Post-doctoral position in "Atmospheric Aerosol Chemistry"

The research group focusing on atmospheric chemistry at the “Institut de Recherches sur la Catalyse et l’Environnement de Lyon” (IRCELYON) invites applications for a postdoctoral fellowship in Atmospheric Chemistry.

This one-year fellowship focuses on the photochemistry of mineral surfaces.

The surfaces of uplifted minerals during dust events are suggested to be photochemically active under atmospherically relevant conditions. Such photocatalytical properties may introduce so far unconsidered new chemical pathways that impact on the composition of the atmosphere.

This project includes experimental (laboratory based) and theoretical (atmospheric modelling) studies of the impact of mineral dust and organics on several aspects of atmospheric / environmental science. Near-UV/vis light-absorbing species (such as TiO$_2$, Fe$_2$O$_3$, FeO, MgO) present in mineral dust aerosol interacting with gas trace gases can initiate a new and potentially important photo-induced heterogeneous chemistry, which presently is almost completely undocumented in the atmosphere.

At the interface of physics, chemistry and atmospheric sciences, this project, based on laboratory experiments and/or field studies, will benefit from highly innovative techniques to study photoinduced interactions of atmospheric trace gas species with surfaces representative of dust.

The successful candidate will have access to a wide range of aerosol and associated analytical facilities for both field and laboratory analyses and experimentation.

Applicants should have a background in experimental physical chemistry or physics. Postdoctoral researchers with experience in one or more of kinetics / mass spectrometry / flow tubes / aerosols are encouraged to apply.

A curriculum vitae, letter of intent and names, addresses and telephone number of three references must be sent electronically to Dr. Christian George (Christian.george@ircelyon.univ-lyon1.fr).

Contact information:

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