

In the frame of the QALIPSO project, financed by the French Environmental Agency ADEME, the Department of Atmospheric Sciences and Environmental Engineering (SAGE) of the IMT Lille Douai Engineering School and Research Center in Douai, France (<http://sage.imt-lille-douai.fr/>) has ongoing research activities focused on the contribution of micro-sensors to prompt a change in behavior regarding in favor to indoor air quality.

A 12-month postdoctoral position is available starting January/February 2020 at the department SAGE. The position focuses on a statistical study of multivariate time series of air quality data coming from a pool of 40 identical micro-sensor stations. These stations are located in volunteer families alerted to the indoor air pollution and supported during 4 months to improve their behavior in favor of air quality. The purpose of the job is to hardly investigate the database with data leaning methods in order to identify clusters of pollution and indicators of behavior changes. Algorithms and methods for unsupervised and supervised analysis will be considered. Meanwhile, families will be submitted to psycho-social interviews; the challenge is to interpret data in regard to sociologic conclusions.

He/she will be in charge of updating the bibliography, developing the methodology, treating the available databases, checking the consistency of the results obtained by the sociologist research team and publishing them in peer-review journals. We are looking for a highly motivated researcher, holding a Master of Science or PhD level in instrumentation, metrology with advanced knowledge in data learning and statistics Good writing skills in English language are also needed.

The salary will depend on the scientific degree and experience of the applicant. The position is located at the Department SAGE, IMT Lille Douai, 941 rue Charles Bourseul 59500 Douai (30 km from Lille), France. Applicants should send a motivation letter, detailed Curriculum Vitae and 2 recommendation letters to: - Dr. Marie VERRIELE ([marei.verriele@imt-lille-douai.fr](mailto:marei.verriele@imt-lille-douai.fr)). - Dr. Nathalie REDON ([nathalie.redon@imt-lille-douai.fr](mailto:nathalie.redon@imt-lille-douai.fr)) – Dr. Sabine CRUNAIRE.