PostDoctoral Researcher: Modeling biological activity in clouds

The group Biometa (Cloud Group) at the Institute for Chemistry (ICCF), University Clermont-Auvergne, is seeking a Postdoctoral Researcher to extend existing process and regional models to describe biological activities in clouds. The research group is the leading group to analyze data from the Puy de Dôme and other locations for biological cloud water and aerosol constituents. The current project will complement these activities by developing models to include the role of microbiota in cloud formation and processing.

Duties (Foci may be discussed based on interest):

- Complementing existing data bases of ice nucleating particles (INP) using unique data from the Puy de Dôme station; refinement of existing INP parameterizations
- Implementation of INP parameterizations into process and regional models (e.g., Meso NH or WRF Chem) to perform sensitivity and case studies

and/or

- Categorization of existing data on microbial processes in clouds in terms of reactivity, species, products etc
- Development and application of modules describing microbial processes in cloud water in process and regional models

Qualifications:

- PhD in atmospheric science, chemistry physics or related scientific discipline
- Background in cloud chemistry, biology and/or physics
- Experience in development and application of atmospheric models on the process and/or regional scale; knowledge of Fortran or other common programming language
- Ability to effectively perform independent research.
- Excellent verbal and written communication skills as evidenced by published results and presentations.
- Good command of both written and spoken English

Salary: 2 105 € - 2 826 € net salary/month, depending on experience (including social security)

The initial term of appointment is for one year with the possibility of renewal for another year based on satisfactory performance.

Planned project start is January 1st, 2019 or soon after.

Applicants should upload his/her CV and a letter of motivation to the job portal: https://emploi.cnrs.fr/, and also send them together with a short description of previous research and the contact details of two references before November 15th to Barbara Ervens (barbara.ervens@uca.fr)



The position is funded by the French National Research Agency (Agence Nationale de la Recherche, ANR) under the 'Investments for the Future' program, within the framework of the initiative 'Make Our Planet Great Again'.