Helping the development of new time transfer methods and their use in the UTC

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 time and frequency metrology for the following post within the Time Department:

Post: Physicist
Category: A
Grade: 8 – 9, commensurate with qualifications and experience
Deadline for applications: 18 February 2018

EXTENDED TO 11 MARCH 2018 MIDNIGHT

Indefinite-term Appointment - Full-time

The Time Department computes and disseminates the international reference time scale Coordinated Universal Time (UTC), and provides traceability to the international system of units (SI) to local realizations of UTC maintained in national institutes. For this work, the Time Department collaborates with about 80 Time laboratories worldwide, develops algorithms and specific software and has a laboratory appropriately equipped for the calibration of time transfer equipment in the participating institutes.

Principal duties and responsibilities

Under the supervision of the Time Department Director, the successful applicant will:

- Take part in the generation, maintenance, and improvement of the UTC and all other services of the department;
- Contribute to the set up and test of new time and frequency transfer techniques including reports and assessment of the tested techniques in collaboration with the Time Departments, the NMIs, and the related CCTF Working groups;
- Develop necessary algorithms and their software implementation harmonized with the overall UTC algorithm and software of the Time Departments;
- Coordinate and contribute to the program of calibration of time transfer techniques, including the establishment of correct procedures and data analysis means in cooperation with the CCTF related Working Groups.

Necessary skills, qualifications and experience

- PhD or equivalent qualification in technical fields related to metrology;
- 5-10 year experience of time and frequency metrology, for example in the development and operation of time and frequency transfer techniques, the installation, operation, and development of a time laboratory;
- Good knowledge of the main advanced time and frequency transfer techniques such as TWSTFT, TWOTFT, GNSS based algorithms;
- Knowledge of satellite telecommunication techniques, electronics, navigation systems, geodesy and geophysics;
• Good knowledge of programming languages such as FORTRAN, Matlab, as well as Perl, MySQL, and Unix shell script;
• Good communication and inter-personal skills, capacity to work in a team, to focus on the objectives, to prioritize, and to work in reliable autonomy;
• Sense of commitment, rigour, precision, transparency and a proactive approach on attaining objectives
• A fluent level of spoken and written English (for report writing, oral presentations and technical discussions);
• The ability to work in a multicultural environment and to maintain good working relations inside and outside the organization.

Although proficiency in French is not essential at the outset, the candidate will be expected to acquire a working knowledge of French after taking up the post, with lessons provided as necessary.

**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 47 100 Euros to around 56 100 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) to recruitment@bipm.org by midnight on 18 February 2018 EXTENDED TO 11 MARCH 2018 MIDNIGHT. 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 Time Department Director, Dr Patrizia Tavella. tel.: +33(0)1-45-07-70-76, patrizia.tavella@bipm.org