigations, land survey, hydrodynamic modeling related to ocean/coastal engineering.</li> </ul>	

Project Scientist-II (Life Science/ Organic Chemistry)	<b>03 (Unreserved)</b>	Rs. 65000 + HRA	Below 40 years	i) Master's Degree in Life Science / Organic chemistry or equivalent from a recognized university / National laboratories with at least first class not less than (60%) marks. ii) Three years experience (after obtaining Post graduation degree) in Research and Development in the fields of deep sea microbes / endophytic microbes / marine microalgal / open sea cage culture / purification and characterization of marine natural products using analytical / chromatographic / spectroscopic	Ph. D. in the field of Life Science / Organic chemistry or equivalent from a recognized university / National laboratories.	i) Should be capable of carrying out technology development / analysis related to deep sea microbial /marine microalgal /offshore cage culture / anti-biofouling / purification and characterization of marine natural products by analytical / chromatographic / spectroscopic techniques / field execution, interpretation of results and technical report preparation at various stages of the project. ii) Cultivation of deep sea microbes in near in situ environment / mass scale culture of marine microalgae in pilot scale outdoor culture systems including raceway models / culture of marine finfishes in offshore cages and / or screening for various pathogens / development of anti-biofouling measures for marine environment / purification and characterization of marine natural products using analytical / chromatographic / spectroscopic techniques /supported by research publications in reputed journals.
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**Project Scientist - I**

Post Code	Name of the post	No. of post(s)	Emoluments	Maximum age as on 30.10.2017	Essential/Requisite Qualification	Desirable	Job Requirement
	Project Scientist-I (Mechanical)	<b>26</b> <b>(SC-3; ST- 1;</b> <b>OBC-7 &amp;</b> <b>UR- 15)</b>	Rs. 55000 + HRA	Below 35 years	Bachelor's degree in engineering or Technology in Mechanical / Naval Architecture / Aeronautical / Ocean or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	Master's degree in engineering or Technology in Mechanical / Naval Architecture / Aeronautical/ Ocean or equivalent from a recognized University / Institute.	<ul style="list-style-type: none"> <li>i) Design and development of surface and underwater systems/ sub-systems/ structures / underwater hydraulic systems and associated sub-components/ vehicles / mechanical systems / rotating machinery/ underwater electronic casings and fixtures / using ANSYS CLASSIC / ANSYS WORKBENCH / ABACUS / STAR CCM+ or ANSYS FLUENT/OpenFoam</li> <li>ii) 3D-CAD modeling of components and integrated mechanical systems using Inventor and Solidworks and ProE/CFD softwares like Autocad, Fluent / Orcaflex, MATLAB, Catia, Simulink / Inventor / COVENTER / COMSOL, etc.,</li> <li>iii) Knowledge in field survey, deployment, retrieval operations / lab operations or sea as also field trials of underwater system.</li> <li>iv) Design of thermal / mechanical systems, Design Analysis, Assembly and Integration of systems, CFD and heat transfer analysis and Knowledge of turbo machinery are preferable.</li> <li>v) Design /fabrication / assembly / integration / testing for island based desalination plants; analysis of offshore components – moorings, fixed/floating structures, numerical modeling of coastal/oceanographic processes; submarine pipeline, material studies, etc.</li> <li>vi) To participate in cruise, onboard NIOT research vessels/ Monitor &amp; 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.</li> <li>vii) Coordinate manufacturing/procurement, integration and testing of developed components/systems for underwater vehicles/systems.</li> <li>viii) <u>Desirable:</u> Knowledge of API/DNV/ABS code for offshore systems and/or</li> </ul>

							experience of working in oil and gas/offshore/ocean engineering
Project Scientist-I (Electrical)	<b>06 (OBC-1 &amp; UR-5)</b>	Rs. 55000 + HRA	Below 35 years	Bachelor's degree in engineering or Technology in Electrical Engineering/ Electrical & Electronics or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	Master's degree in engineering or Technology in Electrical Engineering / Electrical & Electronics or equivalent from a recognized University / Institute.		<ul style="list-style-type: none"> <li>i) Design, integration, assembly, testing, operation and maintenance of surface and subsea Electrical systems, Power electronic converters, solid state drives, power transmission, Brushless DC motor controllers, Permanent magnet synchronous Generators, High voltage high frequency systems, renewable energy systems (small/off/on grid)</li> <li>ii) Simulation, modeling and analysis using softwares like Magnet, Motor Solve, Thermnet and Speed, PSIM, ModelSim, MATLAB, Simulink / Usage of softwares like NI Labview, Electrical CAD</li> <li>iii) Design and development of sensors/ transducers, Sonar Instrumentation</li> <li>iv) Participate in cruises onboard NIOT research vessels, monitor the maintenance of ships, troubleshoot ship board machineries, supervise the dry dock work, construction of ships and liaise with IRS/ DNV.</li> <li>v) Carry out Electrical design works for establishing new facilities, supervising the operation and maintenance of HT and LT infrastructure, supervising Electrical works, ensuring quality and safety at work place, co-ordination between various agencies and contractors and also undertake field testing.</li> </ul>
Project Scientist-I (ECE/E&I)	<b>20 (SC-3; ST- 1 OBC-5 &amp; UR-11)</b>	Rs. 55000 + HRA	Below 35 years	Bachelor's degree in engineering or Technology in Electronics & Communication / Electronics & Instrumentation or equivalent from a recognized University / Institute with at least first class not less than 60% marks	Master's degree in engineering or Technology in Electronics & Communication / Electronics / Applied Electronics/ VLSI Design/ Embedded system design/ Instrumentation / Control & Instrumentation / Controls / Communication		<ul style="list-style-type: none"> <li>i) Design, development and testing of Marine/ Subsea instrumentation and control systems. Knowledge on LabVIEW software programming and NI Data acquisition hardware design.</li> <li>ii) Embedded system design, Analog/Digital circuit design and software development using C/C++/ LabVIEW for Data acquisition and Control system for Marine/ underwater applications.</li> <li>iii) Knowledge on PLC / PAC based Data acquisition and control systems and Fiber optic data and telemetry systems.</li> <li>iv) Field survey/deployment/retrieval</li> </ul>

						systems from a recognized University / Institute	<p>operations, field studies at offshore/coastal regions.</p> <p>v) Instrumentation and data analysis, conduct numerical studies for fixed/floating structures</p> <p>vi) Data acquisition, processing, analysis, handling and maintenance of Oceanographic Instruments or Sensors or System.</p> <p>vii) Development &amp; implementation of underwater Signal Processing Algorithms for sensors/transducers. Development, Calibration and testing of marine sensors /transducers.</p> <p>viii) Knowledge on handling acoustic profiling sensors, acquisition and data processing in single/Multibeam data, beam forming, coding etc</p> <p>ix) Interface testing of Data/Tsunami buoy systems and real time data telemetry system with satellite /GPRS/GSM</p> <p>x) Participation in ship cruises for oceanography survey and data collection, system deployment and testing of ocean observation system/ underwater vehicles/systems.</p> <p>xi) Simulation, Modeling, Digital signal and image processing, data analysis and Interpretation using MATLAB / SIMULINK/LabVIEW</p>
Project Scientist-I (Civil)	<b>14 (SC-1; ST- 1; OBC-3 &amp; UR-9)</b>	Rs. 55000 + HRA	Below 35 years	Bachelor's degree in engineering or Technology in Civil or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	1. Master's degree in Engineering/ Technology in Civil or its equivalent in any of the following disciplines: 1. Structural Engineering 2. Geotechnical Engineering 3. Ocean Engineering/technology 4. Marine structures 5. Coastal	i. Coordination, analysis, design and execution of civil / structural works for island based desalination plants, analysis and design of the offshore components such as moorings, fixed / floating structures, numerical modeling of coastal / oceanographic processes, analysis and design of submarine pipeline, material studies for desalination and offshore structures. ii. Coastal processing modeling, planning, coordinating and managing field data collection programs, hydrodynamic modeling related to ocean / coastal engineering iii. Field studies at offshore / coastal regions,	

						management 2. Experience in areas given in job requirements	laboratory studies, instrumentation, Data analysis, conduct numerical studies for fixed/floating structures; iv. Carry out oceanographic survey, data collection at coastal/offshore locations, involve in Laboratory studies, instrumentation, site assessment studies/CRZ/GIS. v. Planning, analysis and design of foundations for onshore and offshore structures. Onshore and offshore geotechnical investigations, study of field soil characteristics, laboratory soil testing and analysis, review test results and develop design recommendations. vi. Planning and preparing construction schedules, drawings, BOQ and estimation; technical specification of works, co-ordination with officials for carrying out works, preparing master plan and interior layouts; supervising the work, conducting quality test, recording site measurement and certification. vii. Knowledge in software like STAAD PRO, ANSYS, SAP, SACS, SESAM, WAMIT, Orcaflex, MOSES, PLAXIS, PRIMAVERA, MS PROJECT is preferred.
Project Scientist-I (Computer Science)	<b>01 (Unreserved)</b>	Rs. 55000 + HRA	Below 35 years	Bachelor's degree in Computer Science engineering / Information Technology / MCA or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	Master's degree in Computer Science engineering / Information Technology or equivalent from a recognized University / Institute with two years experience in software development using Asp.net, VB.net; code testing and debugging.	i) Programming, Testing, maintenance of IT infrastructure operations and Data Base Management, Application software development, Middleware development, Scientific Data Plotting ii) Knowledge in Microsoft Technologies platform, development using Asp.net with Entity framework, LINQ, SSRS reporting tool, iii) Knowledge in SQL, MySQL, Unix/Linux, Core Java, VBA, RDBMS, JQuery and development knowledge in PHP, VB.net. iv) Software development, Testing, maintenance, fixing of errors, generating reports, and end user support based on bugs reported, Documentation, review & improvement of existing softwares, backup and maintenance; testing the product in controlled, real situations	

							before going live; preparation of training manuals for users.
Project Scientist-I (Oceanography / Physical Oceanography)	<b>10 (SC-1; OBC-2 &amp; UR-7)</b>	Rs. 55000 + HRA	Below 35 years	Master's degree in Oceanography / Physical Oceanography / Chemical oceanography/ Ocean Technology or equivalent from a recognized University / Institute with at least first class not less than 60% marks	Doctorate in Marine sciences / Oceanography / Physical Oceanography/ Chemical Oceanography or equivalent from a recognized University / Institute.		<ul style="list-style-type: none"> <li>i) Oceanographic data collection, processing, quality control and its application in numeric models, coastal processes and hydrodynamic modelling, handling HF radar systems, sea bed engineering investigations, land survey.</li> <li>ii) Analyzing oceanographic data using tools like MATLAB, Ferret, numerical sound propagation modelling and simulations, signal processing, development of algorithms for acoustic imaging techniques and modelling, analysis of active underwater acoustic data propagation and modelling..</li> <li>iii) Physico-chemical data collection with latest equipment and analysis. EIA studies related to coastal and marine environment</li> <li>iv) Participating in cruises for the maintenance of ocean observation platforms and oceanographic cruises in boats/ships for data collection</li> </ul>
Project Scientist-I (Geology/GIS/ Remote Sensing/Marine Geophysics)	<b>06 (OBC-1 &amp; UR-5)</b>	Rs. 55000 + HRA	Below 35 years	<p>BE/ B. Tech degree in Geo-Informatics / Geomatics or its equivalent from a recognized University / Institute with at least first class not less than 60% marks</p> <p><b>[OR]</b></p> <p>Master's degree in Geology / Applied Geology / Marine Geology/Marine Geophysics or its equivalent from a recognized University / Institute with at least first class not less than 60% marks</p>	<p>MS/M Sc./M. Tech. degree in Geo-Informatics / Geomatics / GIS / Remote Sensing or equivalent from a recognized University / Institute</p> <p><b>[OR]</b></p> <p>Doctorate in Geology / Applied Geology / Marine Geology/Marine Geophysics or equivalent from a recognized University / Institute.</p>		<ul style="list-style-type: none"> <li>i) Sea bed mapping systems, design of sampling devices for underwater vehicles, data collection and interpretation with scientific sensors for ocean mineral exploration</li> <li>ii) Reservoir modelling studies and Gas Hydrate research, Environmental Impact Studies and subsidence analysis using software like PLAXIS, handling high pressure and low temperature reactor/autoclave.</li> <li>iii) Oceanographic data collection, processing for coastal process studies</li> <li>iv) Satellite image processing, preparation of GIS maps. Application of satellite data, Collection and processing of Bathymetry and Topography,</li> <li>v) Handling of GIS software like ArcGIS, QGIS, ERDAS, etc.</li> <li>vi) Planning for swath bathymetry (MBES) data collection; data acquisition, process multi-beam data and preparation of DTMs; carryout geophysical data acquisition and</li> </ul>

							analysis; vii) Sediment core/grab sample collection; generating charts and reports viii) Participation in oceanographic cruises in ships
Project Scientist-I (Life Science)	<b>13 (SC-1; OBC-3 &amp; UR-9)</b>	Rs. 55000 + HRA	Below 35 years	Master's Degree in Life / Sciences or equivalent from a recognized university / National laboratories with at least first class not less than (60%) marks / B. Tech. in Bioinformatics from a recognized university with at least first class not less than (60%) marks.	Two years research experience (after obtaining post graduation degree) in Research and Development in the areas listed under job requirement.	Should be capable of carrying out analysis related to deep sea microbial /marine microalgal /offshore cage culture / anti-biofouling studies in the field and / or laboratory / purification and characterization of marine natural products by analytical / chromatographic / spectroscopic techniques / physico-chemical and biological analysis of seawater and sediment / coastal and marine environment EIA studies / interpretation / analysis of results and compilation of reports.	
Project Scientist-I (Chemical Science)	<b>01 (Unreserved)</b>	Rs. 55000 + HRA	Below 35 years	Master's Degree in Chemical Sciences or equivalent from a recognized university / National laboratories with at least first class not less than (60%) marks.		Should be capable of purification and characterization of marine natural products by analytical / chromatographic / spectroscopic techniques / physico-chemical and biological analysis of seawater and sediment / coastal and marine environment EIA studies / interpretation / analysis of results and compilation of reports.	
Project Scientist-I (Petroleum Engineering)	<b>01 (Unreserved)</b>	Rs. 55000 + HRA	Below 35 years	B.E/B.Tech degree in Chemical/Petroleum Engineering or equivalent from a recognized University/ Institute with at least first class not less than 60% marks	M.E. / M.Tech in Petroleum engineering or equivalent from a recognized University	i) Gas Hydrate research, thermal stimulation and depressurization techniques ii) Handling high pressure and low temperature reactor/autoclave iii) Handling CFD software's like fluent; reservoir modeling software for methane hydrate kinetics studies	

**Project Scientific Assistant**

Post Code	Name of the post	No. of post(s)	Emoluments	Maximum age as on 30.10.2017	Essential/Requisite Qualification	Desirable	Job Requirement
	Project Scientific Assistant (Mechanical)	<b>15 (SC-2;ST-1; OBC-3 &amp; UR-9)</b>	Rs.24000 + HRA	Below 28 years	Diploma in Mechanical/ Automobile/ Mechatronics engineering or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	i) Any higher qualification related to job requirement ii) Three years of experience in oil and gas/offshore industries or R&D in Ocean Engineering	i) Preparation of mechanical 2D and 3D modeling using Autocad/Inventor / Pro-E/ANSYS ii) Assembly, integration and testing of mechanical systems, engineering fabrication and assembly work. iii) Working experience in high pressure hydraulic systems, assembly and integration, trouble shooting and maintenance activities etc. iv) Undertake field trials and deployment of the composite system onboard NIOT designated ship/platform at sea and undertake work onboard ships. Should be medically fit to sail and undertake work onboard ships. v) Knowledge in installation and commissioning of process thermal desalination plant equipments, power plant components, operation and maintenance of power/process plants. vi) Preparation of drawings, Overseeing construction / field installation activities in coastal / offshore locations /field survey/deployment / retrieval operations / Overseeing installation of instruments and sensors for Island based desalination plants vii) Operation and maintenance and inspection of scientific equipments onboard including machineries, navigation and communication equipments on board / To participate the dry dock works construction of ships / Maintain and control inventory viii) To assist in retrieval and deployment offshore data collection platforms / participate in ship cruises / to work in software like Solidworks, , Catia, etc.
	Project Scientific Assistant	<b>02 (Unreserved)</b>	Rs.24000 + HRA	Below 28 years	Diploma in Electrical Engineering/ Electrical & Electronics engineering	Experience of 3 years as per the job requirement in oil and	i) Assembly, integration and testing of medium voltage Electrical systems viz. motors, drives, transformers, switch gear

	(Electrical)				or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	gas/offshore or other reputed industries/ R&D organizations	<ul style="list-style-type: none"> <li>etc. for subsea and surface applications</li> <li>ii) Development/ drafting Electrical CAD-circuit drawings.</li> <li>iii) Operation and maintenance and inspection of scientific equipments onboard including machineries, navigation and communication equipments on board / to participate the dry dock works and construction of ships</li> <li>iv) Supervision of Electrical construction and maintenance works, ensuring quality and safety at work place, recording measurements and bill preparation, co-ordination with contractors, Maintenance of Gensets, Transformers and MV switch gear</li> <li>v) Undertake field testing of the systems/ equipments developed by NIOT onboard designated ship/ platform at sea.</li> </ul>
Project Scientific Assistant (ECE/E&I)	<b>13 (SC-1; OBC-3 &amp; UR-9)</b>	Rs.24000 + HRA	Below 28 years	Diploma in Electronics & Communication / Electronics & Instrumentation engineering or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	<ul style="list-style-type: none"> <li>i) Any higher qualifications related to job requirements</li> <li>ii) Three years experience in Data acquisition, Instrumentation &amp; control systems for Underwater / Marine applications or the area of relevant work as per the job requirement.</li> </ul>	<ul style="list-style-type: none"> <li>i) Assembly, Integration and testing of marine / subsea data acquisition and control systems</li> <li>ii) Operation and maintenance, repair and trouble shooting of oceanographic sensors/ instruments and system.</li> <li>iii) Calibration and testing of underwater sensors and instruments and associated software and loop testing.</li> <li>iv) Participation of field trials onboard NIOT designated ship/platform at sea for system integration, deployment and retrieval operations.</li> <li>v) Schematics design and PCB design using ORCAD or PADS</li> <li>vi) Handling, maintenance and testing of fiber optic systems</li> <li>vii) Instrumentation development and field deployment activities in coastal/offshore locations/island based desalination plants.</li> <li>viii) Interfacing and testing of Data/Tsunami buoy systems and real time data telemetry system</li> </ul>	
Project Scientific Assistant	<b>05 (OBC-1 &amp; UR-4)</b>	Rs.24000 + HRA	Below 28 years	Diploma in Civil engineering or equivalent from a	1. Any higher qualification in the relevant discipline/field	<ul style="list-style-type: none"> <li>i) Preparation of drawings, Overseeing construction, fabrication of structures, field installation activities in coastal / offshore</li> </ul>	

	(Civil)				recognized University / Institute with at least first class not less than 60% marks.	2. Experience in areas given in job requirements	locations, field survey, deployment & retrieval operations, Overseeing installation of instruments and sensors for Island based desalination plants and R&D activities. ii) Field measurements and recording in measurement book, studying specification and executing job, geotechnical analysis of sample, beach profiling, topographic survey and field sample collections, assist laboratory operations / instrument maintenance iii) Site execution including reading specifications, drawings, supervising the construction activity, ensuring quality, recording measurements and bill preparation, co-ordination between various agencies and contractors. iv) To supervise / prepare estimates, drawings and specifications as per CPWD codal provisions and effectively supervise the ongoing development / maintenance works. Checking of measurements, maintenance of M-Books, processing of bills for payment and quality assurance with the co-ordination of Estate Engineer. To attend and supervise important Annual Maintenance Contracts for the day to day maintenance.
Project Scientific Assistant (Computer Science)	<b>04 (OBC-1 &amp; UR-3)</b>	Rs.24000 + HRA	Below 28 years	Diploma in Computer Science(DCT) or equivalent from a recognized University / Institute with at least first class not less than 60% marks.	i) Any higher qualification related to job requirement ii) Knowledge in data acquisition and control systems/ remote control sensors and instrumentation/ software testing and R&D.	i) Programming, maintenance of IT infrastructure operations and Data Base Management, Application software development, Middleware development, Scientific Data Plotting ii) Knowledge in Microsoft Technologies platform, development using Asp.net with Entity framework, LINQ, SSRS reporting tool, SQL, MySQL, and development knowledge in PHP, VB.net.. iii) Upkeep, maintenance monitoring and fixing Network / e-mail related issues; supporting to Video Conference Systems; installation of OS's; breakdown and failures; Updates, backup and restore softwares, report generation, periodical review & improvement of existing systems; Manage Active directory and Domain Controller.	

							iv) writing program codes, review & improvement of existing softwares, backup and maintenance; testing the product in controlled, real situations before going live; preparation of training manuals for users.
	Project Scientific Assistant (Life Science)	<b>08 (SC-1; OBC-2 &amp; UR-5)</b>	Rs.24000 + HRA	Below 28 years	Bachelor's degree in Life Sciences or equivalent from a recognized University / National laboratories with at least first class not less than 60% marks.	<p>i) Master's degree in Life Sciences or equivalent from a recognized University / National laboratories.</p> <p>ii) Two years experience (after obtaining under graduation degree) in Research and Development in the areas listed in job requirement. SCUBA diving certification with not less than 25 logged dive.</p>	Should be capable of carrying out preparatory works in the laboratory for research and developmental activities pertaining to deep sea microbial /marine microalgal / offshore cage culture / anti-biofouling studies / purification and characterization of marine natural products / physicochemical analysis of seawater / SCUBA diving and extensive field work for the above activities.
	Project Scientific Assistant (Chemical Science)	<b>01 (Unreserved)</b>	Rs.24000 + HRA	Below 28 years	Bachelor's degree in Chemistry or equivalent from a recognized University / National laboratories with at least first class not less than 60% marks.	<p>i) Master's degree in Chemistry or equivalent from a recognized University / National laboratories.</p> <p>ii) Two years experience (after obtaining under graduation degree) in Research and Development in the areas listed in job requirement. SCUBA diving certification with not less than 25 logged dive.</p>	

**Project Technicians**

Post Code	Name of the post	No. of post(s)	Emoluments	Maximum age as on 30.10.2017	Essential/Requisite Qualification	Desirable	Job Requirement
	Project Technician (Mechanical/Fitter/Welder/Machinist)	<b>12 (SC-2; OBC-3 &amp; UR-7)</b>	Rs.15000 + HRA	Below 28 years	10 <sup>th</sup> pass (secondary or metric) from a recognized Board and ITI course in Mechanical/Fitter/Welder/Machinist approved by National Council for Vocational Training or its equivalent from a recognized Institution	Experience of two years in assembly, integration and testing of mechanical systems and rotating machinery and in hydraulic systems; welding by TIG/MIG and Arc Welding, machining operations viz., turning, drilling, surface grinding and milling trouble shooting and maintenance work and in oil and gas/offshore industries or R&D.	<ul style="list-style-type: none"> <li>i) Integration and assembly of developed subsea mechanical systems / underwater vehicles and their testing on land and onboard ships.</li> <li>ii) Undertake field trials onboard NIOT designated ship/platform at sea and work onboard ships.</li> <li>iii) Knowledge in installation, dismantling, repair, reassembling of machinery/pumps/motors/ equipments in factories, power plants, process plants and construction sites. Knowledge in reading and understanding engineering drawings and symbols.</li> <li>iv) Knowledge in leveling, aligning and installing machinery on foundations or base plates and setting, leveling and aligning electric motors or other power sources such as turbines is preferable. Offshore installations and handling experience is preferable.</li> <li>v) Knowledge in operation and maintenance of chilling plants/ centralized air conditioning plants / cold storage. Knowledge in refrigerants like R134a, ammonia etc.</li> <li>vi) Fabrication, assembly, integration and testing of mechanical systems and structures and subsea mechanical systems/underwater vehicles.</li> <li>vii) Undertake field trials onboard NIOT designated ship/platform at sea and work onboard ships including retrieval operation..</li> <li>viii) Knowledge in welding of MS and SS components, pressure vessels, Boilers, IBR certified TIG/MIG welder.</li> <li>ix) Knowledge in reading and understanding engineering drawings and symbols</li> <li>x) Development, assembly, integration and testing of mechanical components/parts as per given drawing/sample for assembly</li> </ul>

							of subsea mechanical systems for tests and trials.
Project Technician (Electrical)	<b>06 (SC-1; OBC-1 &amp; UR-4)</b>	Rs.15000 + HRA	Below 28 years	10 <sup>th</sup> pass (secondary or metric) from a recognized Board and ITI course in Electrician/ Wireman/ Electrical maintenance approved by National Council for Vocational Training or its equivalent from a recognized Institution	Experience of 2 years in operation and maintenance of medium voltage Electrical systems in oil and gas/offshore or other reputed industries/ R&D organizations	<ul style="list-style-type: none"> <li>i) Assembly and wiring of Electrical components for integration and testing of Electrical systems.</li> <li>ii) Assisting in maintenance and servicing of Electrical systems/ components/ equipments.</li> <li>iii) Maintenance of Electrical testing equipments and tools</li> <li>iv) Electrical stores inventory, Electrical lab maintenance.</li> <li>v) Undertake field testing of the systems/ equipments developed by NIOT onboard designated ship/ platform at sea.</li> </ul>	
Project Technician (Electronics/ Instrumentation)	<b>01 (Unreserved)</b>	Rs.15000 + HRA	Below 28 years	10 <sup>th</sup> Class Pass (Secondary / Metric) of a recognized board and ITI course in Electronics Mechanic / Instrument Mechanic approved by National Council for vocational training or equivalent from recognized Institutions.	Experience of two years in R&D, Industry and/or the area of relevant work as per the job requirement.	<ul style="list-style-type: none"> <li>i) Assembly and Integration of data acquisition and control systems for subsea systems / vehicles.</li> <li>ii) Sensor interface, wiring and routing, Soldering of Electronics components</li> <li>iii) Assist in calibration and testing of underwater sensors/system</li> <li>iv) Participation in field trials onboard NIOT designated ship/platform at sea for system deployment and operation of underwater vehicles and system.</li> <li>v) Knowledge on Test and measuring instruments, oceanographic instruments and acoustic sensors</li> </ul>	
Project Lab Technician/ Assistant	<b>02 (Unreserved)</b>	Rs.15000 + HRA	Below 28 years	10 <sup>th</sup> Class Pass (Secondary / Metric) of a recognized board and ITI course in Electronics Mechanic / Instrument Mechanic approved by National Council for vocational training or equivalent from recognized Institutions.	Experience of two years in R&D, Industry and/or the area of relevant work as per the job requirement.	To support at field level to Scientists, Scientific Assistants, dealing with cruise operations and field works.	

**Administrative Streams**

Post Code	Name of the post	No. of post(s)	Emoluments	Maximum age as on 30.10.2017	Essential/Requisite Qualification	Desirable	Job Requirement
	Project Senior Executive	<b>11 (SC-1; OBC-2 &amp; UR-8)</b>	Rs.24000 + HRA	Below 40 years	i) A bachelor degree from a recognized University ii) Minimum 5 years experience in dealing with Government Rules and Regulation / Auditing / Taxation in Government / PSU / Central Autonomous Bodies / other reputed organizations	i) Post Graduation from any recognized University / institution (or) pass in SAS examination conducted by CAG or equivalent ii) Secretarial course completion certificate iii) Working knowledge of Computer, stenography and typing iv) Working experience in the R&D projects v) Basic knowledge of computer.	i) Knowledge in Office Management, administration, imports, purchases, finance, works, etc. ii) Knowledge of word processing and data entry essential iii) Processing of payments / Pre-auditing of procurement proposals and contracts in compliance with General Financial Rules / Delegation of Financial Power Rules of Gol.
	Project Junior Assistant	<b>17 (SC-3; OBC-4 &amp; UR-10)</b>	Rs.15000 + HRA	Below 28 years	i) 10+2 or its equivalent qualification from a recognized Board or University ii) Typing speed of 35 w.p.m. in English or 30 w.p.m. in Hindi on Computer (correspond to 10500 KDPH/9000 KDPH on an average of 5 key depression for each word).	i) Graduation from Recognized University.	i) Knowledge in Office and accounting procedures ii) Knowledge of word processing and data entry

The candidates are requested to note the following:

Please go through the following instructions carefully. The candidate shall be solely responsible for any loss or hardship caused to him due to his non-adherence to these instructions. The candidate is requested to visit NIOT website periodically to keep track of new announcements and changes, if any. If you have any difficulty in filling the online application form, please send an e-mail to [recruitment@niot.res.in](mailto:recruitment@niot.res.in) indicating the problem faced.

- 1) Candidates must be citizens of India.
- 2) The application form is available online on NIOT website <http://www.niot.res.in/index.php/recruitment>. The candidate has to fill the application online and upon submission, applicants will be provided with an online Registration Number. After allotment of Registration Number, the candidate has to take a print out of the filled in application and sent to NIOT duly signed along with copies of the following certificates.
- 3) Online applications must invariably be followed with duly signed hard copy along with relevant enclosures. Online applications without hardcopy submission will lead to rejection of application. Similarly hard copy applications without online registration will not be considered.
- 4) The application without the following enclosures shall summarily be rejected. Candidates shall enclose self-attested photocopies of the following documents alongwith the print out of the Application Form :
  1. 10<sup>th</sup> standard certificate or equivalent in support of Date of Birth.
  2. 12<sup>th</sup> standard or equivalent mark sheet.
  3. Community certificate in respect of SC/ST/OBC candidates
  4. Degree / Diploma certificate alongwith mark sheets of each year
  5. P.G. Degree Certificate alongwith mark sheets of each year
  6. Experience Certificate, if any, for proof of experience
  7. Other documents, as applicable, relevant to the post applied for
- 5) In case a particular University / Institution does not have any criteria of first class or equivalence, 60% will be taken as equivalent to first class. In case of non-availability of conversion formula, CGPA/CPI of 6.75 (on 10 point scale) will be taken as equivalent to 60% as per AICTE guidelines. For any other point scale of CGPA/CPI, the equivalence may vary proportionally.
- 6) Paste a recent passport size colour photograph in the space provided for at the right top portion on the first page of the application
- 7) Experience in a discipline / area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed qualifications for that post.
- 8) The candidates should not have exceeded the maximum age limit specified above as on the last date of receipt of Applications. A maximum relaxation of 5 years in age is applicable to the candidates belonging to SC/ST category, 3 years for OBC candidates; 10 years for persons with disability; 5 years for Group – A and Group – B Ex-Servicemen and for Group – C Ex-servicemen – 3 years over and above the period of service rendered in the Army, Navy and Air Force, subject to maximum age of 45 years (50 years in case of SC/ST).
- 9) Reservations shall be applied to all the posts except for Project Scientist – II.
- 10) Women candidates fulfilling the requirements are encouraged to apply for the posts.

- 11) Candidates who are in Government / autonomous Institutions and PSU should forward their applications through proper channel.
- 12) NIOT may fix suitable norms for short listing the applications 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 level.
- 13) Mere possession of the education qualifications and requisite experience will not entitle any right to be called for test/interview or selection.
- 14) The Advt. No., Post No., Post Name and Discipline should be clearly indicated on the envelope.
- 15) The candidates selected are liable to work anywhere in India and can be posted in any of the projects of NIOT.
- 16) Self attested copies of certificates / testimonials (for age, qualification and experience proof) should be enclosed along with the applications. Enclose list of publications / re-prints etc., if any also with the application. Write "Enclosure Sl. No. \_\_\_\_\_" as mentioned in the application.
- 17) The applications received after due date or without enclosures or incomplete applications will be summarily rejected. NIOT cannot take any responsibility for transit and other delays.
- 18) Canvassing in any form will be treated as disqualification.
- 19) No TA/DA will be paid for attending the interview / written examination.
- 20) The engagement is time bound and purely temporary on contract basis for a fixed term. The duration of the engagement would be initially for a period of one year and extendable by one more year or co-terminus with the project in which he/she is engaged, whichever is earlier.
- 21) If the candidate wants his/her application to be considered for more than one post, separate application should be submitted for each post.
- 22) Hard copy of registered online applications should be sent to The Director, National Institute of Ocean Technology, Velachery – Tambaram Main Road, Pallikaranai, Chennai–600100, INDIA so as to reach on or before the due date, duly superscribing on the envelope "the post name and discipline for which applied". The Advt.No., Post No., Post Name and Discipline should be clearly indicated on the envelope.

Last date for online applications : **30.10.2017**

Last date for receipt of applications : **06.11.2017**

Last date for receipt of applications for Assam, Meghalaya, Arunachal Pradesh, Mizoram, Manipur, Nagaland, Tripura, Sikkim, Ladakh Division of Jammu and Kashmir State Lahaul and Spiti District and Pangti Sub-division of Chamba District of Himachal Pradesh, Andaman and Nicobar Islands and the Union Territory of Lakshadweep : **13.11.2017**