Curriculum Vitae

Full Professor César Valderrama

Personal Data

Name and Surname	**César A. Valderrama**			
Passport, ID number	46430832L			
	Researcher ID	D-1092-2011		
	Orcid code	0000-0001-6711-8183		
	Scopus number	22952263500		
University/Institution	Universitat Politècnica de Catalunya			
Department	Chemical Engineering Department			
Faculty/School	Barcelona East School of Engineering. EEBE Barcelona School of Industrial Engineering. ETSEIB			
Phone number	934011818	e-mail	cesar.alberto.valderrama@upc.edu	
Current position	Full Professor	From: June 2024		
PhD:	Universitat Politècnica de Catalunya	Year:2007		

Adscription

- Chemical Engineering Department
- Barcelona East School of Engineering. EEBE
- Barcelona School of Industrial Engineering. ETSEIB

Research Group

- 2002-to date: Resource Recovery and Environmental Management **R2EM** SGR group recognized from the AGAUR Agency
- 2022: Specific Centre for Hydrogen Research of the UPC **CER-H2**

Scientific Indicators

Publication statistics in Scopus for the last 5 years and total (June 2024)

Year	**<2019**	**2019**	**2020**	**2021**	**2022**	**2023**	**≥2024**	Total
Indexed papers/reviews	79	5	10	11	18	15	5	**143**
Citations	2211	390	445	664	754	837	558	**5195**

Scientific indicators in different data bases (September 2022):

	Web of Science	**Scopus**	**Google Scholar**
Number of Documents	140	143	160
Citations	4642	5196	6669
H-Index	**39**	**42**	**49**

Public Funding Projects Summary

Type of research project	**Scientific coordinator international/national projects**	**Researcher international/national projects**	**Scientific coordinator Innovation and educational projects**
Number of projects	7	19	10
Total budget	1.613.829 €	3.680.396 €	1.273.605 €

Industry financed research projects and technology transfer project summary

Type of research project	**Scientific coordinator**	**Researcher**
Number of projects	5	13
Total budget	283.288 €	559.900 €

Research management

- 2007-2017: Research Leader in Solar Pond technology within R2EM-UPC
    - Leader in the construction of the demonstration pilot plant (50 m2) and the 500 m2 industrial solar pond in collaboration with the companies and universities involved
- 2010-to date: Research leader in Sustainability and Circular Economy within the E2RM-UPC
- 2019-to date: Scientific-technical Committee of the Hub Recirculates project promoted between the Universitat Politècnica de Catalunya (UPC) and the Metropolitan Area of Barcelona (AMB) to turn UPC into a benchmark for knowledge and practice of the circular economy
- 2021-to date Representing the R2EM in the steering committee of the Specific H2 Research Center at the UPC
- WP Roadmap Coordinator: Education and Public Awareness of Hydrogen Europe Research (HER).10/03/2023 – to date.

Teaching activity

- Teacher responsible and examiner:
    - At KTH: Course MJ2418 Sustainable Energy and Environment (5 ECTS) of the Master's in Environomical Pathways for Sustainable Energy Systems, Unit of Heat and Power Technology at the Royal Institute of Technology (KTH) Stockholm, Sweden. From 2016 to date.
    - At UPC: Master of Energy Engineering 1 course; Master of Chemical Engineering 2 courses
- Advising and Mentoring
    - At KTH: MJ2415 Project in Energy Systems Analysis and MJ2504 Integrated Project of the Year in Sustainable Energy
    - At UPC: Number of Bachelor Thesis advised: 50
      Number of Master Thesis advised: 90
- Participation in innovation projects: 10 Projects Funded by the European Institute of Innovation and Technology since 2013 to date.
- Elaboration of study plans for the Bachelor on Chemical Engineering, Master on Chemical Engineering, Master on Energy Engineering and Master on Sustainable Energy Systems

Teaching Management

- 2013-to date: Coordinator at the UPC of the Master KIC InnoEnergy MSc Environomical Pathways for Sustainable Energy Systems SELECT

- 2019- to date: Program Director of the Master KIC InnoEnergy MSc Environomical Pathways for Sustainable Energy Systems SELECT

PhD Thesis advised

- 2024 Development of new tools for sustainability quantification and management. HEREU MORALES, Joan

- 2024 Recovery and valorization of Nitrogen from urban and industrial process streams by integration of membrane processes. AGUILAR MORENO, Miguel.

- 2023 Sustainable Evaluation of Boron Recovery from seawater desalination brines: integration of membrane processes and ion exchange resins. FIGUEIRA ALVES, Mariana.

- 2023 Nitrogen Recovery from wastewater treatment effluents by liquid-liquid membrane contactor for fertilizers production. SHEIKH, Mahdi.

- 2023 Evaluation of Nitrogen Recovery from Urban Wastewater and its Valorization Trough Fertilizer Production. MAYOR PILLADO, Álvaro.

- 2022 Integration of advanced wastewater treatment and reclamation technologies for organic micropollutants removal and promote water reuse, Carlos ECHEVARRIA DÍEZ-CANEDO.

- 2022 Recovery of polyphenols by extraction and purification technologies from orange and spinach processing residues, Maria Fernanda MONTENEGRO LANDIVAR.

- 2019 Enhancing the thermal efficiency of a salinity gradient solar pond. Implementation of the study in the design, construction, salinity gradient establishment, operation and energy transfer at industrial scale, Aurora ALCARAZ SEGURA.

- 2018 Nutrient recovery from waste water treatment plant by sorption processes: technical and economic analysis, Xialei YOU CHEN.

- 2015 Sewage Biogas Energy Valorization via Solid Oxide Fuel Cells, Nicolás de ARESPACOCHAGA SANTIAGO.

- 2012 Estudio de la viabilidad técnico-económica y ambiental de la gestión de fangos EDAR por adición de CaO para su valorización en la industria cementera, Ricard GRANADOS.

Ongoing PhD thesis advised

- DAWID, Sacha. Sustainability and transdisciplinary analysis of the green energy transition: Foreseen ending date: 2028

- Otero, Julia. Towards a sustainable and circular supply chain for critical raw materials: Foreseen ending date: 2028

- SABATA MAS, Judith. Unlocking the circularity of spent EV batteries for strategic resource recovery: Foreseen ending date: 2027

- ABDOLLAHI, Pouya. Sustainable recovery of metals for energy transition from secondary waste streams: Foreseen ending date: 2027

- SCHNEIDER, Heloisa Cristina. Exploring opportunities and constraints of Chile's energy transition to achieve carbon neutrality: Foreseen ending date: 2026

Ownership of industrial and intellectual property rights

EP21383156 Recovery of rare earth elements from acidic mine water. Universitat Politècnica de Catalunya. 12/2021. Lopez Rodriguez Julio, Cortina Pallas Jose Luis, Gibert Agullo Oriol, Valderrama Angel Cesar A.

EP21382463 Separación de arsénico de antimonio y bismuto en un eluato. Universitat Politècnica de Catalunya. 05/2021. Lopez Rodriguez Julio, Cortina Pallas Jose Luis, Valderrama Angel Cesar A.