

Job vacancy notice

Physicist/Electrical Engineer – Electrical Metrology

The International Bureau of Weights and Measures (BIPM) is an intergovernmental organization whose mandate is to provide the basis for a coherent system of measurements throughout the world, traceable to the International System of Units (SI). The BIPM is based in Sèvres, in the outskirts of Paris (France), and has an international staff of about 74. Further information can be found on www.bipm.org.

The BIPM seeks to recruit a candidate with expertise in electrical impedance metrology for the following post within the Physical Metrology Department:

Post:	Physicist
Category:	A
Grade:	8 – 9, commensurate with qualifications and experience
Deadline for applications:	12 February 2018
Indefinite-term Appointment - Full-time	

The Physical Metrology Department of the BIPM maintains Josephson voltage standards and quantum Hall resistance standards as international reference facilities for the comparison and calibration of national electrical standards, to underpin the international coherence of electrical measurements. The department is active in developing new state-of-the-art electrical standards for future services and for research related to fundamental constants. The Department is also involved in the development of a watt balance, which will support the future redefinition of the unit of mass, the kilogram, with respect to the Planck constant.

Principal duties and responsibilities

- Organize measurement comparisons in the field of resistance and capacitance with National Metrology Institutes, including a series of on-site comparisons requiring travel to laboratories worldwide;
- Supervise and carry out calibrations of resistance and capacitance standards for National Metrology Institutes;
- Participate in the maintenance and improvement of the quantum standards and the related measurement systems;
- Participate in a precision experiment to determine the value of the von Klitzing constant, by using the quantum Hall effect and a calculable capacitor;
- Participate in the development of an ac quantum Hall system for capacitance traceability;
- Identify the needs for new methods for inter-laboratory comparisons;
- Participate in the development of the long-term scientific strategy of the Department;
- Represent the BIPM on meetings and conferences.

Necessary skills, qualifications and experience

- PhD in relevant field (physics, electrical engineering), candidates possessing a lower degree and having appropriate work experience will be considered;
- Strong technical skills in the field of ac coaxial bridges at a high level of accuracy and/or in the quantum Hall effect and related dc bridges;
- 5 years of experience in one or both of these fields;
- Knowledge of measurement uncertainty evaluation and statistical treatment of data;
- A fluent level of spoken and written English (for report writing, oral presentations and technical discussions) and the willingness to acquire a working knowledge of French;
- Ability to work in a team, in a multicultural environment and to maintain good working relations inside and outside the organization.

Terms of Employment

The BIPM offers for this position an indefinite-term appointment, full-time basis, with an initial probationary period of 6 months renewable once for a period of 6 months at a maximum.

The annual gross salary will be from around **46 700 Euros to around 55 700 Euros**, depending on qualifications and experience, plus expatriate and family allowances (if eligible). Salaries and allowances are exempt from income tax in France but taken into consideration for the calculation of the effective taxation rate depending on the marital situation.

Benefits include a minimum of thirty working days' vacation per year. The BIPM provides a contributory pension scheme and private health insurance for staff; health insurance can be extended to cover dependents.

Applications

The BIPM encourages applications from persons with relevant qualifications and experience, regardless of gender or nationality.

Please send a C.V., a list of publications and presentations, and a covering letter (in English or French) to recruitment@bipm.org **by midnight on 12 February 2018**. Applications should include the names of two referees who can comment on your suitability for the post (but only after an interview and referees will not be contacted without permission).

Candidates will be contacted in case of selection for an interview and may initially be requested to participate in a telephone interview.

The BIPM retains the discretion not to make any appointment to this vacancy; to make an appointment at a lower grade in particular if the selected candidate has less than the requested experience; to make an appointment with a modified job description, or to offer a contract term for a shorter duration than indicated in the Vacancy Announcement. The BIPM reserves the right to undertake correspondence only with shortlisted candidates.

Further details

For an informal discussion of the post, please contact the Physical Metrology Department Director, Dr Michael Stock: mstock@bipm.org