CURRICULUM VITAE (maximum 4 pages)

Part A. PERSONAL INFORMATION

CV date	08/01/2024

First and Family name	Adriana Farran		
Social Security, Passport, ID number	46111679Z	Age	65
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0002-7837-0867	
	SCOPUS Author ID (*)		
	WoS Researcher ID (*)	L-4746-2014	

(*) Optional
(**) Mandatory

A.1. Current position

Name of University/Institution	Universitat Politecnica Catalunya			
Department	Chemical Engineering			
Address and Country	Av. Eduard Maristany, 6-12. 08930-Sant Adrià Besós			
Phone number	934010983	E-mail	adriana.farran@upc.edu	
Current position	Full Professor		From	12/02/2021
Key words	Environment. Organic pollutants. Waste water. Analysis. Chromatography. Remediation. Valorization			

A.2. Education

PhD, Licensed, Graduate	University	Year
Liscensed in Chemistry	Autonoma de Barcelona	1982
PhD in Chemistry	Autonoma de Barcelona	1988

A.3. General indicators of quality of scientific production *(see instructions)*

Six-year research periods: 5
Date of the last six-year term granted: 01/01/2016
Total publications: 77
Total Q1 publications: 34
h index: 27
Total citations: 2231
Average citations / year for the last 5 years: 161

Part B. CV SUMMARY *(max. 3500 characters, including spaces)*

Adriana Farran, PhD in Chemistry (Universidad Autónoma de Barcelona,1989) and professor in Chemical Engineering department (Universidad Politécnica de Cataluña, 2021).

Since 1985, she has been teaching first, second and third cycle subjects (currently undergraduate and master's degrees) in Industrial Technologies and Chemical Engineering at the UPC.

7 teaching periods, both state and regional, have been recognized.

She has 13 teaching publications and has participated in 4 teaching innovation projects.

She has directed 6 PhD theses.

Regarding research, its main scientific objectives are detailed below:

1) Development and validation of analytical methods, based on instrumental separation systems, chromatographic (CG, HPLC) and electrophoretic (CZE, MECC), for the determination of organic (pesticides, phenols, organochlorine compounds, aromatic compounds) and inorganic compounds (metal complexes, cyanides) in organisms, waters, sediments and soils.
2) Study of the characterization and treatment of liquid and solid industrial wastes. Analysis and evaluation of the pollutants behavior in the environment, in particular chemical behavior and migration of different species. Within this line, work has been done on pesticide elimination techniques such as adsorption on activated carbon, acidic and basic hydrolysis, and photolysis. Sorption processes have been developed using reactive resins and impregnated resins for the elimination of organic micro-

pollutants in streams and effluents from industrial processes. Currently, she works in the development of new integrated technologies (reactive extraction, membrane processes) for the elimination of pollutants from industrial effluents and the recovery and valorization of waste from water treatment and purification processes.

Management activities. She has held the following university management positions:
- Academic Secretary of the Chemical Engineering Department of the UPC (July 2008 - June 2011).
- Director of the Chemical Engineering Department of the UPC (July 2011 - May 2018).
- Dean of the Escola Enginyeria Barcelona Est (since May 2018)
- Rector delegate at the Diagonal Besós Campus (May 2018-June 2021)

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

Guaya, D.; Valderrama, C.; Farran, A.; Armijos, C.; Cortina, J.L. *"Simultaneous phosphate and ammonium removal from aqueous solution by a hydrated aluminum oxide modified natural zeolite".* Chemical Engineering Journal, 271, 204-213. 2015. ISSN: 1385-8947
Agency: JCR Category: Engineering, Chemical Impact Factor: 5.31 Quartile: Q1

You,X., Guaya, D., Farran, A., Valderrama, C., Cortina, J.L. *"Phosphate removal from aqueous solutions using a hybrid impregnated polymeric sorbent containing hydrated ferric oxide (HFO)".* Journal of Chemical Technology & Biotechnology, 91, 693-704. 2016. ISSN: 0268-2575
Agency: JCR Category: Engineering, Chemical Impact Factor: 3.135 Quartile: Q1

Alcaraz, A.; Valderrama, C.; Cortina, J.; Akbarzadeh, A.; Farran, A. *"Enhancing the efficiency of solar pond heat extraction by using both lateral and bottom heat exchangers*". Solar Energy, 134, 82-94. 2016. ISSN: 0038-092X
Agency: JCR Category: Energy and fuels. Impact Factor: 4.018 Quartile: Q1

Guaya, D.; Valderrama, C.; Farran, A.; Cortina, J. *"Modification of a natural zeolite with Fe(III) for simultaneous phosphate and ammonium removal from aqueous solutions".* Journal of Chemical Technology & Biotechnology, 91, 1737-1746. 2016. ISSN: 0268-2575
Agency: JCR Category: Engineering, Chemical Impact factor: 3.135 Quartile: Q1

Guaya, D.; Valderrama, C.; Farran, A.; Sauras, T.; Cortina, J. *"Valorisation of N and P from waste water by using natural reactive hybrid sorbents: Nutrients (N,P,K) release evaluation in amended soils by dynamic experiments".* Science of the Total Environment, 612, 728-738. 2018. ISSN: 0048-9697
Agency: JCR Category: Environmental Sciences. Impact factor: 5.589 Quartile: Q1

Alcaraz, A.; Montalà, M.; Cortina, J.; Akbarzadeh, A.; Aladjem, C.; Farran, A.; Valderrama, C. *"Design, construction, and operation of the first industrial salinity-gradient solar pond in Europe: An efficiency analysis perspective".* Solar Energy, 164, 316-326. 2018. ISSN: 0038-092X
Agency: JCR Category: Energy and fuels. Impact factor: 4.674 Quartile: Q1

Alcaraz, A.; Montalà, M.; Valderrama, C.; Cortina, J.; Akbarzadeh, A.; Farran, A. *"Thermal performance of 500m2 salinity gradient solar pond in Granada, Spain under strong weather conditions".* Solar Energy, 171, 223-228. 2018. ISSN: 0038-092X
Agency: JCR Category: Energy and fuels. Impact factor: 4.674 Quartile: Q1

Alcaraz, A.; Montalà, M.; Valderrama, C.; Cortina, J.; Akbarzadeh, A.; Farran, A. *"Increasing the storage capacity of a solar pond by using solar thermal collectors: heat extraction and heat*

supply processes using in-pond heat exchangers". Solar Energy, 171, 112-121. 2018. ISSN: 0038-092X
Agency: JCR Category: Energy and fuels. Impact factor: 4.674 Quartile: Q1

Guaya, D.; Mendoza, A.; Farran, A.; Cortina, J.L.; Valderrama, C.; Sauras, M.T. *"Use of nutrient –enriched zeolite (NEZ) from urban wastewaters in amended soils. Evaluation of plant availability of mineral elements".* Science of Total Environment, 727, 2020. ISSN: 0048-9697
Agency: JCR Category: Environmental Sciences. Impact factor: 5.589 Quartile: Q1

Montenegro-Landívar, M.F.; Tapia-Quirós, P.; Vecino, X.; Reig, M.; Granados, M.; Farran, A.; Cortina, J.L.; Saurina, J.; Valderrama, C. *"Recovery of natural polyphenols from spinach and orange by-products by pressure-driven membrane processes".* Membranes, 12, 669. 2022. ISSN: 2077-0375
Agency: JCR Category: Polymer Science. Impact factor: 4.200 Quartile: Q2

C.2. Research projects

Project: "Recuperation and valorization of resources from urban wastes in the circular economy framework" COMRDI16-1-0061-02
Financing entity: *ACC10*
Since: 1/7/ 2017 to: 31/12/2020
Grant amount: 56741€
Principal investigator: Dr. José Luis Cortina Pallás; Dr. C. Valderrama
Number of participating researchers: 10

Project: "Development of radical innovations to recover minerals and metals from seawater desalination brines" H2020-869703-SEA4VALUE
Financing entity: Commission of European Communities
Since: 1/6/2020 to: 31/05/2024
Grant amount: 490.537€
Principal investigator: Dr. César Alberto Valderrama Ángel
Number of participating researchers: 12

Project: "Integración de tecnologías de procesamiento para garantizar una cadena de valor de baterías segura, circular y sostenible a través minería urbana e industrial". TED2021-131583B-I00
Financing entity: Agencia Estatal de Investigación
Since: 1/12/ 2022 to: 30/11/2024
Grant amount: 299000 €
Principal investigator: Dr. José Luis Cortina Pallás
Number of participating researchers: 15

Project: "Recuperación Sostenible de Elementos de valor añadido a partir de salmueras de desalinización de agua de mar mediante Tecnologías de separación híbrida". TED2021-131708B-C21
Financing entity: Agencia Estatal de Investigación
Since: 1/12/ 2022 to: 30/11/2024
Grant amount: 184000 €
Principal investigator: Dr. César Alberto Valderrama Ángel; Dr. Oriol Gibert Agulló
Number of participating researchers: 8

C.3. Contracts, technological or transfer merits
C.4. Patents

C.5. Awards

- Extraordinary Doctorate Award (academic year 1989-1990)

- 13th UPC Award for Quality in University Teaching: Award for the Docent Initiative (2010)

- Jaume Vicens Vives Distinction for university teaching quality (2010)

- First prize in the “Science in Action” contest in the category “Non-interactive science teaching materials” (Santillana Prize) (2010)

C.6- MERITS OF RESEARCH

Recognized periods of research activity (5) (1985-2015)

C.7- NATIONAL ACCREDITATION CERTIFICATE

Faculty: Full professor, Resolution date: 11/02/2011

C.8- SCIENTIFIC EVALUATOR

Journals: Journal of Chromatography A, Journal of Pharmaceutical and Biomedical Analysis, Chemosphere, Journal of Photochemistry and Photobiology A: Chemistry, International Journal of Environmental and Analytical Chemistry, Talanta, Analytica Chimica Acta, Separation Science and Technology.

EVALUATOR of the Agency for the Management of University and Research Grants of the Generalitat de Catalunya (AGAUR)

EXPERT EVALUATOR of projects of the Accreditation Agency in research, development and technological innovation (AIDIT)

C.9- PARTICIPATION IN CONSOLIDATED RESEARCH GROUPS

“Resource Recovery and Environmental Management (R2EM)”, recognized by the Generalitat of Catalunya. (2017-SGR-312)

"Barcelona Research Center in Multiscale Science and Engineering"