

Research Engineer in electrochemistry F/H

REF: MB/IRELEC/DMSI

Full-time position (CDI)

Location: Paris 15ème (FRANCE)

LNE:

Leader in the world of measurement and reference, with a strong reputation in France and at the international level, LNE supports industrial innovation and is an important player for a more competitive economy and a safer society.

At the crossroads of science and industry since its creation in 1901, LNE offers its expertise to all economic players involved in product quality and safety.

As the driving force behind French metrology, our research is at the heart of our public service mission, and is a fundamental factor in supporting the competitiveness of companies.

We give answer to the industry and academia needs for ever more accurate measurements, carried out under increasingly extreme conditions and on innovative subjects such as autonomous vehicles, nanotechnologies or additive manufacturing.

Missions:

The Chemistry and Biology Division within the Scientific and Industrial Metrology Direction is responsible for developing and maintaining metrological references for chemical analyses. Within the Biomedical and Inorganic Chemistry Department, you will be responsible for the electrochemistry activity, in particular for primary pH and conductimetry measurements. These activities are aimed at satisfying the needs of end-users in the fields of industry and research, in particular in the context of collaborations with the oceanographic community in charge of the study of the ocean acidification phenomenon.

Within the Biomedical and Inorganic Chemistry Department, your missions will be the following:

- To lead the primary measurements of pH by potentiometry using the Harned cell (primary method for pH) and of electrolytic conductivity,
- Carry out the characterisation of certified reference materials,
- Participate in inter-laboratory comparisons in the framework of international metrology (BIPM and EURAMET),
- Coordinate and participate in research projects in these fields at national, European and international levels,
- To publish research results in peer-reviewed scientific publications and to communicate at national and international conferences,
- To design and carry out high added-value services for industry and laboratories,
- To contribute to the supervision of PhD students, master students and technicians,
- To contribute to the maintenance and improvement of the quality system of the Chemistry and Biology Division under ISO 17025 accreditation.

Profile:

You have a PhD in electrochemistry or physical chemistry with a strong knowledge of solution electrochemistry. You have acquired solid skills in thermodynamics and electrochemical equilibria. You are at ease with mathematical equations and expressions.

You have more than 5 years of professional or academic experience.

Experience in applied studies of ocean or climate system is desirable.

You have a real taste for laboratory activity, validation of analytical methods and evaluation of measurement uncertainties.

You enjoy teamwork in project mode with internal and external partners.

In addition to your technical skills and knowledge, you are also recognised for your organisational skills, versatility, teamwork, leadership of group work and autonomy.

Your analytical skills and ability to summarise enable you to show initiative and propose solutions.

English is essential.

Short trips for research and partnership building activities are to be expected.

Please send your application (CV and cover letter) to the following address with the reference of the offer MB/IRELEC/DMSI:

paola.fisicaro@lne.fr / recrut@lne.fr