Date of the CVA	06/11/2020

Section A. PERSONAL DATA

Name and Surname	Fco. Javier Heredia Cervera		
DNI	46533591Z	Age	55
Researcher's identification number	Researcher ID	7006205742	
	Scopus Author ID		
	ORCID	0000-0003-4613-957X	

A.1. Current professional situation

Institution	Universitat Politècnica de Catalunya		
Dpt. / Centre	Department of Statistics and Operations Research / School of Mathematics and Statistics (FME)		
Address	Edifici C5, Campus Nord, Jordi Girona 1-3, 08034, Barcelona		
Phone	93-401-73-35	Email	f.javier.heredia@upc.edu
Professional category	Associate professor	Start date	2013
UNESCO spec. code			
Keywords	Non linear programming; Complementary services; Models of determinist nets and stochastics; Linear programming; Planification of the generation systems; Management of electric markets; Prize predictions; Inquiry management; Programation of short therm generation		

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Informática	Universitat Politècnica de Catalunya	1995
Licenciado en Ciencias Físicas	Universitat de Barcelona	1988

A.3. General quality indicators of scientific production

Six-year research periods (sexenios): 4
Date of last granted: 05/06/2019
Number of thesis supervised in the last ten years: 1 finished, 4 ongoing.
Number of citations: 756
Average number of citations in the last five years: 430
Number of publications in the first quartile (Q1): 6
h Index: 16

Section B. SUMMARY OF THE CURRICULUM

Degree in Physics from the University of Barcelona (1988) and Doctor of Science from the Universitat Politècnica de Catalunya (UPC) (1995). Currently I am associate professor (Professor Titular d'Universitat) at the Department of Statistics and Operational Research of the UPC. My areas of interest are the modeling of multistage stochastic programming problems, with special emphasis on the generation of scenario trees, and their resolution through optimization techniques for Mixed Integer Non-Linear Programming problems. I have applied this methodology to problems in energy systems and supply chain in several research projects with both public and private funding. Four recognized six years periods of investigation ("sexenios"), the last one granted in Juny 2019. 32 publications including JCR papers (most of them in Q1 and Q2), chapters of book and indexed proceedings full papers. 59 presentations to congresses, almost all international. I have participated in a total of 19 funded research projects, seven of them as IP.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. Ramon, D.; et al. (4/2). 2020. Optimal postponement in supply chain network design under uncertainty: an application for additive manufacturing International journal of production research. Taylor & Francis. ISSN 0020-7543.
2 **Scientific paper**. Barbero, M.; et al. (5/5). 2020. Critical evaluation of European balancing markets to enable the participation of Demand Aggregators Applied energy. 264-114707, pp.1-23. ISSN 0306-2619.
3 **Scientific paper**. Heredia, F.-Javier; Cifuentes, J.; Corchero, C.(3/1). 2018. Stochastic optimal generation bid to electricity markets with emissions risk constraints Journal of environmental management. 207-1, pp.432-443. ISSN 0301-4797.
4 **Scientific paper**. Heredia, F.-Javier; Cuadrado, M.; Corchero, C.(3/1). 2018. On optimal participation in the electricity markets of wind power plants with battery energy storage systems Computers & operations research. 96, pp.316-329. ISSN 0305-0548.
5 **Scientific paper**. Minguella-Canela, J.; et al. (9/4). 2017. Comparison of production strategies and degree of postponement when incorporating additive manufacturing to product supply chains Procedia manufacturing. 13, pp.754-761. ISSN 2351-9789.
6 **Scientific paper**. Igualada , L.; et al. (4/4). 2014. Optimal energy management for a residential microgrid including a vehicle-to-grid system IEEE transactions on smart grid. Institute of Electrical and Electronics Engineers (IEEE). 5-4, pp.2163-2172. ISSN 1949-3053.
7 **Scientific paper**. Muñoz, M.P.; Corchero, C.; Heredia, F.-Javier. (3/3). 2013. Improving electricity market price forecasting with factor models for the optimal generation bid International statistical review. 81-2, pp.289-306. ISSN 0306-7734.
8 **Scientific paper**. Corchero, C.; Mijangos, E.; Heredia, F.-Javier. (3/3). 2013. A new optimal electricity market bid model solved through perspective cuts TOP. Springer. 21-1, pp.84-108. ISSN 1134-5764.
9 **Scientific paper**. Heredia, F.-Javier; Rider, M.; Corchero, C.(3/1). 2012. A stochastic programming model for the optimal electricity market bid problem with bilateral contracts for thermal and combined cycle units Annals of operations research. 1-193, pp.107-127. ISSN 0254-5330.
10 **Scientific paper**. Corchero, C.; Heredia, F.-Javier. (2/2). 2011. A stochastic programming model for the thermal optimal day-ahead bid problem with physical futures contracts Computers & operations research. 38-11, pp.1501-1512. ISSN 0305-0548.
11 **Scientific paper**. Heredia, F.-Javier; Rider, M.; Corchero, C.(3/1). 2010. Optimal bidding strategies for thermal and generic programming units in the day-ahead electricity market IEEE transactions on power systems. 25-3, pp.1504-1518. ISSN 0885-8950.

C.2. Participation in R&D and Innovation projects

1 2019 DI 098, Modelos de optimización matemática en la gestión de centros comerciales AGAUR. Agència de Gestió d'Ajuts Universitaris i de Recerca. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 07/09/2020-07/09/2023. 33.960 €.
2 RTI2018-097580-B-I00, Modelling and optimization of large-scale structured problems and applications AGENCIA ESTATAL DE INVESTIGACION. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 01/01/2019-31/12/2022. 82.885 €.
3 MTM2013-48462-C2-1-R, Forecasting and optimization of wind generation in energy markets - 1 MIN DE ECONOMIA Y COMPETITIVIDAD. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 01/01/2014-31/12/2017. 59.290 €.
4 2009 SGR 1122, GNOM: GROUP OF NUMERICAL OPTIMIZATION AND MODELLING AGAUR. Agència de Gestió d'Ajuts Universitaris i de Recerca. Jordi Castro Perez. (Department of Statistics and Operations Research). 23/09/2009-30/04/2014. 42.640 €.

5 DPI2008-02153, PLANIFICACIÓN ÓPTIMA DE LA GENERACIÓN ELÉCTRICA A CORTO Y MEDIO PLAZO EN ENTORNOS DE MERCADOS MÚLTIPLES CON RESTRICCIONES DE RIESGO Ministerio de Ciencia e Innovación (MICINN). Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 01/01/2009-30/03/2013. 155.721,62 €.

C.3. Participation in R&D and Innovation contracts

1 OPTIMITZACIÓ DE RESERVES CABLE EN BOBINES (ORCB) TOP-CABLE, SA. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 01/06/2020-01/09/2020. 11.500 €.

2 Strategic analytical models in supply chain design through mathematical optimization ACCENTURE TECHNOLOGY LABS. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 16/11/2016-P3Y1M16D. 70.255,02 €.

3 Strategic analytical models in supply chain design through mathematical optimization ACCENTURE TECHNOLOGY LABS. Fco. Javier Heredia Cervera. (Department of Statistics and Operations Research). 16/11/2016-P3Y2M29D. 133.250,91 €.

C.4. Patents