



Dr Florence KOLTALO



Teacher and Researcher, University of Rouen-Normandie
Team 1 (Analysis)

Tel : 02 32 29 15 35 E-mail : florence.koltalo@univ-rouen.fr

Orcid ID: <https://orcid.org/0000-0001-8665-1856>

IDHal Normandie Université : 808628 (Portet-Koltalo F.)

Researchgate: https://www.researchgate.net/profile/Florence_Portet-Koltalo

LinkedIn: www.linkedin.com/in/florence-koltalo-691b246b

PROFESSIONAL EXPERIENCES

- 2011-2021 Associate professor at COBRA UMR CNRS 6014 laboratory; Rouen Normandy University, France.
- 1997-2011 Associate professor at LASOC EA 3233 laboratory; Rouen University, France.
- 1995-1996 Temporary Lecturer and Research Assistant, University Institute of Technology IUT of Evreux (France)

EDUCATION

- January 2011 HDR: Habilitation thesis to supervise research – University of Rouen, France
Thesis: *“Separation Sciences and Environment”*.
- Sept. 1996 PhD – University Pierre et Marie Curie (UPMC), Paris, France
Thesis : *« Study of the adsorption of complex formulations of nonionic surfactants at liquid/solid interfaces by high performance liquid chromatography. »*
LASOC laboratory (Evreux, France). Dir.: Pr P.L. Desbène
- Jul 1992 Master degree « Spectroscopy, organic and biological analyses », University Pierre et Marie Curie (UPMC), Paris, France
Thesis : *“ Complexation of metal cations by polyethyleneoxide surfactants. Application to the analysis on nonionic surfactants by exchange ion chromatography.”*
LASOC laboratory (Evreux, France). Dir.: Pr P.L. Desbène

ADMINISTRATIVE & INSTITUTIONAL RESPONSIBILITIES

- 2019-2021 Alternate member of the managing board of COBRA Laboratory.
- 2002-2014 and 2018-2021: Member of the Advisor Commission of faculty specialists (CCSE, section 32) – University of Rouen, France.
- 2011-2016 Member of the extended scientific committee of the FR CNRS 3730 SCALE.
- 2009-2011 Member of the management board of Institute of Technology of Evreux

RESEARCH INTERESTS

My research is focused on the development of solvent-minimized sample preparation and separation science (Liquid (HPLC, nanoLC) and gas chromatography (hyphenated to mass spectrometry)), with a special interest in environmental analysis. Between 1997 and 2002, I worked on water pollution by surfactants, on their behavior at the solid/liquid interface and on the development of trace enrichment processes through solid phase extraction (SPE). Between 2002 and 2009, my topics of interest included analysis of ultra-traces of organic pollutants in exhaust gases (diesel engine exhausts, depollution pilot plant), and optimization (through chemometric approaches) of hydrocarbons extraction from highly sorptive environmental matrices (diesel particulate matter...). This part of my work led me to the field of analysis of organic contaminants in soils, sediments, water and wastes (PAHs, PCBs, PBDEs, pesticides...), as to their degradation products (oxygenated PAHs...). Sample preparation from solids includes hot soxhlet extraction, microwave-assisted extraction, pressurized liquid extraction, supercritical fluid extraction, thermodesorption... Since 2009, I have been also working on remediation technologies to remove pollutants such as metals or PAHs from soils or sediments: enhanced biodegradation by microorganisms or fungi, phytoremediation, electrokinetic remediation.

SCIENTIFIC ACHIEVEMENTS AND EXPERTISE

Academic record (h-index: 17 (2020))

53 publications of which 2 book chapters, 4 invited lectures (academia & industry)

18 international and 24 French oral communications; 25 international and 33 French poster communications.

Projects and fundings:

- **2019-2021:**

COPHERL project : « Potential consequences of industrial accidents on human health and the environment, perception and resilience.” Multidisciplinary project (Analytical chemistry, geosciences, combustion physics, toxicology and health...) Normandie Region funding.

COMHYX project : « Fast methodology for the quantification of organic and metallic contaminants in complex environmental matrices through hyperspectral imaging.» Normandie Region funding. Partnerships: M2C laboratory (University of Rouen-Normandie) and Tellux start-up (Rouen).

« Effect of a metallic co-contamination on PAH biodegradation using inoculated fungi for mycoremediation of polluted soils.” ABTE laboratory (University of Caen-Normandie) and BRGM (Orléans) partnerships.

EC2CO project: “Avant Seine: Integrative analysis of pollutants (PAHs, PCBs, hydrocarbons) in sediment cores: geosciences, analytical chemistry, molecular ecology.” CNRS/INSU program, M2C laboratory (University of Rouen-Normandie) partnership.

- **2015-2019**

“Persistent organic and inorganic contaminants in fluvial sediment cores: quantification and bioavailability evolution for 100 years accumulation.” Normandie Region and French Seine-Normandie Water Agency funding.

“Application of electrokinetic remediation process to decontaminate Arsenic in accidentally polluted industrial soils.” YARA Society funding, I2C Carnot.

“Evaluation of polybrominated diphenyl ethers (PBDEs) flame-retardants from various materials (plastics, textiles, foams) in seating furnishing wastes.” Valdelia Society funding, I2C Carnot.

“Pilot-scale photolysis of pesticides in groundwater and recycled wastewater for agricultural use.” Comité Nord-SIPRE (Picardie) and CRT Praxens partnerships.

“New tools for analyzing simultaneously parent and oxygenated metabolites of PAHs in sediments using MSPD coupled to MIPs.” Erasmus Mundus France-Brazil funding.

“Evolution of the toxicity of dredged sediments (containing mixed pollutants PAHs, PCBs, heavy metals) decontaminated by an electrokinetic process». Normandie Region funding, multi-disciplinary research network SCALE, SEDEVAR research project.

“Potentialities of agronomic plants for phytoremediation of PCB-contaminated Algerian soils.” Partnership University USTHB, Algeria.

- **2012-2015**

“Study of contaminant evolution (PAHs, heavy metals) in water/soil/plant systems. Case of LID (Low Impact Development) urban roadways constructions.” Funding from INFRA-SERVICES society, Canteleu, France.

“Influence of bio-geo-chemical factors and biosurfactant addition on PAH bioavailability and biodegradation in diffusively contaminated soils.” Normandie Region funding, multidisciplinary research network SCALE, RESSOLV research project.

“Analysis of hydroxylated metabolites of PAHs in soils using molecularly imprinted polymers.” Partnership with GTS research group of University of Barcelona (Spain) and Polyintell society (Val de Reuil, France).

- **2009-2012:**

“Study of electrokinetic remediation process applied to dredged sediment cleanup.” Haute-Normandie Region funding, research network SCALE, RESSOLV project.

“Production and purification of cyclolipopeptidic biosurfactants for environmental use (desorption of lipophilic organic compounds from soils or sediment).” Haute-Normandie Region funding, research network SCALE, RESSOLV project.

- **1998-2009:**

“Study of the potentialities of a laser induced native fluorescence detector for capillary electrophoresis and nano-LC.” Partnership with Flowgene Society (St Beauzire, France).

“Optimisation of sample preparation and analytical tools for the analysis of PAHs and nitrated derivatives sorbed on Diesel soot.” TOPAASE research program (Toxicology of Atmospheric Pollutants - Aerothermochemistry, Health, Environment), French government-Region contract plan, partnership with the CERTAM (Centre for Study and Technological Research in Aerothermics and Engines), St Etienne du Rouvray, France.

“Collect in aqueous phase of COVs present at trace level in an air stream and quantification by SPE-HPLC.” CRAFT European research program (“Depollution of COVs from gaseous releases”); Partnership with the CERTAM, St Etienne du Rouvray, France.

“Mixtures of nonionic and ionic surfactants at water/solid interfaces: competitive or synergistic sorption phenomena.” French government-Haute-Normandie Region contract plan.

- **1992-1996:**

“Solid Phase Extraction (SPE) for simultaneous trace analysis of anionic and nonionic surfactants in water.” French government-Region contract plan, partnership with the soap and detergent industry's association.

Doctoral research fellow (Research grant from the French Ministry of Education and Research): "Analysis of traces of laundry surfactants in water". French government-Region contract plan, partnership with the soap and detergent industry's association.

Sub-project (6 months): "Isolation of pure polyethyleneoxide surfactant oligomers by preparative liquid chromatography." Partnership with Janssen-Cilag pharmaceutical society.

Expertise/Reviewing:

- Project expertise:

2019: project expertise for I2C Carnot.

2019: project expertise for LABEX Synorg.

- Reviewer for journals:

Talanta, J. Chrom. A, Analytica Chimica Acta...

J. Hazard. Mater., STOTEN, Pedosphere, Chemosphere, Env. Sci. technol., Env. Sci. Pollut. Res,

Env. Toxicol. Chem., Env. Pollut...

SUPERVISION AND COORDINATION ACTIVITIES

Doctoral and M2 thesis supervision:

- Supervision of 8 doctoral thesis, defended in 2006, 2013, two in 2015, 2017, 2018, 2020 and 1 other in progress.

- Supervision of 8 Master 2 degree thesis, defended in 2000, 2002, 2006, 2007, 2016, 2018, 2020, 2021.

Projects-Networks coordination:

- Coordination of the "analytical chemistry team" in the multidisciplinary CIPHERL project (Potential consequences of industrial accidents on human health and the environment, perception and resilience). (2019-2023).

- Sectorial lead for I2C Carnot (Innovation in Chemistry, grouping of 8 French research laboratories) (2017-2018). Coordination for maintaining a technological survey and to ensure the visibility for possible industrial partners in the "Energy and Environment" research sector.

- Coordination of the regional SEDEVAR project (Contaminated Sediments: decontamination, Valorization or reuse for Ecological Restoration) (2014-2016), pooling the expertise of 5 research teams of Universities of Rouen and Le Havre (France).

- Coordination of the regional RESSOLV project (Restoration of Vulnerable Sediments and Soils) (2010-2013), pooling the expertise of 4 research teams of Universities of Rouen and Le Havre (France).

TEACHING ACTIVITIES

- Teaching at Licence degree (L1, L2, L3) at University Institute of Technology IUT of Evreux (France) since 1994, in various fields of chemistry, for students or professionals (permanent formation): Thermodynamics, atomistic, polymers, crystallography, analytical chemistry, spectroscopy (UV, IR, Mass Spectrometry, RMN), chromatography, environment chemistry...

Responsibilities:

- 7 years (1999-2001; 2008-2010; 2014-2017) educational support (schedules, organization of teachers...) of the "Measurement Physics" department of Institute of Technology (IUT) of

Evreux (Normandie, France). 2 years responsible for students internships and contact with private companies (2019-2021).

PUBLICATIONS

	N° DOI	AUTHOR	TITLE	JOURNAL	IF
1	10.1007/BF02263883	B. Desmazières, F. Portet, P.L. Desbène	Analytical study of highly condensed nonionic surfactants. Separation on cation exchangers	<i>Chromatographia</i> , 1993, 36, 307-317	1.37
2	10.1016/0021-9673(95)01087-4	P.L. Desbène, F. Portet, G.J. Goussot	Quantitative trace analysis of surfactant mixtures by reversed-phase high-performance liquid chromatography with refractometric detection	<i>Journal of Chromatography A</i> , 730, 1996, 209-218	4.26
3	10.1006/jcis.1996.0614	F. Portet, P.L. Desbène, C. Treiner	Nonideality of mixtures of pure non-ionic surfactants both in solution and at silica/water interfaces	<i>Journal of Colloid and Interface Science</i> , 184, 1996, 216-226	3.55
4	10.1006/jcis.1997.4884	P.L. Desbène, F. Portet, C. Treiner	Adsorption of pure non-ionic alkylethoxylated surfactants down to low concentrations at silica/water interface as determined using a HPLC technique	<i>Journal of Colloid and Interface Science</i> , 1997, 190, 350-356	3.55
5	10.1006/jcis.1997.5113	F. Portet, P.L. Desbène, C. Treiner	Adsorption isotherms at a silica/water interface of the oligomers of polydispersed non-ionic surfactants of the alkylpolyethoxylated series	<i>Journal of Colloid and Interface Science</i> , 1997, 194, 379-391	3.55
6	10.1006/jcis.1998.5851	F. Portet, P.L. Desbène, C. Treiner	Polydispersity of non-ionic surfactants as related to their adsorption characteristics on porous silica particles in water	<i>Journal of Colloid and Interface Science</i> , 1998, 208, 415-421	3.55
7	10.1016/S0021-9673(00)00225-9	F. Portet, C. Treiner, P.L. Desbène	Simultaneous quantitative trace analysis of anionic and non-ionic surfactants mixtures by reversed-phase liquid chromatography	<i>Journal of Chromatography A</i> , 2000, 878, 99-113	4.26
8	10.1021/la001785p	F. Portet-Koltalo, P.L. Desbène, C. Treiner	Self-desorption of mixtures of anionic and non-ionic surfactants from a silica/water interface	<i>Langmuir</i> , 17, 2001, 3858-3862	4.38
9	10.1016/S0021-9797(03)00050-X	F. Portet-Koltalo, P.L. Desbène, C. Treiner	Analytical investigation of the self desorption of the oligomers of mixtures of a polydispersed ethoxylated surfactant with sodium dodecylsulfate from a silica/water interface	<i>Journal of Colloid and Interface Science</i> , 2003, 261, 40-48	3.55
10	10.1016/j.talanta.2006.06.043	F. Portet-Koltalo, K. Oukebdane, L. Robin, F. Dionnet, P.L. Desbène	Quantification of volatile PAHs present at trace levels in air-flow by aqueous trapping-SPE and HPLC analysis with fluorimetric detection	<i>Talanta</i> , 2007, 71, 1825-1833	3.50
11		F. Portet-Koltalo, K. Oukebdane, F. Dionnet, P.L. Desbène	De l'intérêt de l'utilisation de la pyridine pour l'extraction par micro-ondes des hydrocarbures aromatiques polycycliques à partir des particules de suies émises à l'échappement d'un moteur Diesel	<i>Spectra Analyse</i> , 2007, 254, 28-36	
12	10.1007/s00216-007-1684-2	F. Portet-Koltalo, K. Oukebdane, F. Dionnet, P.L. Desbène	Optimisation of the extraction of polycyclic aromatic hydrocarbons and their nitrated derivatives from Diesel particulate matter using microwave-assisted extraction	<i>Analytical and Bioanalytical Chemistry</i> , 2008, 390, 389-398	3.66
13	10.1002/pssc.200881098	E. Méry, S. Alekseev, F. Koltalo, C. Morin, D. Barbier, V. Zaitsev, P. L. Desbène	Porous silicon based microdevice for reversed phase liquid chromatography.	<i>Physica Status Solidi C</i> , Special Issue: 6th PSST 2008, 2009, 6, 1777-1781	
14	10.1016/j.aca.2009.07.038	F. Portet-Koltalo, K. Oukebdane, F. Dionnet, P.L. Desbène	Optimisation of supercritical fluid extraction of polycyclic aromatic hydrocarbons and their nitrated derivatives adsorbed on highly sorptive diesel particulate matter	<i>Analytica Chimica Acta</i> , 2009, 651, 48-56	4.31

15	10.1016/j.talanta.2010.04.027	Oukebdane, K; Portet-Koltalo, F.; Machour, N.; Dionnet, F.; Desbène, P.L.	Comparison of hot Soxhlet and accelerated solvent extractions with microwave and supercritical fluid extractions for the determination of polycyclic aromatic hydrocarbons and nitrated derivatives strongly adsorbed on soot collected inside a diesel particulate filter	<i>Talanta</i> 2010, <i>82</i> , 227-236	3.49
16	10.1111/j.1574-6941.2009.00788.x	Niepceron, M.; Portet-Koltalo, F. ; Motelay-Massei, A.; Barry, S.; Bodilis, J.	Both <i>Cycloclasticus</i> spp. and <i>Pseudomonas</i> spp. as PAH-degrading bacteria in the Seine estuary (France)	<i>FEMS Microbiol. Ecol.</i> 2010, <i>71</i> , 137-147	3.56
17		Portet-Koltalo, F. ; Ammami, M.T. ; Benamar, A.; Duclairoir-Poc, C.; Groboillot, A.; Orange, N.	Pollution des sédiments de dragage - Procédés de bioremédiation alliés à l'électromigration	<i>Spectra Analyse</i> 2010, <i>277</i> , 54-58	
18	10.3390/ijms12031787	Groboillot, A.; Portet-Koltalo, F.; Le Derf, F.; Feuilloley, M.J.G.; Orange, N.; Poc, C.D.	Novel Application of Cyclolipopeptide Amphisin: Feasibility Study as Additive to Remediate Polycyclic Aromatic Hydrocarbon (PAH) Contaminated Sediments	<i>Int. J. mol. Sci.</i> 2011, <i>12</i> , 1787-1806	2.46
19	10.1016/j.chroma.2010.12.074	Portet-Koltalo, F.; Preterre, D.; Dionnet, F.	A new analytical methodology for a fast evaluation of semi-volatile polycyclic aromatic hydrocarbons in the vapor phase downstream of a diesel engine particulate filter	<i>J. Chromatogr. A</i> , 2011, <i>1218</i> , 981-989	4.61
20		Portet-Koltalo, F. ; Ammami, M.T.; Benamar, A.; Groboillot, A.; Orange, N.; Duclairoir-Poc, C.;	Déséquestration de polluants de type hydrocarbures aromatiques polycycliques à l'interface de sédiments au moyen d'un tensioactif original d'origine biologique	<i>Spectra Analyse</i> 2011, <i>278</i> , 21-27	
21		Vieillard, J.; Morin, C.; Portet-Koltalo, F.; Le Derf, F.	Potentialités de la détection par fluorescence native induite par laser UV pour les sciences séparatives	<i>Spectra Analyse</i> 2011, <i>281</i> , 20-27	
22	ISBN 979-953-307-1017-7	Portet-Koltalo, F. ; Machour, N.	Analytical methodologies for the control of particle-phase polycyclic aromatic compounds from diesel engine exhausts	Diesel Engine, ed. S. Bari, INTECH Open Science, 2012	
23	10.1039/C3AY41227J	Baltrons, O.; López-Mesas, M.; Palet, C.; Le Derf, F.; Portet-Koltalo, F.;	Molecularly imprinted polymer-liquid chromatography/fluorescence for the selective clean-up of hydroxylated polycyclic aromatic hydrocarbons in soils	<i>Anal. Methods</i> , 2013, <i>5</i> , 6297-6305	1.94
24	10.1016/j.jhazmat.2013.07.062	Portet-Koltalo, F.; Ammami, M.T.; Benamar, A.; Wang, H.; Le Derf, F.; Duclairoir-Poc, C.;	Investigation of the release of PAHs from artificially contaminated sediments using cyclolipopeptidic biosurfactants.	<i>J. Hazard. Mater.</i> 2013, <i>261</i> , 593-601.	4.33
25	10.1051/e3sconf/20130101004	Ammami, M.T.; Benamar, A.; Koltalo, F.; Wang, H.Q.; Le Derf, F.	Heavy metals removal from dredged sediments using electro kinetics	E3S Web of Conferences, Proceedings, 16th International Conference on Heavy Metals in the Environment, EDP Sciences, 1, 2013,	
26	10.1016/j.envpol.2013.05.040	Niepceron, M.; Martin-Laurent, F.; Crampon, M.; Portet-Koltalo, F.; Akpa-Vinceslas, M.; Legras, M.; Bru, D.; Bureau, F. ; Bodilis, J.;	GammaProteobacteria as a potential bioindicator of a multiple contamination by polycyclic aromatic hydrocarbons (PAHs) in agricultural soils.	<i>Environ. Pollut.</i> 2013, <i>180</i> , 199-205.	3.73
27	10.1007/s13762-013-0395-9	Ammami, M.T.; Benamar, A.; Wang, H.; Bailleul, C.; Legras, M. ; Le Derf, F.; Portet-Koltalo, F.;	Simultaneous electrokinetic removal of polycyclic aromatic hydrocarbons and heavy metals from an aged contaminated model sediment using mixed enhancing agents.	<i>Int. J. Environ. Sci. Te.</i> 2014, <i>11</i> , 1801-1816,	1.84

28	10.1007/s11356-013-2258-9	Niepceron M.; Beguet J.; Portet-Koltalo F.; Martin-Laurent F.; Quillet L.; Bodilis J.	Low impact of phenanthrene dissipation on the bacterial community in grassland soil.	<i>Environ.Sci. Poll. Res.</i> 2014, 21, 2977-2987	2.76
29	10.1007/s11356-014-2799-6	Crampon, M.; Bureau, F.; Akpa-Vinceslas, M; Bodilis, J.; Machour, N.; Le Derf, F.; Portet-Koltalo, F.	Correlations between PAH bioavailability, degrading bacteria and soil characteristics during PAH biodegradation in five diffusely contaminated dissimilar soils	<i>Environ. Sci. Poll. Res.</i> 2014, 21, 8133-8145	2.76
30	10.1016/j.chemosphere.2014.03.012	Marcotte, S.; Poisson, T.; Portet-Koltalo, F.; Aubrays, M.; Basle, J.; de Bort, M.; Giraud, M.; Nguyen Hoang, T.; Octau, C.; Pasquereau, J.; Blondeel, C.	Evaluation of the PAH and water-extractable phenols content in used cross ties from the French rail network	<i>Chemosphere</i> 2014, 111, 1–6.	3.50
31	10.1007/s11356-014-3064-8	Crampon, M.; Copard, Y.; Favreau, G.; Raux, J.; Merlet-Machour, N.; Le Coz, M.; Ibrahim, M.; Peulon-Agasse, V.; Portet-Koltalo, F.	Occurrence of 1,1'-dimethyl-4,4'-bipyridinium (Paraquat) in irrigated soil of the Lake Chad Basin, Niger.,	<i>Environ. Sci. Poll. Res.</i> 2014	2.76
32		M.C. Leroy, S. Marcotte, F. Le Derf, V. Moncond'huy, M. Legras, S. Marcotte	Infrastructures vertes : des outils paysagers et écologiques. Exemple des noues de voirie pour la remédiation des hydrocarbures aromatiques polycycliques (HAP) et des éléments traces (ET)	<i>Actualité Chimique</i> 2014, 390, 82-84	0.09
33	10.1016/j.chemosphere.2014.12.087	M.T. Ammami, F. Portet-Koltalo, A. Benamar, C. Duclairoir-Poc, H. Wang, F. Le Derf.	Application of biosurfactants and a periodic voltage gradient for enhanced electrokinetic remediation of metals and PAHs in dredged marine sediments.	<i>Chemosphere</i> , 2015, 125, 1-8	3.50
34	10.1016/j.scitotenv.2015.03.020	M.C. Leroy, M. Legras, S. Marcotte, V. Moncond'huy, N. Machour, F. Le Derf, F. Portet-Koltalo,	Assessment of PAH dissipation processes in large-scale outdoor mesocosms simulating vegetated roadside swales	<i>Science of the Total Environment</i> , 2015, 520, 146-153	3.16
35	10.1016/j.scitotenv.2016.05.027	M.C. Leroy, F. Portet-Koltalo, M. Legras, F. Lederf, V. Moncond'huy, I. Polaert, S. Marcotte	Performance of vegetated swales for improving road runoff quality in a moderate traffic urban area	<i>Science of the Total Environment</i> , 2016, 566-567, 113-121	4.10
36	10.1016/j.jhazmat.2016.04.059	M. Crampon, J. Bodilis, F. Le Derf, F. Portet-Koltalo	Alternative techniques to HPCD to evaluate the bioaccessible fraction of soil-associated PAHs and correlation to biodegradation efficiency.	<i>Journal of Hazardous Materials</i> , 2016, 314, 220-229	4.53
37	10.1016/j.scitotenv.2016.11.195	M.C. Leroy, S. Marcotte, M. Legras, V. Moncond'huy, F. Le Derf, F. Portet-Koltalo	Influence of the vegetative cover on the fate of trace metals in retention systems simulating roadside infiltration swales.	<i>Science of the Total Environment</i> , 2017, 580, 482-490	4.10
38	10.1016/j.envpol.2017.03.053	M. Crampon, A. Cébron, F. Portet-Koltalo, S. Uroz, F. Le Derf, J. Bodilis	Low effect of phenanthrene bioaccessibility on its biodegradation in diffusely contaminated soil	<i>Environmental Pollution</i> , 2017, 225, 663-673	4.84
39	10.1016/j.scitotenv.2017.07.094	Y. Tian, C. Boulangé-Lecomte, A. Benamar, N. Giusti-Petrucciani, A. Duflot, S. Olivier, C. Frederick, J. Forget-Leray, F. Portet-Koltalo	Application of a crustacean bioassay to evaluate a multi-contaminated (metal, PAH, PCB) harbor sediment before and after electrokinetic remediation using eco-friendly enhancing additives	<i>Science of the Total Environment</i> , 2017, 607-608, 944-953	4.10
40	10.1016/j.scitotenv.2018.02.013	O. Baltrons, M. López Mesas, M. Vilaseca, C. Gutiérrez Bouzán, F. Le Derf, F. Portet -Koltalo, C. Palet	Influence of a mixture of metals on PAHs biodegradation processes in soils.	<i>Science of the total environment</i> , 2018, 628-629, 150-158	4.10
41	10.1016/j.jhazmat.2018.07.088	M. Crampon, J. Bodilis, F. Portet-Koltalo	Linking initial soil bacterial diversity and polycyclic aromatic hydrocarbons (PAHs) degradation potential	<i>Journal of Hazardous Materials</i> , 359, 2018, 500-509	4.53
42	10.1007/s10337-018-3584-3	I. Berger-Brito, · N. Machour, · C. Morin, · F. Portet-Koltalo	Experimental Designs for Optimizing Multi-residual Microwaveassisted Extraction and Chromatographic	<i>Chromatographia</i> , 81, 2018, 1401-1412	1.55

			Analysis of Oxygenated (Hydroxylated, Quinones) Metabolites of PAHs in Sediments		
43	10.1080/10406638.2017.1326947	A. Halfadji, A. Touabet, F. Portet-Kotalo, F. Le Derf, N. Merlet-Machour	Concentrations and source identification of Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs) in Agricultural, Urban/residential, and Industrial soils, East of Oran (Northwest of Algeria)	<i>Polycyclic Aromatic Compounds</i> , 39, 2019, 299-310	1.57
44	10.1016/j.chemosphere.2019.04.063	A. Benamar, Y. Tian, F. Portet-Kotalo, M.T. Ammami, N. Giusti-Petruciani, Y. Song, C. Boulangé-Lecomte	Enhanced electrokinetic remediation of multi-contaminated dredged sediments and induced effect on their toxicity	<i>Chemosphere</i> , 228, 2019, 744-755	5.11
45	10.1016/j.jhazmat.2019.121499	F. Portet-Kotalo, T. Gardes, M. Debret, Y. Copard, S. Marcotte, C. Morin, Q. Laperdrix	Bioaccessibility of polycyclic aromatic compounds (PAHs, PCBs) and trace elements: influencing factors and determination in a river sediment core	<i>Journal of Hazardous Materials</i> , 384, 2020, 121499	7.65
46	https://doi.org/10.5194/essd-2019-167	A-M. Dendievel, B. Mourier, A. Coynel, O. Evrard, P. Labadie, S. Ayrault, M. Debret, F. Kotalo, Y. Copard, Q. Faivre, T. Gardes, S. Vauclin, H. Budzinski, C. Grosbois, T. Winiarski, and M. Desmet	Spatio-temporal assessment of the PCB sediment contamination in the four main French River Basins (1945-2018)	<i>Earth System Science Data</i> , 2020, en ligne	10.9
47	10.1016/j.catena.2020.104513	T. Gardes, M. Debret, Y. Copard, E. Patault, T. Winiarski, A-L. Develle, P. Sabatier, A-M. Dendievel, B. Mourier, S. Marcotte, B. Leroy, F. Portet-Kotalo	Reconstruction of anthropogenic activities in legacy sediments from the Eure River, a major tributary of the Seine Estuary (France)	<i>CATENA</i> , 190, 2020, 104513	3.85
48	10.1016/j.electacta.2020.136462	M.T. Ammami, Y. Song, A. Benamar, F. Portet-Kotalo, H. Wang	Electro-dewatering of dredged sediments by combined effects of mechanical and electrical processes: Influence of operating conditions	<i>Electrochimica acta</i> , 353, 2020, 136462	5.38
49	10.1016/j.electacta.2020.136488	A. Benamar, M.T. Ammami, Y. Song, F. Portet-Kotalo	Scale-up of electrokinetic process for dredged sediments remediation	<i>Electrochimica acta</i> , 352, 2020, 136488	5.38
50	10.1016/j.scitotenv.2020.138249	T. Gardes, M. Debret, Y. Copard, A. Coynel, M. Fournier, J. Deloffre, S. Revillon, J. Nizou, A.-L. Develle, P. Sabatier, S. Marcotte, E. Patault, Q. Faivre, F. Portet-Kotalo	Fluxes estimation, temporal trends and sources determination of trace metal contamination in a tributary of the Seine Estuary (France)	<i>Science of The Total Environment</i> , 724, 2020, 138249	5.59
51	10.1016/j.apgeochem.2020.104749	T. Gardes, F. Portet-Kotalo, M. Debret, K. Humbert, R. Levallant, M. Simon, Y. Copard	Temporal trends, sources, and relationships between sediment characteristics and polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) in sediment cores from the major Seine estuary tributary, France	<i>Applied Geochemistry</i> , 122, 2020, 104749	2.90
52	10.1016/j.talanta.2020.121601	F. Portet-Kotalo, Y. Tian, I. Berger-Brito, A. Benamar, C. Boulangé-Lecomte, N. Machour	Determination of multi-class polyaromatic compounds in sediments by a simple modified matrix solid phase dispersive extraction	<i>Talanta</i> , 221, 2021, 121601	5.34
53	ISBN	K. B. Pedersen, A. Benamar, M.T. Ammami, F. Portet-Kotalo, G.M. Kirkelund	Electrokinetic Remediation of Dredged Contaminated Sediments	in "Electrokinetic Remediation for Environmental Security and Sustainability." A. Ribeiro and M.N.V. Pasad Editors, Wiley Ed. (2021, in press).	

ORAL CONFERENCES

	AUTHORS	TITLÉE	CONFERENCES
1	<u>F. Portet</u>	Analyse chromatographique de formulations tensioactives complexes. Etude de leur devenir aux interfaces liquide/solide	Journée jeunes chercheurs avec la Société Française de Chimie, novembre 1995, Rouen
2	F. Portet-Koltalo, K. Oukebdane, L. Robin,, F. Dionnet, <u>P.L. Desbène</u>	Analyse chimique des particules fines	colloque CNRT combustion et moteur: réduction des émissions, santé et environnement, une approche interdisciplinaire, Rouen, 8 octobre 2004
3	<u>Niepceron, M.</u> , F. Portet-Koltalo, A. Motelay-Massei, S. Barry and J. Bodilis	Evaluation du Potentiel de Dégradation Bactérienne des HAP en Estuaire de Seine	7th International Congress of Limnology-Oceanographie, UOF 2008, 14-16 Octobre 2008, Mont Saint Aignan, France
4	<u>F. Portet-Koltalo</u>	Caractérisation de polluants de type HAP à l'échappement de moteurs Diesel : prélèvement et analyse de l'effluent gazeux	journée du réseau GRR énergie, Le Madrillet, 12 novembre 2008
5	<u>F. Portet-Koltalo</u>	Mesure de polluants de type HAP à l'échappement de moteurs Diesel : prélèvement et préparation d'échantillons	Club chromatographie du Val de Seine, Mont Saint Aignan, 6 novembre 2008
6	<u>F. Portet-Koltalo</u>	De l'intérêt de l'usage de la pyridine pour l'extraction des Hydrocarbures Aromatiques Polycycliques et de leurs dérivés nitrés à partir de particules Diesel en vue de leur analyse par chromatographie gazeuse/spectrométrie de masse	1 ^{ère} Journée Chimie pour l'Analyse, réseau CRUNCH, Mont-Saint-Aignan, 18 juin 2008
7	<u>C. Morin</u> , J. Vieillard, F. Koltalo, N. Garnier et P. L Desbène	La détection par fluorescence native induite par laser en électrophorèse capillaire	15 ^{èmes} journées d'électrophorèse de Xavier Bichat, Paris, 18 juin 2009
8	<u>Niepceron, M.</u> ; Koltalo, F.; Motelay, A.; Merlin, C.; Barry, S.; Bodilis, J.	Evaluation du potentiel de dégradation bactérienne des HAP (hydrocarbures aromatiques polycycliques) en estuaire de seine,	Séminaire GRR Sciences de l'Environnement, gestion des Risques – 3 février 2010 , Le Havre, France
9	<u>Ammami M.T.</u> , Benamar A., Portet-Koltalo F., Wang H.Q.,	Traitement des sédiments de dragage : analyse du comportement en chambre de dépôt et d'un processus de transfert de masse.	Séminaire GRR Sciences de l'Environnement, gestion des Risques – 3 février 2010, Le Havre, France ;
10	<u>Niepceron, M.</u> ; Bureau, F.; Akpa-Vinceslas, M. ; Portet-Koltalo, F.; Martin-Laurent, F.; Quillet, L.; Bodilis, J.	Interaction between the bacterial community diversity and Polycyclic Aromatic Hydrocarbon (PAHs) contaminations in agricultural soil,	International Symposium on Aromatic Polycyclic Compounds (ISPAC 23), 4 - 8 septembre 2011, Münster, Allemagne.
11	<u>Ammami, M.T.</u> ; Benamar, A. ; Koltalo, F.; Bourdin,F.; Wang, H.; Pantet, A.	Traitement des sédiments de dragage par un procédé électrocinétique	séminaire du GRR sciences de l'environnement, gestion des risques, 10 fev 2011, Mont Saint Aignan
12	<u>C. Lefevre</u> , C. Dubois, L. Castel, M. Akpa, C. Gangneux, N. Laurent, F. Portet-Koltalo, I. Trinsoutrot-Gattin, F. Bureau, M. Legras	Dégradation des HAPs et impact sur les communautés microbiennes telluriques.	11 ^{èmes} Journées Nationales d'études des sols, 19-23 Mars 2012, Versailles
13	<u>Crampon, M.</u> ; Bodilis, J.; Bureau, F.; Akpa-Vinceslas, M. ; Machour, N.; Le Derf, F.; Portet-Koltalo, F.	Etude de la biodisponibilité des HAP dans 5 sols naturels contrastés : Impact des caractères physico-chimiques du sol et des communautés bactériennes. ,	séminaire du GRR sciences de l'environnement, gestion des risques, 15 fev 2013, Mont Saint Aignan.
14	<u>Crampon, M.</u> ; Machour, N.; Bodilis, J.; Bureau, F.; Akpa-Vinceslas, M.; Mofaddel, N.; Le Derf, F.; Portet-Koltalo, F.	Stratégies analytiques pour évaluer la biodisponibilité des HAP dans les sols; corrélation avec leur atténuation par biodégradation.	10e colloque francophone sur les sciences séparatives et les couplages (SEP'13), 4-7 juin 2013, Paris
15	<u>Crampon, M.</u> ; Bodilis, J.; Bureau, F.; Akpa-Vinceslas, M.; Mofaddel, N.; Le Derf, F.; Machour, N.; Portet-Koltalo, F.	Analytical strategies to evaluate polycyclic aromatic hydrocarbons (PAHs) bioavailability in soils; correlation with their biodegradability,	14th EuCheMS International Conference on Chemistry and the Environment (ICCE 2013), 25-28 juin 2013, Barcelone, Espagne.
16	<u>Leroy, M.C.</u> ; Koltalo, F.; Le Derf, F.; Moncond'huy, V.; Marcotte, S.; Legras, M.	Biofilters to improve road run-off quality: interactions between water, soil and the biosphere.	4ème colloque recherche de la fédération Gay Lussac, « la chimie et la ville de demain », 4-6 décembre 2013, Paris.
17	Leroy, M.-C.; Portet-Koltalo, F.; Le Derf, F.; Marcotte, S.; Moncond'huy, V.; <u>Legras, M.</u>	Abattement en contaminants dans un système eau/sol/plante. Problématique des aménagements de noues végétalisées.	Journées scientifiques de Marrakech, 22-24 avril 2014, Marrakech, Maroc.

18	<u>Leroy, M.C.</u> ; Koltalo, F.; Marcotte, S.; Moncond'huy, V.; Le Derf, F.; Legras, M.	Trace elements and polycyclic aromatic hydrocarbons remediation by soil-plant infiltration systems: a way to decrease environmental impact of cities?	JEDNC Journées de l'école doctorale normande de chimie, Le Havre, 27 mai 2014
19	<u>Crampon Marc</u> , Bodilis Josselin, Cébron Aurélie, Bureau Fabrice, Le Derf Franck, Merlet-Machour Nadine, Portet-Koltalo Florence	Impact de l'addition de Rhamnolipide dans un sol dopé avec du Phénanthrène (PHE) : adsorption, dégradation et bactéries impliquées.	24 ^e réunion des sciences de la Terre, RST2014, 27-31 Octobre 2014, Pau
20	<u>Leroy, M.C.</u> ; Moncond'huy, V.; Koltalo, F.; Le Derf, F.; Marcotte, S.; Legras, M.	La recherche scientifique pluridisciplinaire au service de l'innovation de la gestion des eaux pluviales : 3 ans de collaboration pour dégager des éléments de conception des noues de voiries.	93 ^e ème congrès de l'ASTEE (association scientifique et technique pour l'eau et l'environnement), 3 au 6 juin 2014, Orléans
21	<u>Leroy, M.C.</u> ; Legras, M.; Le Derf, F.; Marcotte, S.; Moncond'huy, V.; Portet-koltalo, F.	Physico-chemical and microbial characterization in (near-) rhizosphere soil planted with macrophytes to investigate pahs and tes phytoremediation processes at the soil-root interface,	ASWEP, Biogeochemical Processes at air-soil- water interfaces and environmental protection - 23-26 juin 2014, Imola, Italie
22	Leroy M.-C., F. Portet-Koltalo, S. Marcotte, M. Legras, F. Le Derf, <u>V. Moncond'huy</u>	Dépollution par les noues ? Le rôle du sol et des plantes	Conférence – débat de l'ADOPTA : Gestion des eaux pluviales, biodiversité en ville: les noues ? 25 septembre 2014 , Douai
23	<u>Crampon, M.</u> ; Bodilis, J.; Cébron, A.; Bureau, F.; Le Derf, F.; Machour N.; Portet-Koltalo, F.	Impact of rhamnolipid addition to soil on Phenanthrene degrading bacteria on two dissimilar soils : sorption, degradation kinetics and impact on Phenanthrene degrading bacteria,	4th International Conference on Environmental Pollution and Remediation (ICEPR'14), 11-13 aout 2014, Prague, République Tchèque.
24	<u>Leroy M.-C.</u> , F. Portet-Koltalo, S. Marcotte, M. Legras, F. Le Derf, V. Moncond'huy	Les végétaux, des acteurs de la dépollution des eaux pluviales : cas des noues de voirie.	5 ^e ème édition du Forum des eaux pluviales, 18-19 mars 2015, Douai,
25	O. Baltrons, <u>M. López-Mesas</u> , M. Vilaseca, C. Gutiérrez, F. Le Derf, F. Portet-Koltalo, C. Palet	Influence of metals on PAHs biodegradation processes in soils	15th EuChemS International Conference on chemistry and the environment, 20-24 sept 2015, Leipzig, Allemagne
26	<u>Y. Tian</u> , A. Benamar, C. Boulangé-Lecomte, F. Portet-Koltalo	Are biosurfactant and chelating agent mixtures good additives for electro-kinetic remediation of multi-contaminated sediments?	1st international conference on pollutant toxic ions and molecules, PTIM 2015, 2-4 november 2015, Caparica, Portugal.
27	<u>F. Portet-Koltalo</u> , Y. Tian, M. Crampon, M. Ammami, J. Bodilis, A. Benamar	Biosurfactants as additives to increase PAH release from soils or sediment and enhance remediation processes	1st international conference on pollutant toxic ions and molecules, PTIM 2015, 2-4 november 2015, Caparica, Portugal.
28	<u>F. Portet-Koltalo</u> , Y. Tian, I. Berger, C. Boulanger-Lecomte, A. Benamar, N. Machour	Advantages of Matrix Solid Phase Dispersive (MSPD) Extraction Associated to MIPS versus MAE Liquid Extraction for the Simultaneous Analysis of PAHs, PCBs and some Hydroxylated PAHs in Sediments.	18th International Conference on Environmental Monitoring and Analysis ICEMA 2016 , 19-20 mai 2016, Berlin, Allemagne.
29	<u>I. Berger</u> , N. Machour, F. Portet-Koltalo	Analytical Tools for Multi-residue Analysis of some Oxygenated Metabolites of PAHs (Hydroxylated, Quinones) in Sediments.	18th International Conference on Environmental Monitoring and Analysis ICEMA 2016 , 19-20 mai 2016, Berlin, Allemagne.
30	<u>Y.Tian</u> , A. Benamar, C. Boulangé-Lecomte, F. Portet-Koltalo	Comparaison des tests de remédiation électrocinétiques avec mélanges de biosurfactants et agents chélatants pour les sédiments multi-contaminés réels et reconstitués	Journées de l'école doctorale normande SPMII, Le Havre, juin 2016
31	<u>Y. Tian</u> , A. Benamar, C. Boulangé-Lecomte, F. Portet-Koltalo	Comparison of electro-kinetic remediation tests enhanced by biosurfactant and chelating agent mixtures for both reconstituted and real multi-contaminated sediments	18th International conference on Heavy Metals in the Environment (ICHMET), 12-15 September 2016, Ghent, Belgique.
32	<u>I. Berger-Brito</u> , N. Machour, C. Morin, F. Portet-Koltalo	Experimental design for the optimisation of multi-residual analysis of oxygenated metabolites of PAHs (hydroxylated, quinones) in sediments.	ICCE 2017 16th International Conference on Chemistry and the Environment, 18-22 juin 2017, Oslo, Norvège
33	<u>T. Gardes</u> , Y. Laberdesque, E. Pateau, M. Debret, Y. Copard, J. Deloffre, S. Marcotte, A. L. Develle, P. Sabatier, E. Chaumillon, F. Portet-Koltalo	Long-term accumulation of metals and persistent pollutants (PAHs, PCBs, organochlorine pesticides) from Eure river watershed (France) in sediments: possible consequences of a dam removal.	ICCE 2017 16th International Conference on Chemistry and the Environment, 18-22 juin 2017, Oslo, Norvège

34	<u>M. Debret</u> , T. Gardes, Y. Copard, F. Kotalo, A-L. Develle, J. Deloffre, S. Marcotte, P. Sabatier, S. Revillon, J. Nizou, T. Berthe, E. Chaumillon, C. Grosbois, M. Simon, L. Chaumillon, M. Desmet	Effet de l'arasement d'un barrage sur les la qualité et quantité des transferts sédimentaires: Projet OSS 276 (Observatoire des Sédiments de la Seine).	TSMR 2017 Transport Solide et Morphodynamique des Rivières, 8-9 novembre 2017, Villeurbanne, France
35	<u>F. Portet-Kotalo</u> , Y. Tian, A. Benamar, C. Boulangé-Lecomte	Quels défis pour la dépollution électrocinétique des sédiments de dragage portuaire?	INTERSOLS 2018, 27-29 mars 2018, Paris
36	<u>A. Benamar</u> , Y. Tian, F. Kotalo, C. Boulangé, M. Ammami, Y. Song	Enhanced electrokinetic remediation of multi-contaminated dredged sediment and induced effect on their toxicity	EREM 2018: 16th International Symposium on Electrokinetic Remediation , 6-8 aout 2018, Canakkale (Turkey)
37	<u>T. Gardes</u> , M. Debret, Y. Copard, F. Portet-Kotalo, E. Patault, J. Deloffre, S. Marcotte, A.L. Develle, P. Sabatier, E. Chaumillon, T. Coulombier, S. Revillon, J. Nizou, Y. Laberdesque	Organic compounds and Trace Metal Elements in the Eure River Watershed: Past and actual records of anthropogenic impacts	Goldschmidt 2018, International conference on geochemistry , 12-17 aout 2018, Boston, USA
38	<u>M. T. Ammami</u> , Y. Song, , A. Benamar, F. Portet-Kotalo, C. Boulangé-Lecomte, Y. Tian	Enhanced electrokinetic remediation of dredged harbor sediment co-contaminated by heavy metals and polycyclic aromatic hydrocarbons (PAHs)	EREM 2018: 16th International Symposium on Electrokinetic Remediation , 6-8 aout 2018, Canakkale (Turkey)
39	<u>F. Portet-Kotalo</u>	Développement d'une nouvelle approche expérimentale pour évaluer la bioaccessibilité de contaminants organiques persistants dans des matrices sédimentaires	Journées thématiques "De la pollution à la contamination dans les cours d'eau ", 4-5 juillet 2018, Mont saint Aignan, France
40	<u>F. Portet-Kotalo</u>	dépollution des sols/sédiments: principe et solutions apportées par les procédés électrocinétiques	Séminaire UIC-Carnot I2C, "De la biomasse végétale pour le traitement des effluents et la dépollution", 15 novembre 2018, Rouen
41	<u>F. Portet-Kotalo</u> , T. Gardes, M. Debret, Y. Copard, S. Marcotte, C. Morin	Identification of the factors influencing bioaccessibility of polycyclic aromatic compounds in model sediments and in a river sediment	17th ICCE International Conference on Chemistry and the Environment, 16-20 june 2019, Thessalonique, Grèce
42	<u>F. Portet-Kotalo</u>	Innovative chemical and biological remediation processes for soil decontamination	Séminaire ERASMUS+ "Rencontre internationale Lycée Senghor d'Evreux et Université de Rüsselsheim, Allemagne", lycée Léopold Senghor, Evreux, 1 avril 2019