### **EARTH SYSTEM SCIENCE ORGANISATION**



#### NATIONAL INSTITUTE OF OCEAN TECHNOLOGY

(An Autonomous society under Ministry of Earth Sciences, Govt. of India) NIOT Campus, Velachery–Tambaram Main Road, Pallikaranai, Chennai-600 100 Phone: 91-44-6678 3310/6678 3300 Fax: 91-44-6678 3308

### ADVERTISEMENT No. NIOT/E&P/ 02(PROJECT)/2015

National Institute of Ocean Technology (NIOT), Chennai, a technical arm of the Ministry of Earth Sciences, Govt. of India, is functioning with the broad objective of promoting technology development in activities related to Ocean Engineering and Ocean Resource utilization. The Institute has taken up various research projects in the area of Ocean Energy and Fresh Water, Off-shore Structural Components, Deep Sea Technologies and Ocean Mining, Coastal and Environmental Engineering, Ocean Acoustics, Ocean Observation Systems, Submersibles and Gas Hydrates, Marine Sensors and Systems, Ocean Electronics and Marine Biotechnology for Islands. In order to carry out the research and development activities of the projects, the Institute is looking for Project Scientists and other Project staff on contract basis. Applications are invited from the interested and eligible Indian nationals to fill up these posts.

The candidates should apply on-line and forward a hard copy duly signed by Post along with Registration No. (Obtained by online submission) enclosing the requisite copies of certificates.

Qualification in the relevant discipline and Job requirement in one or more of the areas as mentioned against each post are required.

I. Name of the Post Project Scientist - I (26 Posts)

Salary Range Pay scale Rs.15,600-39,100/- + Grade Pay Rs.5,400/-

Age Limit Below 35 years

Post Code	PS101-MECH
No. of Post(s)	7 (Seven)
Discipline	Mechanical
Eligibility Criteria  EFW-4 MSS-1 VMC-1 OOS-1	Essential: Bachelor's degree in Mechanical / Production/Ocean Engineering/Naval Architecture or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Master's degree in Mechanical / Production/Ocean Engineering/Ocean Technology from a recognized university or equivalent.
Job Requirement	<ul> <li>i) Design and analysis of thermal / mechanical systems, rotating machinery, assembly and integration of systems, computational fluid dynamics preferable.</li> <li>ii) Machine Design (Dynamics &amp; Analysis / ADAMS / related software)</li> <li>iii) Dynamic simulation/Modelling studies of Mechanical and Electronics Systems using standard software's. Design and development of</li> </ul>

	underwater sensors. Design of underwater electronic casings and
	fixtures for various projects.
iv	y) Modelling using Software's like AUTOCAD/ATILA/ANSYS/
	Pro-E/Inventor/COVENTER/COMSOL. Design of floating
	platforms/Design of moving platform/structural analysis.
v	) Knowledge to prepare and verify the Technical
	Specification/drawings/documents of ships. Regular ship inspection
	on board; maintenance of various scientific, navigation and
	communication equipments onboard.
V	i) Trouble-shooting and providing innovative solutions to improve the
	operations of vessels and scientific equipments.
V	ii)Cruise planning/ Interaction with ports and also knowledge of
	construction of ships/dry dock work supervision.

Post Code	PS102-CVL
No. of Post(s)	3 (Three)
Discipline	Civil/Structural Engineering
Eligibility Criteria	Essential: Bachelor's degree in Civil/Structural Engineering or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Master's degree in Civil/Ocean/Structural Engineering from a recognized university or equivalent.
Job Requirement  OSS-2 Seafront-1	<ul> <li>i) Co-ordination, analysis, design and execution of Civil / Structural works for island based desalination plants, Analysis of the offshore components such as moorings, fixed/floating structures, numerical modeling of coastal/oceanographic processes at structures, analysis and design of submarine pipeline, material studies for desalination and offshore structures.</li> <li>ii) To carry-out Project Management &amp; Construction, Execution of Multistoried &amp; Industrial buildings, Pile foundations, Tendering, Estimating and costing of works, measurement and certification for payment of bills etc.,</li> </ul>

Post Code	PS103-INSC
No. of Post(s)	1 (One)
Discipline	Electronics & Instrumentation
Eligibility Criteria	Essential: Bachelor's degree in Electronics & Instrumentation Engineering or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Master's degree in Electronics & Instrumentation Engineering from a recognized university or equivalent.
Job Requirement	(i) Development and Implementation of Underwater Signal Processing Algorithms. Development of hardware and software
MSS-1	required for various project under NIOT. Should be familiar with Electrical simulation studies and power calculations of Underwater Systems and Sub systems.

Post Code	PS104-EEE
No. of Post(s)	1 (One)
Discipline	Electrical & Electronics
Eligibility Criteria	Essential: Bachelor's degree in Electrical & Electronics Engineering or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Master's degree in Electrical & Electronics Engineering from a recognized university or equivalent.
Job Requirement  VMC-1	<ul> <li>i) Regular Ship board inspection on maintenance of various scientific, navigation and communication equipments onboard.</li> <li>ii) Knowledge on ships electrical system wiring, cable routing and general electrical maintenance.</li> <li>iii) Testing and control panels, erection of electrical component and Installation of scientific equipment onboard and</li> <li>iv) Knowledge of construction of ships/dry dock work supervision.</li> </ul>

Post Code	PS105-ECE
No. of Post(s)	4 (Four)
Discipline	Electronics & Communication-3 Nos.
	Electronics & Media Technology - 1 No
Eligibility Criteria	Essential: Bachelor's degree in Electronics & Communication  Engineering or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Master's degree in Electronics & Communication Engineering
	from a recognized university or equivalent.
Job Requirement DST-1 OE-2 VMC-1	<ul> <li>i) Acoustic signal processing and Embedded electronics system design &amp; software development using C/C++</li> <li>ii) Experience in microcontroller design, programming languages C, C++, and Visual basic.</li> <li>iii) Design and Development of Data Acquisition &amp; Control system for subsea applications.</li> <li>iv) Knowledge of Embedded system design, Digital signal processing and programming with MATLAB.</li> <li>v) Knowledge to operate and maintain survey and sampling equipment's.</li> <li>vi) Maintenance of all survey equipments, data analysis and its backups.</li> <li>vii) Trouble-shooting and providing innovative solutions to improve the operations of vessels and scientific equipments</li> <li>viii) Control system wiring, loop testing electronics instruments calibration and software testing.</li> </ul>

Post Code	PS106-GEO
No. of Post(s)	1 (One)
Discipline	Marine Geophysics
Eligibility Criteria	Essential: Master's degree in Geophysics / Applied Geophysics / Marine Geophysics or equivalent from a recognized university / institution with at least first class not less than 60% marks.
	Desirable: Ph.D. in Marine Geophysics with specialization in Sedimentology / Sediment Dynamics / Geoexploration.
Job Requirement	(i) Knowledge in swath bathymetry (MBES) data collection and
VMC-1	able to take appropriate decision while monitoring date quality and also to ensure date validity as per given procedure.
	(ii) Knowledge in processing & analysis of multi-beam data and prepare DTMs as per given procedure.
	(iii) Knowledge to carryout Geophysical Analysis of the results and
	(iv) Maintenance and operation of shipboard/lab scientific equipments.

Post Code	PS107-OPO
No. of Post(s)	4 (Four)
Discipline	Oceanography / Physical Oceanography / Physics
Eligibility Criteria	Essential: Master's Degree in Oceanography / Physical Oceanography / Physics, Ocean Sciences, Ocean Technology or equivalent from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Doctorate in the relevant field.
Job Requirement	i) Knowledge in operating CTD, ADCP and other shipboard scientific equipments.
VMC-1 OOS-3	<ul> <li>ii) Oceanographic date collection, data processing and application of numeric models.</li> <li>iii) Maintenance and operation of shipboard/lab scientific equipments.</li> <li>iv) Analysing oceanographic data using tools like MATLAB, Ferret etc.</li> <li>v) Participating in cruises for the maintenance of ocean observation platforms.</li> </ul>

Post Code	PS108-LS
No. of Post(s)	2 (Two)
Discipline	Life Sciences-1 & Organic Chemistry-1
Eligibility Criteria	Essential: Master's Degree in Life Science/ Marine Biology/Organic Chemistry from a recognized university/Institute with at least first class not less than 60% marks.  Desirable: Doctorate in the relevant field.
Job Requirement OSTI-2	i) Collection, isolation, identification, maintenance, mass culture and biochemical analysis of marine micro algae / macro algae. Collection, isolation, identification, maintenance, mass culture and biochemical analysis of marine microbes. Physico-chemical and biological analysis of seawater and sediment. Extraction, isolation of bioactive and anti microbial compounds from marine organisms. Biochemical / molecular analysis and/or characterization of bioactive compounds extracted from marine organisms. EIA studies related to coastal and marine environment.

Post Code	PS109-OE
No. of Post(s)	2 (Two)
Discipline	Ocean Engineering
Eligibility Criteria	Essential: B.E/B.Tech in Civil/Ocean/Mechanical/Naval Architecture or Equivalent from a recognized university/Institute with at least first class not less than 60% marks.
	Desirable: Master's degree in Civil/Ocean/Mechanical/Naval Architecture from a recognized university or equivalent.
Job Requirement	i) Knowledge in Physical model testing, floating body dynamics with preferably hands-on experience in simulating
E&FW-2	offshore components using tools MOSES or ORCAFLEX.  ii) Design and analysis of offshore components/systems.

Post Code	PS110-GI & RS
No. of Post(s)	1 (One)
Discipline	GIS & Remote Sensing
Eligibility Criteria	Essential: B.E/B.Tech in GeoInformatics/ Geomatics or M.Sc in GeoInformatics/GIS/Remote Sensing or Equivalent from a recognized university/Institute with at least first class not less than 60% marks.
	Desirable: M.Tech/M.E/M.S in GeoInformatics / GIS & Remote Sensing.
Job Requirement	iii) R&D in Ocean sciences, Data collection, processing and
OSS-1	analysis of remote sensing date, preparation of GIS maps.  Application of satellite data in Earth system sciences, Collection and processing of Bathymetry and Topography, Oceanographic data application of GIS and remote sensing in Ocean and Coastal processes studies. Working knowledge of GIS software like ArcGIS, QGIS, ERDAS etc.,

## II. Name of the Post Project Senior Executive (Audit) (2 Posts)

Consolidated Salary: Rs. 36,213/- per month

Age Limit below: 35 years (Relaxable to retired Govt. employees / Ex-Servicemen upto 62 years)

Post Code	PSE-111
No. of Post(s)	2 (Two)
Eligibility Criteria	Essential: -
	i) A bachelor's degree from a recognized University, basic knowledge of
	computer
	ii) Minimum 7 years experience in Auditing/ Taxation in
	Government/PSU/ Central Autonomous Bodies
	Desirable :- A pass in SAS examination conducted by CAG or equivalent.

Job Requirement	i) Checking of bills
	ii) Pro auditing of progurement proposals and contracts in compliance
	ii) Pre-auditing of procurement proposals and contracts in compliance with General Financial Rules/ Delegation of Financial Power Rules of
	Government of India

III. Name of the Post Project Junior Assistant (4 Posts)

Consolidated Salary: Rs. 18,531/- per month

Age Limit Below: Below 28 years

Post Code	PJA-112
No. of Post(s)	4 (Four)
Eligibility Criteria	<ul> <li>i) 10+2 or its equivalent qualification from a recognized Board or University.</li> <li>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).</li> <li>iii) Desirable:- Graduation from Recognized University.</li> </ul>
Job Requirement	<ul> <li>i) Office Management, Administration, imports, purchases, Finance, etc.</li> <li>ii) Knowledge of word processing and data entry essential.</li> </ul>

# **General Conditions:**

### The candidates are requested to note the following:

- 1. Candidates must be citizens of India.
- 2. The application form is available online **NIOT** website on 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, duly sign and send it to NIOT along with copies of the following certificates to reach by 09.10.2015. 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. The application without the following enclosures shall summarily be rejected.
  - i) Qualification certificates
  - ii) Mark List
  - iii) Experience certificates
  - iv) Caste certificate in the prescribed form issued by the Competent Revenue Authority.
- 3. Paste a recent passport size colour photograph in the space provided for at the right top portion on the first page of the application.
- 4. Experience in a discipline / area of work, wherever prescribed, shall be counted after the date of acquiring the minimum prescribed qualifications for that post.
- 5. 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 SC/ST and candidates working in Government of India / Autonomous organizations of GOI; 10 years in age is applicable to physically disabled persons and 3 years for OBC candidates.
- 6. Women candidates fulfilling the requirements are encouraged to apply for the posts.
- 7. Candidates who are in Government / autonomous Institutions and PSU should forward their applications only through proper channel.
- 8. NIOT may fix suitable norms for short listing the applications depending upon the vacancies available and the area in which the vacancies exist.
- 9. Mere possession of the education qualifications and requisite experience will not entitle any right to be called for interview or selection.
- 10. The Advt. No., Post No., Post Name and Discipline should be clearly indicated on the envelope.
- 11. The candidates selected are liable to work anywhere in India and can be posted in any of the projects of NIOT.

- 12. Self attested copies of certificates / testimonials (for age, qualification and experience proof) should be enclosed along with the applications. Enclose list of publications / reprints etc., if any also with the application. Write "Enclosure Sl. No. \_\_\_\_\_\_' as mentioned in the application.
- 13. 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.
- 14. The number of posts mentioned in the advertisement may vary depending upon the requirements. NIOT reserves the right not to fill up any post(s) without assigning any reasons what so ever.
- 15. Canvassing in any form will be treated as disqualification.
- 16. Any unsolicited communication regarding this advertisement is strictly prohibited.
- 17. The decision of NIOT in all matters relating to eligibility, acceptance or rejection of application shall be final and no enquiry or correspondence will be entertained in this connection from any individual or his/her agency.
- 18. The engagement is time bound and purely temporary on contract basis for a fixed term.
- 19. The duration of the engagement would be for a period till 31.03.2017 or co-terminus with the project in which he/she is engaged, whichever is earlier.
- 20. If the candidate wants his/her application to be considered for more than one post, separate application should be submitted for each post.
- 21. The candidates selected against the post with Life Science qualification are liable to be posted in Andaman & Nicobar / Lakshadweep Islands.
- 22. Marine / ocean technology related experience will be an added advantage.

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 "Project Scientists and other Project Post".

LAST DATE FOR ONLINE APPLICATIONS : 01.10.2015

LAST DATE FOR RECEIPT OF APPLICATIONS : 09.10.2015

**DIRECTOR**