Research engineer in atmospheric chemistry M/F

Missions

Under the responsability of the team leader and in coordination with the ACMCC-ACTRIS management team, he/she will be responsible for coordinating and carrying out some of the activities of the Center of Expertise for the Automatic Measurement of Aerosol Chemical Composition (ACMCC), in liaison with its users (20-30 instrumented sites across Europe). In particular, this involves implementing the tools and resources needed to ensure the quality of the data produced by the ACTRIS measurement platforms, including metrological support for operators. As a referent for on-line particle chemistry, he/she will also be responsible for coordinating the work of the European/international community on this subject. Last but not least, he/she will be involved in developing the ACMCC's activities for high-resolution mass spectrometers and other state-of-the-art instruments used in atmospheric simulation chambers.

Activities

Metrological activities:

- Consolidation and development of calibration procedures, and qualification of Aerosol Chemical Speciation Monitor (ACSM) and Aerosol Mass Spectrometer (AMS) instruments.

- Interaction with observatory and simulation chamber operators (within ACTRIS and external users)

- Co-coordination of national and European intercomparison exercises organized at ACMCC.

- Contribute to the development of performance evaluation procedures for mass spectrometers.

- Participation in consulting and R&D activities (e.g., evaluation of new measurement techniques).

Data processing activities:

- Co-supervision of processing and exploitation of associated data in collaboration with ACTRIS national and European data centers.

- Maintenance and ongoing development of observation station data submission tools

- User training

- Development of innovative services (notably real-time source attribution and oxidation properties).

Other activities

- Representation of ACMCC activities at national and international conferences, summer schools and workshops.

- In charge of the ACMCC laboratory (new building 717)

- Writing or co-writing activity reports and scientific articles

- Contribution to ACMCC activity reporting to ACTRIS-FR and ACTRIS-ERIC

- Occasionally (<5% of time) to support other team activities (eg field campaigns).

Profile

Background

Required : Master's degree in atmospheric science, with at least 3 years of experience in aerosol measurements.

Recommanded : PhD in atmospheric science with demonstrated experience in experimental work

Skills

- Required knowledge of environmental chemistry-physics/atmospheric chemistry

- Required experience in aerosol instrumentation/metrology

- Desirable experience in operation and maintenance of aerosol mass spectrometers

- Required experience in data processing with Python and/or R, and Igor is preferred.

- Define and implement a quality approach

- Drafting of technical reports

- Fluency in written and spoken English essential

- Teaching skills: transfer knowledge and skills to different levels of users

Soft skills

- Intellectual curiosity

- Thoroughness

- Critical thinking

- Organizational skills

- Good autonomy in work

- Taste for instrumental developments

- Ability to work as part of a team, including international collaboration.

How to apply

Please send :

- detailed CV
- 3 letters of recommendation
- cover letter (3 pages maximum), explaining how your skills and professional experience match the job profile.

To Valérie Gros (valerie.gros@lsce.ipsl.fr) and Jean-Eudes Petit (jean-eudes.petit@lsce.ipsl.fr)

Calendar

Application closure : April 28th, 12h (CET)

Selection of application for interview: End of April

On-site final interview * : First week of June

Expected start date: September 1st

For any questions regarding the position, please contact jean-eudes.petit@lsce.ipsl.fr, valerie.gros@lsce.ipsl.fr

*adress LSCE : CEA Saclay, Bat 714, Site de l'Orme des Merisiers
Chemin de Saint Aubin – RD 128
F-91191 Gif sur Yvette Cedex – France

Location of position

Saclay (91), France