राष्ट्रीयसमुद्रप्रौद्योगिकीसंस्थान
NATIONAL INSTITUTE OF OCEAN TECHNOLOGY
(पृथ्वीविज्ञानमंत्रालय, भारतसरकार)
(Ministry of Earth Sciences, Government of India)
रासामैसपररसर, वेलाचेरी–तांबरमरोड, चेन्नै– 600 100
NIOT CAMPUS, VELACHERY-TAMBARAM ROAD, CHENNAI - 600 100
Phone: 91-44-66783300 E-Mail: recruitment@niot.res.in

ADVERTISEMENT No. NIOT/E&P/01/2023(Regular)

National Institute of Ocean Technology (NIOT), Chennai, an autonomous body under the Ministry of Earth Sciences, Govt. of India, is functioning with broad objectives of promoting technology development in various mission mode activities in Ocean Engineering and Ocean Resource utilization. The institute invites online applications through the website link https://www.niot.res.in (***on Direct recruitment basis)*** to the following posts from talented and motivated Indian citizens possessing the qualifications prescribed in the table below:-

Name of the Post	Discipline	Pay Level in the Pay Matrix (as per VII CPC)	No. of vacancy & Category
Scientist - F	Marine Biology (1), Biotechnology/ Mariculture (1)	Level 13A	2 posts, UR
Scientist - E	Mechanical/Marine (2), Marine Biotechnology/Microbiology (1), Biochemistry/Organic Chemistry (1)	Level 13	4 Posts, UR
Scientist -D	Mechanical (3), Electrical (1), Electronics & Instrumentation (1), Naval Architecture (1), Civil (1), Biotechnology (1), Microbiology/Marine Biology (1)	Level 12	9 Posts, UR
Scientist -C	Mechanical (3), Electrical (2), Electronics & Communication / Instrumentation (2), Naval Architecture (1), Biotechnology/Bioinformatics (2),	Level 11	10 Posts, UR

Director

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY
(Ministry of Earth Sciences, Government of India)
NIOT Campus, Velachery-Tambaram Main Road,
Pallikaranai, Chennai - 600 100
Phone : 91-44-6678 3300 E-Mail: recruitment@niot.res.in

ADVERTISEMENT No. NIOT/E&P/01/2023(Regular)

Scientist – F – 2 Posts

Post code	SF-MB-01-2023
Name of the post	**Scientist – F (Marine Biology)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Master's degree in Marine Biology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctorate in Marine Biology from a recognized University / Institute.
Experience	**Essential:** Sixteen years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Marine Biology. **Desirable**: Experience in the field of Marine Biology / Marine taxonomy / bio-prospection of marine organisms/ Planning and implementation of marine biology programmes / research cruise and biological sampling.
Job Requirement	● Planning and execution of marine biological research and developmental activities. ● Conducting research and developmental studies related to marine biodiversity / benthic ecology / molecular taxonomy of marine organisms. ● Establishment of laboratory and infrastructure for field studies in Marine Biology, including advanced instrumentation facility in the field of marine biology. ● Supervision and guidance of research work pertaining to Marine Biology. ● Development and coordination of business incubators for ocean biology applications. ● Organizing, participation in research cruise and biological sampling
Pay Scale	Pay Level 13A (Rs. 131100 - 216600) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SF-BT/MC-02-2023
Name of the post	**Scientist – F (Biotechnology/Mariculture)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Master's degree in Biotechnology/Mariculture from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctorate in Biotechnology/Mariculture from a recognized University / Institute.
Experience	**Essential:** Sixteen years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Biotechnology / Mariculture. **Desirable** Experience in the field of Marine Biotechnology / Marine microbial genomics / Marine microbial bioprospecting / Offshore mariculture, finfish farming / Planning and implementation of marine biology programmes / research cruise and biological sampling
Job Requirement	• Planning and execution of research and developmental activities related to Marine Biotechnology / Mariculture, Collaborating with the National and International organizations. • Establishment and Maintenance of Laboratories and advanced instrumentation facility relating to Marine Biotechnology / Mariculture. • Conduct research and developmental activities related bioprospection of marine organisms, Offshore farming of marine finfishes. • Development of techniques for downstream processes for key biomolecules from marine organisms, protocols for mass scale product development Technology transfer to societal / industrial development • Supervision and guidance of research work pertaining to Marine Biotechnology / Mariculture.
Pay Scale	Pay Level 13A (Rs. 131100 - 216600) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Scientist E- 4 Posts.

Post code	SE-Mech/Marine-01-2023
Name of the post	**Scientist – E (Mechanical/Marine)**
Number of post	02 (Two) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Mechanical/Marine Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Mechanical/Marine Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Eleven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Mechanical / Marine Engineering / Technology. **Desirable**: Experience in relating to : • Design, analysis and operation of underwater systems, vehicles and/or underwater piping and pipe systems used in offshore systems. • Heavy machinery handling onboard ship and operational experience • Professional experience in designing, numerical analysis and development using AUTOCAD / Inventor / Pro E / CATIA / Solidworks /Rhino and Ansys / AbaqusorStarCCM+ / Ansys Fluent • Working knowledge in codes and standards, viz. ASME/BIS/DNV GL/ABS/IRS
Job Requirement	• Design, development of analysis and commissioning of underwater vehicles, deep sea mining nodule collection, slurry transport, pumping and separation systems. Integration and testing of the deep sea mining systems • Planning and Management, field execution of high end deep sea technological programmes. • Participation in sea trials, survey and exploration at sea. • Coordination with ship modifications, operation for heavy machinery deployment and retrieval • Piloting the manned submersible during the dives and exploration using manned and unmanned submersible. • Innovation, capacity building and creation of spin-off projects
Pay Scale	Pay Level 13 (Rs. 123100 - 215900) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SE-MB-02-2023
Name of the post	**Scientist – E (Marine Biotechnology/Microbiology)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Master's degree in Biotechnology / Marine Biotechnology / Microbiology / Applied Microbiology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctorate in Biotechnology / Marine Biotechnology / Microbiology / Applied Microbiology from a recognized University / Institute.
Experience	**Essential:** Eleven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Biotechnology / Marine Biotechnology / Microbiology / Applied Microbiology. **Desirable**: Experience in profiling, systematics / marine microbial genomics & metagenomics / marine microbial bio-prospecting / research cruise and biological sampling.
Job Requirement	• Planning and organizing cruises for deep sea sample collection. • Identification and realization of deep sea sampling equipments and deep sea microbial storage system. • Isolation, identification, and polyphasic characterization of deep sea microbes. • Sequencing of deep sea microbial genome by next generation sequencing. • Standardization of high pressure culture conditions and fermentation methods. • Fermentation and production of bioactive secondary metabolites. • Screening, Isolation, purification and characterization of bioactive secondary metabolites. • Genome analysis, cloning and recombinant expression of novel genes. • Conducting experiment, analysis of samples, interpretation of results and preparation of technical report at various stages of the project.
Pay Scale	Pay Level 13 (Rs. 123100 - 215900) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SE-BC/OC-03-2023
Name of the post	**Scientist – E (Biochemistry/Organic Chemistry)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Master's degree in Biochemistry/Organic Chemistry from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctorate in Biochemistry/Organic Chemistry from a recognized University / Institute.
Experience	**Essential:** Eleven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Biochemistry / Organic Chemistry. **Desirable**: Experience in relating to purification and characterization of marine bioactive molecules / Biochemical profiling of marine bioactive metabolites / Molecular characterization and recombinant production of marine bioactive compounds / Functional characterization of biological macromolecules / Biosynthesis of low and high molecular biological active compounds / / research cruise and biological sampling.
Job Requirement	• To conduct analytical studies related to various vital biomolecules and to establish biochemical pathways in novel marine organisms. • To establish facilities pertaining to biochemical analysis in marine organisms. • Supervision and guidance of research work pertaining to Bio Chemistry. • Interaction and extension of expertise to other activities related to biochemistry. • Participation in cruise, collection of deep sea samples and processing of samples onboard. • Conducting experiment, analysis of samples, interpretation of results and preparation of technical report at various stages of the project.
Pay Scale	Pay Level 13 (Rs. 123100 - 215900) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Scientist-D – 9 Posts

Post code	SD-Mech-01-2023
Name of the post	**Scientist – D (Mechanical)**
Number of post	03 (Three) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Mechanical Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Mechanical Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Mechanical Engineering. **Desirable:** Experience in relating to • Design, development and analysis of underwater vehicles, hydraulic power systems or piping used in deep water offshore systems. • Mechanical structure design and fabrication, heavy machinery handling onboard ship and operational experience in electro-mechanical devices • Project planning, budgeting and execution • Working knowledge in analysis software for CFD / FEA like Ansys, Abacus, Starr CCM etc • Advanced knowledge in drawing, numerical analysis and development using software like AUTOCAD/Inventor/Pro E/CATIA/Solidworks and MATLAB (Hydraulics) • Working knowledge in usage of codes and standards, like ASME/DNV GL/ABS, in risk assessment of subsea systems.
Job Requirement	• Design, development, testing and analysis of underwater vehicles, deep sea mining systems, subsea hydraulic systems used for motive power and precision control integration of project requirements with ship • Participation in sea trials, survey and exploration onboard research vessels • Project planning and management, field execution of high end technological programmes • Handling ship based systems, fabrication and assembly of manned submersible • Coordination with DNV for testing • Integration, balancing of the underwater hydraulic systems for hyperbaric, cold and corrosive conditions and testing of the • Innovation, capacity building and creation of spin-off projects
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-Elec-02-2023
Name of the post	**Scientist – D (Electrical)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Electrical Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Electrical Engineering / Technology /Power Electronics from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Electrical Engineering. **Desirable** • Design of marine and subsea electrical systems, power electronic converters, power transmission systems, rotating machines and battery storage. • Validation of Modeling and simulation using MATLAB Simulink, PSIM, Magnet-Motor Solve, Protection coordination, Data Acquisition Systems • Advanced knowledge in drawing, numerical analysis and development using software like Electrical CAD, NI's Labview and MATLAB/SIMULINK (Power Systems)/Magnet/Motor Solve/Thermnet/PSIM • Familiarity with IS/IEC/EN standards followed in ship based electrical installations, EMI/EMC, High voltage safety in electrical power devices, grounding practices etc.
Job Requirement	• Design, integration and testing, of marine and subsea electrical systems, power electronic converters, power transmission systems, rotating machines and battery storage devices. • Design and validation of Modeling and simulation using MATLAB Simulink, PSIM, Magnet-Motor Solve, Protection coordination, Data Acquisition Systems • Handling EMC compliance and grounding practices • Undertake field testing of the systems/equipments developed by NIOT onboard designated ship/platform at sea • Participation in sea trials for system qualification
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-EI-03-2023
Name of the post	**Scientist – D (Electronics / Instrumentation)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Instrumentation & Control/ Electronics & Communication/Electronics & Instrumentation Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in any specializations under Instrumentation & Control/Electronics & Communications / Electronics & Instrumentation Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in any of the field of Electronics and Instrumentation engineering. **Desirable**: Experience in relating to • Design and development instrumentation and control systems, Image and Signal processing, Vision based vehicle controls for offshore platforms and/or underwater vessels/systems/vehicles or for aerospace applications • System integration, testing, quality check and maintenance of subsea navigation and control system • Integration, assembly, testing, operation and maintenance of marine and subsea Sensors & Transducers, Underwater vision system, Acoustics based sensors and communication systems, battery modules design and Battery Management System (BMS) or for aerospace applications. • Advanced knowledge in understating P&I drawing, numerical analysis and Application development using software like NI's Labview and MATLAB/SIMULINK/COMSOL
Job Requirement	• Design and development of subsea instrumentation and control systems for offshore platforms and/or underwater vessels/systems/vehicles for deep sea mining. • Integration, assembly, testing, operation and maintenance of subsea navigation and control system for underwater tethered and untethered vehicles. • Underwater Image and Signal processing, Vision based vehicle control. • Design and Development of Real Time Operating System (RTOS) for battery operated portable system and Design and development of Autonomous system • Participation in sea trials, survey and exploration at sea, Project planning, proposal and report preparation, field execution and budget planning for high end technological programmes. • Innovations in the systems design and development, for deep sea mining
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-NA-04-2023
Name of the post	**Scientist – D (Naval Architecture)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Naval Architecture Engineering/Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Naval Architecture Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in Naval Architecture. **Desirable**: Experience relating to ● Design, development and analysis of surface vessels/offshore platforms and/or underwater vessels/systems/vehicles and/or offshore launching and recovery systems. ● Advanced knowledge in drawing, numerical analysis and development using software like AUTOCAD/Inventor/Pro E/CATIA/Solidworks/Rhino AND ANSYS/ABAQUSAND/OR hydrostatic and hydrodynamic studies of subsea systems/vehicles using StarCCM+/Ansys Fluent and ANSYS AQUA/ORCAFLEX/Shear 7/WAMIT. ● Working knowledge and use of codes and standards, viz. ASME/DNV GL/ABS etc.
Job Requirement	● Design, development and analysis of surface vessels/offshore platforms, underwater vessels/systems/vehicles, deep water riser systems and launching and recovery systems (LARS). ● Hydrostatic and hydrodynamic studies of surface platforms, subsea systems/vehicles and the connected riser systems. ● Design, development and realisation of offshore/ship-based launching and recovery systems. ● Participation in sea trials, survey and exploration at sea. Project planning, proposal and report preparation, field execution and budget planning for high end technological programmes. ● Systems design and development, used for deep sea mining for capacity building and creation of spin-offs .
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-Civil-05-2023
Name of the post	**Scientist – D (Civil)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Bachelors' degree in Civil Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Civil/Structural/Off-shore Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Civil Engineering. **Desirable**: Experience in policy making, planning or management, etc., related to execution of projects in the area of ocean technology and engineering
Job Requirement	● 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 ● 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. ● 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. ● Applications of software like STAAD PRO, ANSYS, SACS, SESAM, WAMIT, Orcaflex, MOSES, PLAXIS, PRIMAVERA, is preferred.
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-BT-06-2023
Name of the post	**Scientist – D (Biotechnology)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Masters' degree in Biotechnology / Marine Biotechnology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctoral degree in Biotechnology / Marine Biotechnology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the areas of Bio technology **Desirable**: Experience in the field of deep sea microbial biotechnology / deep sea microbial genomics / deep sea microbial systematics, taxonomy, profiling / deep sea microbial bioprospecting, secondary metabolite production, characterization / research cruise and deep sea sampling
Job Requirement	● Identification and realization of deep sea sampling equipments. ● Profiling of deep sea microbial diversity by culture independent methods.` ● Isolation, identification and polyphasic characterization of deep sea microbes. ● Screening, Isolation purification and characterization of bioactive secondary metabolites. ● Genome analysis, cloning and recombinant expression of novel genes. ● Large scale culture and production of bioactive secondary metabolites. ● Participation in cruise, collection of deep sea samples and processing of samples onboard. ● Conducting experiment, analysis of samples, interpretation of results and preparation of technical report at various stages of the project.
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SD-MB-07-2023
Name of the post	**Scientist – D (Microbiology/Marine Biology)**
Number of post	01 (One) - Unreserved
Age Limit	Not exceeding 50 years
Qualification	**Essential:** Masters' degree in Microbiology/Applied Microbiology/Marine Biology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctoral degree in Microbiology/Applied Microbiology/Marine Biology from a recognized University / Institute.
Experience	**Essential:** Seven years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Microbiology / Applied Microbiology / Marine Biology. **Desirable**: Experience in the field of deep sea - microbiology / deep sea microbial genomics / deep sea microbial culture / deep sea microbial bioprospecting / research cruise and deep sea sampling
Job Requirement	● Profiling of deep sea microbial diversity by culture based methods. ● Isolation, identification and polyphasic characterization of deep sea microbes. ● Sequencing of deep sea microbes genome by next generation sequencing. ● Screening of deep microbes for bioactive molecules and pathways. ● Standardization of high pressure culture conditions and fermentation methods. ● Development of deep sea microbial storage system and reviving methods. ● Mass scale culture of various organisms in marine environment. ● Participation in cruise, collection of deep sea samples and processing of samples onboard. ● Conducting experiment, analysis of samples, interpretation of results and preparation of technical report at various stages of the project
Pay Scale	Pay Level 12 (Rs. 78800 - 209200) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Scientist-C – 10 Posts.

Post code	SC-Mech-01-2023
Name of the post	**Scientist – C (Mechanical)**
Number of post	03 (Three) - Unreserved
Age Limit	Not exceeding 40 years
Qualification	**Essential:** Bachelors' degree in Mechanical Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Mechanical Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Three years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Mechanical Engineering **Desirable**: Experience relating to: ● Design and analysis of underwater systems and vehicles or offshore systems or mining or underwater mining or coastal and waterways dredging ● Working knowledge in analysis software in the areas like AUTOCAD/Inventor/Pro E/CATIA/Solidworks/Rhino and Ansys/Abaqus or StarCCM+/Ansys Fluent. ● Knowledge in codes and standards (ASME, BIS)and classification rules (ASME/BIS/DNV GL/ABS/IRS etc)
Job Requirement	● Design and analysis of underwater vehicles, integration of project requirements with ship ● Design/development and analysis of deep sea mining nodule and rock collection systems, cutters and suction units. ● Integration and testing of the deep sea underwater vehicles, mining systems of collectors and associated electro-hydraulic systems. ● Participation in sea trials, survey and exploration ● Project planning, proposal preparation, field execution and report preparation for high end technological programmes ● High pressure vessels design and hydraulic systems realization and testing ● Vehicle structure analysis and realization and buoyancy systems design with mass budgeting to understand the CG and CB ● Absorption of the technology in deep sea mining for capacity building and creation of spin-off projects within the country.
Pay Scale	Pay Level 11 (Rs. 67700 - 208700) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SC-Elec-02-2023
Name of the post	**Scientist – C (Electrical)**
Number of post	02 (Two) - Unreserved
Age Limit	Not exceeding 40 years
Qualification	**<u>Essential:</u>** Bachelors' degree in Electrical Engineering / Technology from a recognized University with at least First Class (60% marks) in the qualifying degree level. **<u>Desirable:</u>** Master's degree in Electrical Engineering / Technology from a recognized University / Institute.
Experience	**<u>Essential:</u>** Three years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the field of Electrical Engineering **<u>Desirable</u>:** Experience relating to ● Design/development/analysis of electrical power systems for offshore platforms and/or subsea applications, viz. underwater vessels/systems/vehicles. ● Experience in integration/assembly/testing/operation and maintenance of marine and subsea medium voltage electrical systems, power transmission systems, motor controllers, and medium voltage high frequency systems ● Advanced knowledge in drawing, numerical analysis and development using software like Electrical CAD, NI's Labview and MATLAB/SIMULINK (Power Systems)/Magnet/Motor Solve/Thermnet/PSIM ● Familiarity with IS/IEC/EN standards followed in ship based electrical installations, EMI/EMC, High voltage safety in electrical power devices etc.
Job Requirement	● Design, development, Assembly, intergration and testing and analysis of subsea electrical systems and their components, power electronic converters and battery devices, solid state drives, power transmission systems, brushless DC motor controllers, permanent magnet synchronous generators etc ● Modeling and simulation using MATLAB Simulink, PSIM, ● Familiarity with EMC and grounding practices ● field testing of the systems/equipments I ● Participation in sea trials, survey and exploration at sea. ● Absorption of the deep water systems design and development, used for deep sea mining for capacity building and creation of spin-off projects
Pay Scale	Pay Level 11 (Rs. 67700 - 208700) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SC-EC/EI-03-2023
Name of the post	**Scientist – C (Electronics & Communication /Instrumentation)**
Number of post	02 (Two) - Unreserved
Age Limit	Not exceeding 40 years
Qualification	**Essential:** Bachelors' degree in Electronics & Communication/Electronics & Instrumentation Engineering / Technology or M.Sc.(Electronics) from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Electronics & Communication/Electronics & Instrumentation Engineering / Technology from a recognized University / Institute.
Experience	**Essential:** Three years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in the areas of Electronics and communication or Instrumentation Engineering **Desirable**: Experience relating to ● Design and development of subsea DAC system, Fibre optic communication system & FO Troubleshooting equipment for offshore platforms and/or subsea applications, viz. underwater vessels/systems/vehicles or for aerospace applications. ● Experience in integration, assembly, testing, operation and maintenance of marine and subsea Sensors & Transducers, Underwater vision system, Acoustics based sensors and communication system ● Advanced knowledge in understating P&I drawing, numerical analysis and Application development using software like NI's Labview and MATLAB/SIMULINK/COMSOL. ● Signal and image processing, satellite communications, Analog and Digital Circuit design with ORCAD, Pspice.
Job Requirement	● Integration, assembly, testing, operation and maintenance of subsea instrumentation & equipment Installation of systems on-board ships . ● Design and testing of DAC system and LARS control system, electronic systems hardware - data acquisition and programming, Undertake field testing of the systems/equipments Embedded System design, programming and verification using C/C++/MATLAB/PYTHON/Java. Data acquisition GUI application software development using MATBAL/LabView/PYTHON. Design and development of DAC systems and Image Processing. ● Active participation in sea trials, survey and exploration at sea for the R&D activities.
Pay Scale	Pay Level 11 (Rs. 67700 - 208700) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SC-NA-04-2023
Name of the post	**Scientist – C (Naval Architecture)**
Number of post	01 (Two) - Unreserved
Age Limit	Not exceeding 40 years
Qualification	**Essential:** Bachelors' degree in Naval Architecture Engineering / Technology from a recognized Universitywith at least First Class (60% marks) in the qualifying degree level. **Desirable:** Master's degree in Naval Architecture Engineering / Technology from a recognized University /Institute.
Experience	**Essential:** Three years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in Naval Architecture. **Desirable**: Experience relating to ● Design, development and analysis of surface vessels/offshore platforms and/or underwater vessels/systems/vehicles and/or offshore launching and recovery systems. ● Knowledge in drawing, numerical analysis and development using software like AUTOCAD/Inventor/Pro E/CATIA/Solidworks/Rhino and hydrodynamic studies of subsea systems/vehicles using StarCCM+/Ansys Fluent and ANSYS AQUA/ORCAFLEX/Shear 7/WAMIT. ● Working knowledge and use of codes and standards, viz. ASME/DNV GL/ABS etc. ● Experience of working / handling ship design / offshore projects / deep sea mining.
Job Requirement	● Design and Analysis of surface vessels/offshore platforms, underwater vessels/systems/vehicles, deep water riser systems and launching and recovery systems (LARS). ● Hydrostatic and hydrodynamic studies of surface platforms, subsea systems/vehicles and the connected riser systems. ● Participation in sea trials, survey and exploration at sea. ● Project planning, proposal and report preparation, field execution and budget planning for high end technological programmes.
Pay Scale	Pay Level 11 (Rs. 67700 - 208700) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Post code	SC-BT/BI-05-2023
Name of the post	**Scientist – C (Biotechnology/Bioinformatics)**
Number of post	02 (Two) - Unreserved
Age Limit	Not exceeding 40 years
Qualification	**Essential:** M.Sc. or B.Tech. in Biotechnology / Bioinformatics from a recognized University with at least First Class (60% marks) in the qualifying degree level. **Desirable:** Doctoral degree / M.Tech. in Biotechnology / Bioinformatics from a recognized University / Institute
Experience	**Essential:** Three years experience in Research and Development, Survey, Planning, Administration, Supervision or training, etc., in any of the field of the areas of Biotechnology / Bioinformatics. **Desirable**: Experience in the fields of deep sea microbial biotechnology/ bioinformatics analysis of deep sea microbial genome and metagenomes/Recombinant expression of bioactive molecules from deep sea organisms/ Genomic and metagenomic analysis of deep sea samples/ Next Generation Sequence data analysis and bioinformatics tool development/ research cruise and deep sea sampling
Job Requirement	● Isolation, identification and polyphasic characterization of deep sea microbes. ● Sequencing of deep sea microbial genomes by next generation sequencing. ● Development of deep sea metagenomic clone library and screening for novel genes. ● Screening of deep sea microbes novel secondary metabolites and biomolecules. ● Development of bioinformatics tools, nucleotide database and analysis of metagenomic data. ● Participation in cruise, collection of deep sea samples and processing of samples onboard. ● Conducting experiment, analysis of samples, interpretation of results and preparation of report.
Pay Scale	Pay Level 11 (Rs. 67700 - 208700) and allowances as admissible under 7th CPC
Selection Procedure	Through Interview

Screening of Applications for the Post of Scientist-F, Scientist-E, Scientist-D, Scientist-C

The preliminary verification of the applications will be based on candidate's qualifying credentials against (i) the essential requirements specified above, (ii) date of birth (inclusive of relaxation of age as applicable), (iii) completeness of the application like providing the details sought, submission of the passport size photograph, and copies of the marks list, academic and experience certificates, signature etc. (iv) essential qualification and experience, (v) desirable qualification and experience as specified in the above. The candidate's experience certificates shall be in the **format attached**, clearly specifying whether he/she possess the experience / knowledge / skills /meeting the experience requirements.

The prescribed essential qualifications are minimum requirements and the mere possession of the same does not entitle candidates to be called for interview. The application complete in all respect will be screened by a duly constituted committee. The Committee will scrutinize the experience possessed by the candidate with reference to the job requirement and shortlist the number of application to a reasonable limit. The final selection of the candidate will be based on the candidate's performance in the interview. No correspondence will be entertained with candidates who are not called for interview/selected for appointment.

Criteria for Short-listing of applicants for Interview:

The prescribed essential qualifications are minimum requirements and the mere possession of the same does not entitle candidates to be called for interview. If the number of applications received in response to advertisement is large, it will not be convenient or possible to call all candidates for interview. Hence, NIOT may restrict the number of candidates to be called for interview to the reasonable limit through Shortlisting Process by adopting one or more suitable criteria, like cut off marks in the minimum educational qualification, higher educational qualification, higher number of years of relevant experience in the relevant field. The criteria for short listing the applications will be set by a Committee constituted to screen the applications depending upon the number of applications received.

It has to be further noted that

a.   For the purpose of arriving the percentage of marks, the Institute will follow the yardstick adopted by the University/Institution/Board and take into account the percentage of marks as indicated in the Final Year Marks Statement.

b.   NIOT will not take the responsibility of working out the percentage of marks by adding up the marks secured by the candidates in different subjects/each year of Graduation and instead take into account the percentage of marks / CGPA as indicated in the Final Year Marks Statement.

c.   Where the Merit of the candidate is indicated in the Final Year Marks Statement in CGPA without indicating the corresponding percentage of marks, NIOT will follow the criteria indicated by the University/Institution in the Certificate/Mark statement submitted by the candidate, if any, for arriving at the corresponding percentage. In all other cases, NIOT will apply the conversion formula of CGPA (as indicated in the Final Year Marks Statement) multiplied by (x) 9.5.

Note:-
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.

Doctoral Degree obtained in the relevant area will be counted as three years of experience. However, this additional weightage of 3 years of experience will not be granted if the Doctoral degree is obtained concurrently with any employment or engagement as research scholar which is already counted for experience.

सीधी भर्ती के माध्यम से आवेदन जमा करने हेतु सामान्य निर्देश एवं प्रक्रिया:
General Instructions and Procedure for submitting application for Post through Direct Recruitment:

अभ्यर्थियों से निम्नलिखित बिन्दुओं पर ध्यान देने का अनुरोध किया जाता है:
The candidates are requested to note the following:

1. अभ्यर्थी भारत का नागरिक होना चाहिए।
Candidate must be a citizen of India.

2. इच्छुक अभ्यर्थी रासप्रौसं की वेबसाइट https://www.niot.res.in. के माध्यम से अपना ऑनलाइन आवेदन जमा कर सकते हैं। अभ्यर्थी ऑनलाइन आवेदन भरने से पूर्व कृपया दिये गए निर्देशों को ध्यानपूर्वक पढ़ें और तत्पश्चात अपना ऑनलाइन विवरण भरें साथ ही अपनी शैक्षिक योग्यता, अनुभव, जन्म तिथि, सामुदायिक जानकारी, नियोक्ता से एनओसी (सरकारी / स्वायत्त निकायों / पीएसयू में कार्यरत अभ्यर्थियों के लिए), आयु में छूट का दावा करने हेतु निर्धारित प्रारूप में प्रमाण पत्र (सरकारी कर्मचारी / भूतपूर्व सैनिक) आदि दस्तावेज़ तथा हाल में ली गई पासपोर्ट आकार की तस्वीर की स्कैन की गई प्रतियां अपलोड करें। आवेदन जमा करने से पूर्व ऑनलाइन भरे गए विवरणों की जांच और सत्यापन के बाद ही अपना आवेदन जमा करें। आवेदन जमा करने के बाद अपलोड किए गए विवरणों, दस्तावेजों में परिवर्धन, संशोधन या परिवर्तन के अनुरोध पर विचार नहीं किया जाएगा। अभ्यर्थियों को सत्यापन के समय अपलोड किए गए दस्तावेजों की मूल प्रति प्रस्तुत करनी होगी।

The application should be submitted online through NIOT website https://www.niot.res.in.The candidate should read the instructions for filling the online applications carefully and submit the particulars online and upload the recent passport size photograph, and scanned copies of the documents relating to his educational qualification, experience, date of birth, community status, NOC from the employer (for those employed in Govt/Autonomous Bodies/PSU), certificate in prescribed format for claiming relaxation of age (Govt Servants/Ex-servicemen) etc. The candidate should thoroughly check and verify the particulars filled online before submission of application. Request for additions, alterations or changes in particulars, documents uploaded after submission of the application will not be entertained. The candidates must produce the originals of the documents uploaded at the time of verification.

(a) अपूर्ण आवेदन अस्वीकार कर दिये जाएंगे। अभ्यर्थी कृपया यह सुनिश्चित करें कि उनके पास आवेदन किए गए पद के लिए आवश्यक योग्यता और अनुभव है तथा सत्यापन के दौरान अपलोड किए गए दस्तावेजों की मूल-प्रति प्रस्तुत करने में विफलता या मूल-प्रति समान नहीं होने पर भर्ती प्रक्रिया के किसी भी चरण में अभ्यर्थी की अभ्यर्थिता खारिज कर दी जाएगी।

Incomplete applications will be rejected. Candidate must ensure that they possess the essential qualification and experience for the post applied and the candidature will be summarily rejected at any stage of recruitment process if found not possessing the same or failure to produce the originals of the documents uploaded during verification.

3. **'आयु एवं अपेक्षित योग्यता/अनुभव'** का निर्धारण ऑनलाइन आवेदन जमा करने की अंतिम तिथि के आधार पर किया जाएगा, बशर्ते

The Crucial Date for determining the possession of '**AGE AND ESSENTIAL QUALIFICATION (EQs)/EXPERIENCE**' will be the closing date for on line application, Provided that

(a) समय-समय पर केंद्र सरकार द्वारा जारी निर्देशों या आदेशों के अनुसार सरकारी कर्मचारियों के लिए अधिकतम आयु में छूट दी जाएगी।

Upper age relaxable for Govt. Servants in accordance with the instructions or orders issued by the Central Govt. from time to time

(b) भूतपूर्व सैनिकों, दिव्यांग एवं अन्य विशेष श्रेणियों के अभ्यर्थियों को अधिकतम आयु के संबंध में समय समय पर केंद्र सरकार द्वारा जारी आदेशों के अनुसार छूट दी जाएगी।

The upper age limit in respect of the Ex-service men, Physically challenged and other special categories of persons shall be relaxable in accordance with the orders issued by the Central Govt. from time to time in this regard.

(c) अभ्यर्थी द्वारा प्रस्तुत अनुभव की गणना केवल उस तिथि से की जाएगी जिस दिन से अभ्यर्थी ने पद के लिए अपेक्षित न्यूनतम शैक्षणिक योग्यता प्राप्त कर ली हो।

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.

4. अपेक्षित योग्यताएँ रखने वाली महिला अभ्यर्थियों को इस पद के लिए आवेदन करने हेतु प्रोत्साहित किया जाता है।
Women candidates fulfilling the requirements are encouraged to apply for the post.

5. अभ्यर्थी जो सरकारी स्वायत्त संस्थानों और सार्वजनिक क्षेत्र के उपक्रमों में/कार्यरत हैं, उन्हें अपना ऑनलाइन उत्पन्न आवेदन उचित माध्यम द्वारा अग्रेषित करना होगा या पद हेतु आवेदन करने के लिए नियोक्ता से अनापत्ति प्रमाण पत्र जमा करना होगा ।अग्रेषण पत्र एनओसी में स्पष्ट रूप से/इस बात का उल्लेख किया जाना चाहिए कि उम्मीदवार सतर्कता के दृष्टिकोण से स्पष्ट है। नियत तिथि के भीतर उचित माध्यम से आवेदन को अग्रेषित करने में देरी होने पर वे आवेदन की अग्रिम प्रति प्रस्तुत कर सकते हैं। हालांकि, उनकी अभ्यर्थिता पर तभी विचार किया जाएगा जब, आवेदन उचित माध्यम से भेजा गया हो (या) लिखित परीक्षा/साक्षात्कार के समय अनापत्ति प्रमाण पत्र प्रस्तुत किया जाए।

Candidates who are in Government/ autonomous Institutions and PSU should forward their online generated applications through proper channel or upload the NOC from the employer for applying for the post. The forwarding letter/NOC must clearly state that the candidate is clear from vigilance angle. They may submit advance copy of application in case delay in forwarding the application through proper channel within the due

date. However, their candidature will considered only if the application is routed through proper channel (or) on production of NOC at the time of Written test/Interview.

6. साक्षात्कार में भाग लेने के लिए किसी टीए/डीए का भुगतान नहीं किया जाएगा। साक्षात्कार के लिए बुलाए गए बाहरी अनुसूचित जाति / अनुसूचित जनजाति के अभ्यर्थियों को यात्रा टिकट (बस / रेल) के उत्पादन पर निवास स्थान (आवेदन के अनुसार) या वास्तविक प्रारंभिक स्थान, जो भी कम हो, से सबसे छोटे मार्ग के लिए शयन श्रेणी हेतु रेल किराए की प्रतिपूर्ति की जाएगी।

No TA/DA will be paid towards attending the Interview. Outstation SC/ST candidates called for interview will be reimbursed to and fro sleeper class rail fare by the shortest route from the place of residence (as per application) or actual starting place whichever is less on production of travel (Bus / rail ticket).

7. चयनित अभ्यर्थी भारत में कहीं भी,रासप्रौसं के किसी भी केंद्र में कार्य करने के लिए उत्तरदायी हैं।

The candidates selected are liable to work anywhere in India in any of the Centers/project sites of NIOT.

8. रासप्रौसं पारगमन और अन्य किसी भी प्रकार की देरी के लिए कोई जिम्मेदारी नहीं लेगा ।

NIOT cannot take any responsibility for transit and other delays.

9. रासप्रौसं बिना कोई कारण बताए पद को न भरने का अधिकार सुरक्षित रखता है।

NIOT reserves the right not to fill up the post without assigning any reasons what so ever.

10. किसी भी रूप में पक्षप्रचार को अयोग्य माना जाएगा।

Canvassing in any form will be treated as disqualification.

11. इस विज्ञापन के संबंध में कोई भी अवांछित संचार सख्त रूप से निषेध है।

Any unsolicited communication regarding this advertisement is strictly prohibited.

12. आवेदन की पात्रता, स्वीकृति या अस्वीकृति से संबंधित सभी मामलों में रासप्रौसं का निर्णय अंतिम होगा और इस संबंध में किसी भी व्यक्ति या एजेंसी से कोई पूछताछ या पत्राचार पर विचार नहीं किया जाएगा।

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.

13. साक्षात्कार के लिए प्रवेश पत्र पंजीकृत ईमेल के माध्यम से भेजे जाएँगे।

The call letter for Interview will be communicated through the registered email.

ऑनलाइन आवेदन जमा करने की अंतिम तिथि /
LAST DATE FOR ONLINE APPLICATIONS   :   **2nd JUNE 2023**