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MAIN ACADEMIC QUALIFICATIONS

1985: PhD Thesis in Spectrochemistry, University of Lille

2004: Habilitation Thesis

POSTDOCTORAL EXPERIENCE

1986 – 1991: Project Manager « Research and Development », Exide Technologies, Gennevilliers, France.

1991 – 1993: Research Engineer at the French Atomic Energy Commission (CEA), National Agency for Radioactive Waste Management (ANDRA).

ACADEMIC EXPERIENCE

1993- 2016: Assistant Professor, Université du Littoral - Côte d'Opale (ULCO), France

Since 2016: Full Professor, Université du Littoral - Côte d'Opale (ULCO), France

Main Research Theme: Pollution Aerosols Physicochemical Dynamics

SOME RECENT SIGNIFICANT PUBLICATIONS

Characterization and source apportionment of single particles from metalworking activities

J. Arndt, R. M. Healy, A. Setyan, **P. Flament**, K. Deboudt, V. Riffault, L. Y. Alleman, S. Mbengue and J. C. Wenger.
Environmental Pollution, **2021**, 270, 116078 (doi : 10.1016/j.envpol.2020.116078)

In-cloud processing as a possible source of isotopically light iron from anthropogenic aerosols: new insights from a laboratory study.

D.S. Mulholland, **Flament, P.**, de Jong, J., Mattielli, N., Deboudt, K., Dhont, G. and Bychkov, E.
Atmospheric Environment, **2021**, 259, 118505 (doi : 10.1016/j.atmosenv.2021.118505)

Laboratory study of iron isotope fractionation during dissolution of mineral dust and industrial ash in simulated cloud water.

Elena C. Maters, Daniel S. Mulholland, **Pascal Flament**, Jeroen de Jong,
Nadine Mattielli, Karine Deboudt, Guillaume Dhont and Eugene Bychkov.
Chemosphere, **2022**, 299, 134472 (doi: 10.1016/j.chemosphere.2022.134472)

Development and Characterization of a Time-Sequenced Cascade Impactor: Application to Transient PM_{2.5} Pollution Events in Urbanized and Industrialized Environments.

S.H. Ngagine, Deboudt, K., **Flament, P.**, Choël, M., Kulinski, P. and Marteel, F.
Atmosphere, **2022**, 13, 244 (doi:10.3390/atmos13020244).

Physical and chemical characteristics of particles emitted by a passenger vehicle at the fire-road contact.

Asma Beji, Karine Deboudt, Bogdan Muresan, Salah Khardi, **Pascal Flament**, Marc Fourmentin,
Laurence Lumiere.
Chemosphere, **2023**, 139874 (doi:10.1016/j.chemosphere.2023.139874).

Can commercial Doppler lidars serve air quality applications? Results from a field comparison with PM₁₀, PM_{2.5} and granulometric observations in a multi-influenced harbor city

Elsa.Dieudonné, Hervé Delbarre, Patrick Augustin, Marc Fourmentin, Pascal Flament, Karine
Deboudt, Soulemame Halif-Ngagine, Fabrice Cazier.
Aerosol Science and Technology, **2025**, 59(5), 608-622 (doi: 10.1080/02786826.2024.2427868)

CURRENT RESEARCH PROGRAMS

FAAR: Surface complexation: a key phenomenon in **Fe** Aerosols **A**tmospheric **R**eactivity? French ANR funded Project (2024-2026; 120 k€) – **Scientific Coordinator** (<https://anr.fr/Projet-ANR-23-CE01-0014>).

CaPPA: Laboratory of Excellence CaPPA – Chemical and Physical Properties of the Atmosphere – funded by the French ANR (2012-2024) – see: <https://www.labex-cappa.fr/en/> - **Co-PI of the Workpackage 3** “Aerosol observations: instrumentation, intensive field campaigns, monitoring from ground-based networks and satellites.”

ECRIN: Climate and environmental changes resulting from human activities (French Ministry of Higher Education and “Region Hauts de France” agreement contract 2021-2027)

INTERNATIONAL EXPERTISE

- National Science Foundation (NSF, USA)
- Fonds de Recherche du Québec - Nature et Technologies (FRQNT)
- Fonds de la Recherche Scientifique – FNRS Belgique