

S4. Metaheuristics in Port Logistics and Related Problems

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Descripción:

Nowadays, maritime container terminals compete with each other for a seaborne trade that moves more than 10 billion tons of freights around the world. It is a market highly competitive in which huge maritime companies choose ports in regions stable in politic and social terms, as well as with suitable locations and with cost/quality ratios as operations center. In this environment, maritime container terminals deal with constant opportunities and threats from current and future neighboring competitors. The improvement of the logistic management of the whole terminal is the most appropriate response to these threats due to its direct impact on prizes and quality of service. In this regard, terminal managers today require innovative management systems to make adequate decisions to cope with the potential threats.

Most of the optimization problems that arise in the context of a maritime container terminal belong to the N P-hard class. For this reason, efficient heuristic and metaheuristic approaches are required to solve them in realistic scenarios.

The goal of this scientific workshop is to bring together researchers who work in the design, analysis, and comparison of metaheuristic techniques applied to maritime logistics and related problems. The workshop includes works that address the solution of berth allocation problems, quay crane assignment problems, quay crane scheduling problems, container relocation problems, and vehicle routing problems, among others.