

## Research Engineer @ ENPC CEREА

« Research engineer for industrial application in modelling atmospheric dispersion, wind and air quality»

### Context

The Industrial application of atmospheric dispersion modelling, wind modelling and air quality are manifold. They include industrial emission assessment and safety study, estimation of the performance of renewable energy such as wind and solar, urban air quality study. Due to the strong links between CEREА and the energy industry, the CEREА traditionally provides a large panel of atmospheric study and scientific expertise, especially to the EDF engineering divisions and the French government bodies (Ministères). The CEREА has been developing several software on atmospheric modelling and air quality, such as the software included in the Polyphemos platform and the atmospheric version of Code\_Saturne.

### Job description

The successful candidate will deliver studies and scientific expertise on the atmospheric modelling topics for industrial (nuclear, renewables) and social (air quality) applications. He/She will use the Weather Research and Forecast (WRF) model for the meso-scale modelling together with the Polyphemos platform (<http://cerea.enpc.fr/polyphemos>) He/She will discuss the scope of the study with the customer, build the study and deliver the study. He/She will be supervised by senior members of the CEREА. He/She will be asked to disseminate and/or publish and/or protect the scientific innovation HHe/She will develop.

### Skills

The successful candidate will be smart, independent, able to work in a team and successful in discussing with customers and experts and different levels. He/She will be aware of the practical application of the study, ready to suggest innovations which will have a positive impact for the final users. He/She will be particularly focused on the transfer of the knowledge toward the final users and He/She will enjoy the practical side of the application. He/She will have a master degree in engineering sciences (or similar) He/She will have a knowledge in physics and chemistry of the atmosphere and He/She will be expert in numerical modelling, in particular for the topics and software mentioned herein. Fluency in French would be appreciated.

### Logistic

The candidate will be hired by the Ecoles des Pontes ParisTech at the CEREА Lab. He/She will be based at the École des Pontes ParisTech, (6 et 8 avenue Blaise Pascal, Champs-sur-Marne - 77455 Marne-la-Vallée), with regular (monthly) visits at the EDF Lab in Chatou (6 quai Watier, 78400 Chatou). The duration of the position is 24 months, starting on the 1<sup>st</sup> of October 2018, with renew option and the salary will depend on the experience of the candidate.

### Contact

For applications, please send CV and motivation letter to Pietro Bernardara, head of CEREА, [pietro.bernardara@edf.fr](mailto:pietro.bernardara@edf.fr), before the 25<sup>th</sup> September 2018