## Post-doctoral position available at ICARE - CNRS, Orléans (France)

| | |
|---|---|
| **Fields:** | Atmospheric chemistry, analytical chemistry |
| **Subject:** | Atmospheric processes studies |
| **Financial support:** | Project PIVOTS (« Plateformes d'Innovation, de Valorisation et d'Optimisation Technologique environnementaleS » supported by « Région Centre Val de Loire and FEDER european program) |
| **Duration:** | 1 year (extendable 2 years) |
| **Salary:** | Around 1900€, commensurate with experience. This includes social services and health insurance |

The Atmospheric Reactivity group of ICARE (Institute for Combustion, Aerothermodynamics, Reactivity and Environment, a research unit of CNRS) is recognized internationally for its work in atmospheric chemistry related to the air quality and climate change. It has important experimental facilities and has also recently developed a unique experimental platform in France for studies of atmospheric chemical processes (HELIOS). The group is heavily involved in national and international research programs.

The proposed postdoctoral position is focused on one of these projects (PIVOTS) which consists of 6 major experimental platforms, one of which is coordinated by ICARE. This platform entitled "PRAT" (Platform for Atmospheric Reactivity studies) is composed of two sets: (i) HELIOS: the atmospheric simulation chamber with natural irradiation of Orleans which is dedicated to studies of photochemical processes in the atmosphere under controlled and realistic conditions; (ii) the Super-Site VOLTAIRE HELIOS: located at the CNRS campus of Orleans, it is dedicated to the measurement and monitoring of air pollutants (gas and particles, NOx, $O_3$, PM10, …).

The platform PRAT is an open access facility to national and international scientific community for punctual studies, or larger studies as part of joint research projects, including:

- Tests and intercomparisons of instrumentations dedicated to the air characterization (gas and particles),
- Mobile detection of trace gases and toxic particles including: hazardous leaks, indoor and outdoor pollution, pesticides...
- The quality of industrial production, the impact of (raw) materials used for the production on air quality...
- Characterization of outdoor pollution (gases & particles) in relation to transport, heating, industrial activities, fires...
- Studies of impact of the chemical composition of the atmosphere on health,
- Characterization of indoor air pollution (formaldehyde, pesticides, particles...).

### Mission:

The candidate will contribute to the installation and the monitoring development of new analytical instruments. Once developed, these instruments will be coupled to the plateform PRAT for kinetics experiments (HELIOS) and real measurements during field campaigns (Supersite VOLTAIRE)

### Candidates profile:

Background in physical/analytical chemistry and experience in one or more of the fields: atmospheric sciences, kinetics, field measurements
Candidates must have a good capability to communicate (oral and written) in English.

### Application:

Please send a detailed CV, a letter of application with research interest and the name of referees to Véronique Daële (Veronique.daele@cnrs-orleans.fr) and Wahid Mellouki (mellouki@cnrs-orleans.fr)

### Research group Information:

http://www.era-orleans.org/ERA-TOOLS/