

**Name**

Roberto Musmanno

Role

Professore Ordinario

Short CV

Roberto Musmanno is Professor of Operations Research at the University of Calabria (Unical), Italy. He was Assistant Professor of Operations Research at Unical from 1995 to 1998 and Associate Professor of Operations Research at University of Lecce from 1998 to 2001; Post-doctoral Research Associate, at the Operations Research Department of Stanford University, USA (6-8/1992) and Visiting Scientist at the Laboratory for Information and Decision Systems, MIT, Cambridge, USA. His major research interests are in logistics and network optimization. He has published more than 50 papers in a variety of journals. He is coauthor of six books on logistics and operations research field. He has been involved in several international research projects.

Teaching courses:

Logistics for bachelor's degree in Engineering Management at University of Calabria.

Logistics 1, Logistics 3, Optimization and Operations Research for master's degree in Engineering Management at University of Calabria until 2010

President of Council of degree in Management Engineering until 2011

Selected Publications

A. Bosco, D. Laganà, R. Musmanno, F. Vocaturo, A Matheuristic Algorithm for the Mixed Capacitated General Routing Problem, *Networks*, 64/4 (2014) 262-281.

P. Beraldi, M.E. Bruni, D. Laganà, R. Musmanno, R. The Mixed Capacitated General Routing Problem under Uncertainty, *European Journal of Operational Research*, 240/2 (2015) 382-392.

C. Ciancio, C. Varrese, G. Ambrogio, L. Filice, R. Musmanno, A multi-objective optimization of a porthole die extrusion for quality and sustainability issues, *Key Engineering Materials Vols. 622-623* (2014), 79-86 - Trans Tech Publications, Switzerland.

J-F. Cordeau, D. Laganà, R. Musmanno, F. Vocaturo, A decomposition-based heuristic for the multiple-product inventory-routing problem, *Computers and Operations Research*, 55 (2015) 53-166.

F. Longo, A. Chiurco, R. Musmanno, L. Nicoletti, Operative and procedural cooperative training in marine ports, *Journal of Computational Science*, 10 (2015) 97-107.

Research Lines

Arc Routing Problems: combinatorial optimization problems in which a fleet of vehicles must be routed over a logistics networks, where required links must be serviced while minimizing the total transportation cost

General Routing Problems: combinatorial optimization problems in which a fleet of vehicles must be routed over a logistics networks, where required links and vertices must be serviced while minimizing the total transportation cost

Inventory Routing Problems: combinatorial problems arising in the context of the Vendor Managed Inventory (VMI) system, in which the vendor decides on the best replenishment policy of the customers by avoiding stock-out, while respecting their maximum inventory capacity and minimizing the total transportation and inventory cost.