



## VACANCY ANNOUNCEMENT

**Vacancy Number 1/2013**

**Post Title: Scientist (Maritime Security Programme)**

**NATO Grade A-3**

**NATO STO Centre for Maritime Research and Experimentation,  
La Spezia, Italy**

**Closing Date: Monday, 28 January 2013**

Applications are invited from qualified candidates and redundant staff for the position of scientist available in the Research Department, Maritime Security Programme.

Depending on qualifications, this post is offered at the Senior Scientist (NATO grade A-3) level.

### **A. General**

CMRE conducts a basic and applied research program that is dedicated to fulfilling NATO's Operational Requirements in the maritime environment. Unique in its international makeup, CMRE maintains a strong reputation for bringing the best and brightest scientists in maritime disciplines together to solve problems related to capability development for NATO. The Centre has an interdisciplinary scientific complement of rotational scientific staff drawn from NATO member nations. Technical support is provided by permanent staff, trained in engineering and other technical related disciplines. The Centre operates two of the finest research vessels in the world, the Alliance and the Leonardo.

The Research Department is involved in concept development for Maritime Security missions, including maritime situational awareness, maritime interdiction operations, counter-piracy, force protection, and critical infrastructure protection. To this end, CMRE develops prototype systems, conducts studies, and performs experimentation related to the development of concepts in areas of interest to Maritime Security and other applications.

### **B. Reports to: Head Research Department**

### **C. Responsibilities and duties of the post**

The successful candidate will be responsible, under the guidance of the program manager and department head, for conducting research in the following areas:

- Evaluation of tools, technologies and techniques for Maritime Security applications, including new sensors and platforms

- Application of tools, technologies and techniques to emergent maritime operational and technical requirements
- Application of autonomous systems for maritime security, including above and/or under-water missions

Responsibilities include:

- Evaluating sensors and/or platforms for suitability to fulfil operational and technical requirements
- Determining technology gaps and technical requirements for maritime security missions
- Providing innovative solutions to fulfil technical requirements for NATO's capability development process
- Planning and execution of experiments or sea-trials with multi-sensor data feeds, possibly from ships, aircraft, autonomous vehicles, space-based sensors, and/or other available systems
- Conducting statistical analysis of performance by theory, simulations and/or trials/experiments
- Documentation of all research activity in reports and publications
- When appropriate, supervision of a team of scientific assistants and visiting researchers.

This work will be performed in close cooperation with other team members, projects, organizations and with nations via collaborative research and partnerships.

#### D. Qualifications:

##### Essential qualifications

1. *Professional experience*
  - a. Strong background in applied science, with in-depth knowledge of at least one area of relevant technical expertise
  - b. Background in experimentation, scientific trials, or the testing of new sensors or systems
  - c. Demonstrated ability to work on multidisciplinary, applied projects
  - d. Demonstrated ability to lead and work on team projects
  - e. Demonstrated problem solving abilities
  - f. Modelling and simulation techniques
  - g. Statistics and statistical analysis
  - h. Optimization techniques
  - i. Report writing background
  - j. Computer skills including algorithm development in either Matlab, C/C++, C#, or Java, or similar.

2. *Education/training*

	EDUCATION				
	PhD	MSc/MA	BSc/BA	Higher Secondary	Secondary

				<b>Education (12-13 years of education)</b>	<b>Education (9-11 years of education)</b>
<b>Minimum years of experience required</b>	3	5	7	12	N/A

The degree must be in engineering, mathematics, physics, or related discipline, or (exceptionally) equivalent relevant work experience.

3. *English:* SLP 3333 (listening, speaking, reading and writing). Note: the work in this post and organization is conducted mainly in English, both written and oral. French is the other official language of CMRE.

4. *Security clearance:* Any contract offered will be subject to the successful candidate obtaining NATO secret clearance. Prior to appointment, the NATO body must have received a security clearance certificate from the government of the country of which the candidate is a national.

5. *Standard Automatic Data Processing Knowledge*

Word Processing:	Working knowledge
Spreadsheet:	Working knowledge
Graphics presentation:	Working knowledge
Database:	Working knowledge
eMail Clients/Web Browsers:	Working knowledge
Web Content management:	Basic knowledge

### **Desirable qualifications**

1. *Professional experience*
  - a. Comprehensive knowledge of:
    - a. Operational requirements definition and their subsequent analysis
    - b. Concept Development and Experimentation (CDE) process
    - c. NATO DOTMLPFI<sup>1</sup> or national equivalent
  - b. Decision Support Modelling
  - c. Data and Sensor Fusion
  - d. Remote Sensing
  - e. Proposal writing
  - f. Sea trials
  - g. Prior experience of working in an international environment

<sup>1</sup> Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, Interoperability

2. *Education/training:* PhD in engineering, mathematics, physics, or related discipline.

3. *English:* SLP 4444

### **E. Personal attributes**

The incumbent must be highly articulate and persuasive possessing tact and diplomacy. He/She must have a proven ability to work with no supervision and is expected to be a proactive self-starter. Must possess keen perception and apply sound judgment, which must take due account of political realities. Frequent requirement for original thought. The incumbent must be capable of working in a demanding environment, be clear, concise, and convincing in written and oral presentations, and flexible in response to changing requirements. He/She must also have:

- Ability to conduct applied scientific research
- Ability to work harmoniously with colleagues and other staff, both civilian and military, from NATO nations, as well as staff from private scientific / industrial organisations.
- Demonstrated leadership and management capabilities.
- Personal qualities of tact, judgment and adaptability.
- Ability to tactfully and effectively interface with senior management personnel, peers, and subordinates.
- Good political awareness and motivational and listening skills.
- A sense of diplomacy and propriety in order to work harmoniously with colleagues and other staff, both civilian and military, as well as with staff from private scientific/industrial organizations.
- Ability to explain project related work to non-expert audiences.
- Creativity, adaptability and self-motivation required for daily work
- Good communication skills both oral and written

### **Managerial responsibilities**

Ability to supervise the work of research assistants and visiting researchers as required. Incumbent may be required to supervise groups, which involves the direction, planning and coordination of diverse subjects. This work involves projects and programmes which engage multiple parts of the organisation and often involves interaction with external organisations.

### **Professional contacts**

Has professional contact typically at senior management level inside and outside the Centre. Interface with other NATO and national commands and research agencies to exchange technical information and data. Develops policy and processes which require explanation, discussion, persuasion and approval of actions. Requires good negotiating skill, tact and persuasion to conduct significant discussions at senior committee level with representatives of NATO nations or other NATO bodies on behalf of the CMRE.

### **Contribution to the Objectives**

Provides leadership in several key aspects of the performance of the Programme of Work and Customer Work Programme. Acts as a group leader for a group of scientists organised by disciplines and as a senior researcher.

## **F. Work environment**

This work is normally performed in a typical office environment. Normal working conditions apply. The risk of injury is categorised as no risk. Note: it may be required to perform duties at sea, on any of the centre ships or other ships or platforms that may be involved.

## **G. Contract**

The attention of candidates is drawn to the fact that this is a research post in a scientific establishment. Therefore the successful candidate will be offered a 3-year definite duration contract which, subject to satisfactory performance and organizational requirements, may be renewed for a further period of up to 3 years.

CMRE offers a comprehensive benefits package including tax-free remuneration, 6 weeks annual vacation, life and medical insurance, a retirement plan, educational allowance for dependent children and paid travel to the home country for the member and family every two years.

## **H. Application procedures**

Qualified candidates must submit the completed [CMRE application form](#) indicating the vacancy number and the post title. A covering letter explaining how their experience and qualifications fit them to the specified requirements of the post should also be included. Copies of certificates covering the highest level of education required by the job description must be submitted together with the application form. Applications must be submitted either (1) by ordinary mail addressed to: Human Resources Branch, CMRE, a NATO Research Centre, Viale San Bartolomeo 400, 19126 San Bartolomeo, La Spezia, Italy or (2) electronically (preferable) to: [recruitment@cmre.nato.int](mailto:recruitment@cmre.nato.int) (in this latter case the application form and its supporting documents such as continuation sheets and copies of certificates, must be sent as a single word document).

Closing date for receiving applications: Monday 28 January 2013.

**Notes for candidates:** the candidature of NATO redundant staff will be considered and evaluated before any other candidature.

Applicants who are not successful in this competition may be offered an appointment to another post of a similar nature, albeit at the same or a lower grade, provided they meet the necessary requirements.

**Notes for NATO civilian personnel officers/human resources managers:** if you have any qualified redundant staff of same grade, please advise CMRE either by message or e-mail ([recruitment@CMRE.nato.int](mailto:recruitment@CMRE.nato.int)) no later than 24 January 2013.

**Remarks:** only nationals of the 28 NATO member countries can apply for vacancies at CMRE. The NATO member countries are: Albania, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, the Netherlands, Turkey, United Kingdom, United States.

**POC:** Human Resources Section ([recruitment@cmre.nato.int](mailto:recruitment@cmre.nato.int))