CURRICULUM VITAE (maximum 4 pages)

Part A. PERSONAL INFORMATION

CV date	27-9-2018

First and Family name	BERTA GALAN CORTA		
Social Security, Passport, ID number	30589035R	Age	51
Researcher numbers	Researcher ID	K-9467-2014	
	Orcid code	0000-0003-2145-3669	

A.1. Current position

Name of University/Institution	UNIVERSIDAD DE CANTABRIA			
Department	QUIMICA E INGENIERIA DE PROCESOS Y RECURSOS			
Address and Country	AVDA LOS CASTROS S/N			
Phone number	942201589	E-mail	galanb@unican.es	
Current position	Lecturer		From	15/7/1999
Espec. cód. UNESCO	3303			
Palabras clave	Simulation, Model, Process Design, Industrial waste.			

A.2. Education

PhD	University	Year
Chemistry degree	UNIVERSITY OF PAIS VASCO	1989
Master in Philosopy	BATH UNIVERSITY	1992
Chemistry PhD	UNIVERSTY OF CANTABRIA	1994

A.3. JCR articles, h Index, thesis supervised…

4 six-year research period; last one in 2015.
2 PhD in the last 10 years.
Total Citation: 639. (Web of Science).
Average citation/year in the last five years: 45,4 (Web of Science).
Total publications in the first quartile (Q1): 19
Index h: 15 (Scopus).

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

I got the Bachelor degree in Chemistry (1989) by the University of Basque Country, master's degree (Mphil) by the University of Bath (United Kingdom) in 1992 and PhD in chemistry by the University of Cantabria in 1994. In February 1992 I joined to the University of Cantabria (UC) in Santander where I am at present.

Currently, the objective of my research are two: i) management of Construction and Demolition waste: location, recycling plants and indicators and ii) modelling and simulation of chemical and environmental processes; the main areas of application are: process design of water separation, simulation of operations and environmental optimization.

My research activity starts initially at the University of Bath and later is developed at UC, through the realization of the PhD thesis and through the collaboration at international, European and national research & development projects. Some of the project were of basic character and others were applied projects in collaboration with the industrial sector.

I've got four six-year research period of the CNEAI office, through the publications of more than 30 international articles in indexed journals (categories of Chemical Engineering, Environmental Sciences), 20 chapters of book with ISBN and 5 articles in national magazine; 50 communications to congresses international and by the award of 1 patent of invention. Supervision of 4 PhD theses. Development of two stays of 24 weeks in 1998 and 35 weeks in 2010 with Professor Ignacio Grossmann in the Chemical Engineering Department at Carnegie Mellon University, Pittsburgh (USA).

Since 1992 I teach at University of Cantabria at bachelor level; all the subjects are related to chemical engineering in different degrees, currently, in the chemical engineering degree and industrial engineering degree. I have been also teaching different courses related to the official postgraduate programme (Master and PhD) titlded "Engineering chemistry and of processes" with MEC quality mention from 1994 until 2013. Currently, since 2013, I participate in one of the official maste of UC titeled "Research in Engineering Industrial" as well as in the programs of doctorate titeled " Industrial Engineering " of the UC. I have also taught various short courses from UC in the field of chemical engineering and the environment. Finally. I have also attended several short courses at UC related to educational programs and course in Dublin City University about *How to Learn to use academic English as teachin in a foreing language*.

PART C. RELEVANT MERITS IN THE LAST 10 YEARS

C.1. Publications (including books)

- Galán B., Dosal E., Cifrian E., Andres A., Viguri, J., **2019,** *Analysis of the influence of input streams on recycling performance using basic and advanced CDW plants*. **Sent to J. of Cleaner Production.**
- Revilla M., Galan B., Viguri J., **2018**, *Optimization methodology for high cod Nutrient-limited wastewaters treatment using bas process*. **Water, air and soil pollution.** 229(6),191. (Q3).
- Revilla M., Galan B., Viguri J., **2018**, *Analysis of simulation tools and optimization of the operational conditions for biofilm activated sludge industrial process*. **Int. J. Environ. Sci. Technol.** 15, 2499–2510. (Q2).
- Martin-Torre M.C., Cifrian E., Ruiz G., Galan B., Viguri J., **2017***, Estuarine sediment resuspension and acidification: Release behaviour of contaminants under different oxidation levels and acid sources,* **Journal of Environmental Management**, 199, 211- 221 (Q1).
- Revilla M., Galan B., Viguri J., **2016**, *An integrated mathematical model for chemical oxygen demand (cod) removal in moving bed biofilm reactors (MBBR) including predation and hydrolysis*. **Bioresource Technology.** 220, 572-583. (Q2).
- Revilla M., Galan B., Viguri J., **2016**, *An integrated mathematical model for chemical oxygen demand (cod) removal in moving bed biofilm reactors (MBBR) including predation and hydrolysis*. **Water Research.** 98, 84-97. (Q1)
- Muñoz I., Martin-Torre M.C., Galan B., Viguri J., **2015**, *CO2 seawater acidification by CCS-simulated leakage: Kinetic modelling of Zn, Pb, Cd, Ni, Cr, Cu and As release from contaminated estuarine sediment using pH-static leaching tests,* ***International Journal of Greenhouse Gas Control*****,** 54, 185-199. (Q1).
- Muñoz I., Martin-Torre M.C., Galan B., Viguri J., **2015**, *Assessment by self-organizing maps of element release from sediments in contact with acidified seawater in laboratory leaching test conditions*, **Environmental Monitoring and Assesment**, 33, 1117-1122. (Q2).
- Martin-Torre M.C., Ruiz G., Galan B., Viguri J., **2015**. *Generalized mathematical model to estimate Zn, Pb, Cd, Ni, Cu, Cr and As release from contaminated estuarine sediment using pH-static leaching tests*. **Chemical Engineering Science**, 138, 780- 790 (Q2).
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- Payán, M.C., Galán, B., Ruiz, G., Coz, A., Viguri, J.R., **2013,** *Pb and Zn release from intertidal marine sediment in contact with acidified CO_2 seawater: mathematical model for column leaching tests.* ***Chemical Engineering Science*** 95, 85-93. (Q1).
- Galán B., Dosal E., Andres A., Viguri, J., **2013**, *Assessing of economical-transportation criteria for the optimal location of Construction and Demolition Waste management facilities in Cantabria (Spain).* ***Waste and Biomass Valorization***. 4, 797-808.
- Payan MC., Galán B. Coz A., Vandecasteele C., Viguri J.R., **2012**, *Evaluation through column leaching tests of metal release from contaminated estuarine sediment subject to CO_2 leakages from Carbon Capture and Storage sites.* ***Environmental Pollution***. 171, 174-184. (Q1).
- Cifrian E., Galán B., Andres A., Viguri J.R., **2012**, *Material flow indicators and carbon footprint for MSW management systems: Analysis and application at regional level, Cantabria, Spain.* **Resources, Conservation and Recycling,** 68, 54-66. (Q2).
- Payan M.C., Verbinne, B., Galán B., Coz A., Vandecasteele C., Viguri J.R., **2012**, *Potential influence of CO_2 release from a carbon capture storage site on release of trace metals from marine sediment.* ***Environmental Pollution***. 162, 29- 39. (Q1).
- Arce R., Galán B., Coz A., Andrés A., Viguri J.R., **2010**, *Stabilisation/solidification of an alkyd paint waste by carbonation of waste-lime based formulations.* ***Journal of Hazardous Materials***. 177-(1-3), 428- 436. (Q1).
- Alvarez-Guerra M., González C., Andrés A., Galán B., Viguri J.R., **2008**, Assessment of self-organizing map artificial neural networks for the classification of sediment quality. ***Environment International***. 34, 782-790. (Q1).

C.2. Research projects and grants

- H2020-LCE-2015-1-two-stage. **Use of vineyard pruning residues in a novel, high-performance technological flow for cellulosic ethanol production,** PRUNING-FUEL. Call for Competitive Low Carbon Energy. Date of submission: 03/09/2014.
- FP7-KBBE.2012.3.4-02. **New tailor-made biopolymers produced from lignocellulosic sugars waste for highly demanding fire-resistant applications** BRIGIT. UE. 15 partners from 11 countries. University of Cantabria (5 researchers). IP: A. Coz, 2012-2016. 357.600 € UC. Investigador.
- CTM2011-28437-C02-01. **Effects of CO_2 leakages when store in manire geological formations: Kinetics of mobility of metals in marine sediments.** CO2GS-EFFMET. Plan Nacional 2011-2014. MICINN. Partners: U. Cantabria, U. Cádiz, 01/2012-12/2014. 98.010 €. J. Viguri (Coordinador e IP)
- CTM 2006-07960. **Development of a process of ceramic products using waste Foundry sand and dredged material: technical evaluation and environmental assessment (SANDBRICK))** Plan Nacional I+D+I, 2011-2014. MICINN. 76.000 €. A. Andres (Coordinador e IP)
- CTM2008-06344-C03-01/TECNO. **Analysis and modeling of the behaviour of leaching in dynamic conditions of mobility of metals from marine sediments in contact with leakage of CO2 from processes** CS-SSGS. Plan Nacional 2008-2011. MICINN. Partners: UC, UCA, CSIC. Nº Researchers: 6. 01/2009-12/2011. 87.120 €. J. Viguri (IP).
- National PlanE, " **Development of the initiative for the identification, monitoring, biotechnology and energy crops conversion-valorizacion** "EUCAFUEL". Partners: INIA, UC, Valladolid, Alcalá de Henares y Bosques 2.000. A Coz (IP). 2009-2010. 284.417,00 € UC. Investigador

C.3. Contracts

- **Analysis of the results and model creation of electrodialysis. ElectroModel**. Solvay Química. J. Viguri (IP). 07/2012-03/2014. 75.986,79 €.

- **Analysis of the results and model creation of electrodialysis -ElectroModel**. BOSQUES 2000-INIA-UNIVERSIDAD DE CANTABRIA, SNIACE 2010-2012. J. Viguri (IP).

C.4. Patents

ORTIZ URIBE I., GALÁN CORTA B., IBAÑEZ MENDIZABAL R. ***Method to extraction and simultaneous concentration of compounds of liquid phases using microporous solutions.*** Required number: P99-0-1559 Priority Country: Spain, Priority date: 5-7-1999.

C.5. Member of Editorial Board and Conference Advisory Committees.

Wascon 9th Conference WASCON 2015, Santander, Spain, 2015.

C.6. International Postgraduate Committees and Spanish Thesis Committees

Participation in 3 Committees in the last 10 years.

C.7. Referee Activities

Referee of some scientific journals in the areas of de Chemical Engineering, Environmental Sciences, Environmental Engineering.

C.8. International Collaborations

- Prof. Carlo Vandecasteele. Dept of Chemical Engineering of Katholieke Universiteit Leuven, Belgium.
- Prof. Ignacio Grossmann. Center for Advanced Process Decision-making (CAPD). Chemical Engineering Department. Carnegie Mellon University. Pittsburgh, Pennsylvania, USA

C.9. Student supervision (2006-actual)

- 4 Ph.D supervision: 1999, 2004, 2016, 2017.
- 3 Mphil supervision: 2012, 2014, 2015
- Supervision of more than 20 bachelor degree thesis.

C.10. Evaluations, Awards and Recognitions

- Certification to give class in English.
- 1st award to the best poster of Wascon 8th Conference. WASCON 2012, Gothenburg, Sweden, 2012.