Appointmente will be subject to receipt of a NATO SECRET security clearance (provided by the national Authorities of the selected candidate) and approval of the candidate’s medical file by the CMRE Medical Adviser.

CMRE is looking for a senior scientist to lead our Modelling and Simulation project. This project is within the Maritime Unmanned Systems Enablers (MUSE) programme within our Research Division. The M&S team is a group of young dynamic individuals who have been increasing the interest in M&S, in particular for the test, evaluation, validation, and verification of Maritime Unmanned Systems. This project has increased significantly over the past few years that we are now in need of a Senior Scientist to lead it.

GENERAL BACKGROUND

The Centre for Maritime Research and Experimentation (CMRE) is part of the NATO Science and Technology Organization (STO). CMRE is an established, world-class scientific research and experimentation facility that organizes and conducts scientific research and technology development, centred on the maritime domain, delivering innovative and field tested Science & Technology (S&T) solutions to address defence and security needs of the Alliance.

CMRE has more than 60 years of experience and has produced a cadre of leaders in ocean science, modelling and simulation, acoustics and other disciplines, as well as producing critical results and understanding that have been built into the operational concepts of NATO and the Nations.

POST DESCRIPTION

Location: La Spezia, Italy, 80 Km north of Pisa, on the Gulf of La Spezia
Division: Research Division

POST CONTEXT

The position is within the Research Division (RD), which is responsible for identifying, developing and delivering Science & Technology (S&T) solutions to the needs of the Alliance in the maritime domain.
The Division leads the development of CMRE’s scientific strategy and through its capability in ocean sensing, numerical modelling, big data analytics, artificial intelligence and autonomy, delivers the Centre’s S&T goals while maintaining CMRE’s reputation within the scientific community.

The Research Division comprises the four following sections:

1. Antisubmarine Warfare (ASW)
2. Mine Countermeasures (MCM)
3. Data & Environmental Knowledge and Operational Effectiveness (D-EKOE)
4. Maritime Unmanned Systems Enablers (MUSE)

The position is within the MUSE Section. The Senior Scientist will lead the “Modelling and Simulation” Project within the Maritime Unmanned Systems Enablers (MUSE) Programme, responsible to support the program of work in developing and investigating innovative scientific research.

The expected scientific focus is the area of Modelling and Simulation (M&S), where CMRE aims at developing a cohesive capability in support of its programme of work. CMRE is particularly interested in developing M&S capabilities in support of:

- Concept Development,
- Test, Evaluation, Validation and Verification of Maritime Unmanned Systems (MUS) with the aim to contribute to the development of the MUS capability within CMRE and the NATO Nations.

The Scientist will be responsible (in coordination and under guidance of the Section Head) to define and monitor the execution of a coherent program of work, lead research topics and coordinate a team that works towards achieving set objectives.

The scientist may also be involved within other projects within the CMRE Program of Work. Under the guidance of the MUSE Section Head, the incumbent will be responsible to support the Centre’s research and development in Modelling and Simulation in close collaboration with researchers in the Anti-Submarine Warfare, Mine Countermeasures, Maritime Surveillance, Military Oceanography and Ocean Engineering Programmes to support the overall execution of the CMRE Programme of Work.

**PRINCIPAL DUTIES**

Reporting to a Section Head or a Division Head and working within a matrix structure, the incumbent will perform duties such as the following:

- Defines a scientific program of work in accordance with the programmatic objectives;
- Monitors the execution of the program and guarantee quality within budget and time;
- Provides scientific oversight for the project;
- Prepares scientific proposals for funding agencies / sponsors;
- Assigns work and monitor execution;
• Takes active part in research tasks.
• Conducts research tasks and produce reports as outputs;
• Represents CMRE in meeting and panels;
• Presents results and research direction to sponsors and steering bodies and other communities of interest;
• Runs meetings and workshops;
• Supports the Section Head, Head of Research Division and senior management.

SPECIAL REQUIREMENTS AND ADDITIONAL DUTIES

Flexibility Clause

• The incumbent may be required to perform other related duties even in other parts of the organization as directed.

• As required by the Program of Work, the incumbent may be asked to participate in working groups or project teams and to coordinate and organize the work of other scientists and staff.

All other related duties should correspond with the required competencies for the job.

Deployment/Travel

The incumbent may be required to perform his/her duties onboard Centre or chartered vessels. The incumbent may be required to undertake TDY assignments within and outside NATO boundaries. The duties are mostly performed in an administrative environment but may include work on board of a vessel. The duties are performed indoor and outdoor subject to changing conditions and can involve physical labor. Undesirable working conditions may apply.

ESSENTIAL QUALIFICATIONS

Professional/Experience

• A broad-based knowledge and experience of M&S fundamentals and methodologies;
• Hands-on experience with development and/or implementation of M&S standards;
• Experience with serious gaming;
• Experience with simulation-based training and education;
• Experience in simulation for decision support, experimentation, engineering or other areas not related to training;
• Solid knowledge and scientific experience in physics, mathematics, engineering or related field, demonstrated by a record of accomplishment of scientific and/or technical publications in the fields of application of M&S;
• Experience in proposing and conducting scientific project work within a multi-national environment and interacting with research sponsoring agencies, demonstrated through successful proposal submissions and projects participation;
• Exposure to the international and NATO M&S communities;
• Demonstrated ability to coordinate work of a team;
• Demonstrated ability to plan and execute experimental activities / table-top exercises.
Education/Training

- MSc degree in physics, mathematics, engineering or related technical field with a specific focus on marine robotics and at least 5 years post-MSc experience in physics, mathematics, engineering or related technical field with a specific focus on robotics.

Language Requirements

A thorough knowledge of one of the two NATO languages, both written and spoken, is essential and some knowledge of the other is desirable.

English SLP 3333

NOTE: Most of the work of CMRE is conducted in the English language.

DESIRABLE QUALIFICATIONS

- Ph.D. in physics, mathematics, engineering or related technical field with a specific focus on robotics.
- Project management certification (e.g. PRINCE2)
- Navy operational education/training
- Demonstrated capability to obtain funding for new research activities;
- Experience working with Navy and/or Defence organizations;
- A broad experience of collaboration with academia, industry and National labs in the field of underwater technology;
- Knowledge of NATO structure and objectives.
- Standard Language English 4444 (Listening, Speaking, Reading and Writing);
- Other NATO language, French, (besides mother tongue) at proficiency 3333.

REMARKS:

The successful candidate will be offered a 3-year definite duration contract, which may be renewed.

HOW TO APPLY:

Applications are to be submitted using the NATO Talent Acquisition Program (NTAP) https://nato.taleo.net/careersection/2/jobdetail.ftl?job=220667&lang=en. Applications submitted by other means are not accepted. NTAP allows adding attachments.

Essential information must be included in the application form. Particular attention should be given to Education and Experience section. Each question should be answered completely. Expressions such as “please see annex / enclosed document” or invitations to follow links to personal webpages are not acceptable and will be disregarded. All answers should be in English preferably, or French.