Maria Albareda Sambola

Associate professor in the Statistics and Operations Research department of UPC, since 2011, after having been lecturer in the same department and in the Statistics department of Carlos III University in Madrid.

Holds a BsC in Mathematics from UPC since 1997 and obtained a Ph.D. in Mathematics, also at UPC, in 2003, under the supervision of professors E. Fernández and G. Laporte.

Her research lines focus on discrete optimization problems arising in logistics. In particular, she has worked on vehicle routing problems and discrete location problems both, under deterministic and stochastic assumptions. Her work on these problems has given rise to about 30 publications in International journals.

Currently she is member of the editorial advisory board of Computers & Operations Research, and of Computational Optimization and Applications and coordinates the GELOCA working group of the Statistics and Operations Research spanish society.

Researcher ID: G-4328-2015
Orcid ID: 0000-0002-7666-6218
Scopus Author ID: 15755066200

Research lines

Combinatorial optimization, Discrete location, Vehicle routing

Background

Ph. D. In Mathematics. Universitat Politècnica de Catalunya, 2003
BSc(Llicenciatura) in Mathematics. Universitat Politècnica de Catalunya, 1997

Recent publications

- Reformulated acyclic partitioning for rail-rail containers transshipment (A. Marín, A.M. Rodríguez-Chía).
  European Journal of Operational Research, 277(1): 153-165, 2019
  doi: 10.1016/j.ejor.2019.02.022

- The stratified p-center problem (L.I. Martínez-Merino, A.M. Rodríguez-Chía)
  Computers & Operations Research, 108: 213-225, 2019
  doi: 10.1016/j.cor.2019.04.013

- Exact calculation of network robustness (O. Lordan)
  Reliability Engineering & System Safety, 183:276-280, 2019.
  doi: 10.1016/j.ress.2018.11.020

- The probabilistic p-center problem: Planning service for potential customers (L.I. Martínez-Merino, A.M. Rodríguez-Chía)
  European Journal of Operational Research, 262:509-520, 2017
  doi: 10.1016/j.ejor.2017.03.043

- Introducing capacities in the location of unreliable facilities (M. Landete, J.F. Monge, J.L. Sainz-Pardo)
  European Journal of Operational Research, 259: 175-188, 2017
  doi: 10.1016/j.ejor.2016.10.013

- Location-routing and location-arc routing. (amb J. Rodríguez-Pereira) Capítol 15 de *Location Science 2nd Edition*, G. Laporte, S. Nickel i F. Saldanha da Gama, Eds. ISBN: 978-3-030-32176-5. Springer, 2020

Ph.D. Theses

- Victoria Rebillas. The Multi-Depot VRP with Vehicle Interchanges
  Programa de doctorat: Estadística I Investigació Operativa. Universitat Politècnica de Catalunya.
  Barcelona, 2018.

- Efraín Ruíz. The capacitated minimum spanning tree problem
  Ph.D. program: Statistics and Operations Research. Universitat Politècnica de Catalunya. Barcelona Tech.
  Barcelona, 2013. (co-supervised with E. Fernández)

Contact

maria.albareda (domain: upc.edu)