

Rosa Mari Darbra (Prof. PhD)

Scientific and academic resume

R.M. Darbra obtained her Environmental Science degree with a **final extraordinary award** in November of 2000. After that, in February of 2005 she got her **PhD degree by the Universitat Politècnica de Catalunya**, with the qualification of Cum Laude and the European recognition. She developed her PhD research in the framework of the **ECOPORTS project** (2002-2005). The methodology developed in her thesis aimed at evaluating the environmental impacts in ports. Currently, this tool is still being used by European ports. Each year a report of the environmental results gathered with this tool is published as a result of a collaboration between UPC and the European Sea Ports Organization (www.espo.be). In addition, R.M. Darbra received the **Young Professional Award** (ECOPORTS Foundation, 2005) for her outstanding contribution to this project.

She also was accredited as an **environmental auditor** by Lloyd's. During the pre-doctoral period, she was awarded with a **FPU grant** (Ministry of Education) and the possibility of doing abroad stages in prestigious universities: **Cardiff University (U.K.)** and **World Maritime University (Sweden)**.

Once finished her PhD, the candidate worked in several research centres outside Spain, a fact that allowed her not only to acquire new scientific knowledge, but also to integrate in international working groups. Firstly, she stayed as a postdoc researcher at the **Politecnico di Torino** (Italy). Then, she worked at **Wollongong University** (Australia) as a lecturer and chief researcher of an international project between Australia and New Zealand. Her last stage abroad was as a professional in the **Port of Amsterdam**, where she worked as a manager of European projects in the field of environmental monitoring in ports and as an environmental adviser.

In March of 2007, R.M. Darbra came back to Barcelona to join to the research group of Prof. Damià Barceló at the Spanish National Research Council (**CSIC**), with a contract from the Ministry of Education and Science (**Juan de la Cierva**). Her main research line was the environmental risk analysis in aquatic organisms and rivers using fuzzy logic. In this line, she participated in several European research projects (RISKBASE, AQUATERRA, and PROMOTE) and she applied for one related with chemical risk within the Seventh Framework Programme. This project was granted and, lately, she was its responsible at UPC (RISKCYCLE (2009-2011)).

Finally, in July of 2008, the candidate applied for a lecturer position in the **Universitat Politècnica de Catalunya** and she gained it. After that, in 2011 she became **Associate Professor** at the Chemical Engineering Department and in 2022 she got the **Full Professor category**. Nowadays, she teaches in the industrial engineering bachelor degree and master degree, however, she has taught in **11 different degrees** a total of **18 different subjects**.

At the same time, she leads a research line focussed on the analysis of the environmental risk in ports. In this framework, she has been the responsible at UPC for several international projects, such as BROMACUA (Fundació BBVA), RISKCYCLE (European Commission) and PERSEUS (EU). Following the research done in her thesis, she also coordinated the project SIMDESPORTS, to evaluate environmental indicators in

ports (funded by AGAUR), followed by the coordination at UPC of the European project PORTOPIA, related with the environmental impact in ports. Nowadays she works in two National funded projects related to sustainability.

At the UPC, R.M. Darbra also has worked as an evaluator of safety studies for the Generalitat de Catalunya. Currently she is the responsible for sustainability in the Chemical Engineering Department (Barcelona section) and coordinator of the chemical studies within the industrial engineering degree. Finally, she also participates in the supervision of several final degree projects, master thesis and doctoral thesis.

During her first years as a lecturer, she was trained in pedagogy and she cursed the PROFI course (lecturers course by Educational Science Institute), assisting to a wide number of courses, conferences and workshops focused on improving the lecturers' skills (around 50). She has also been main researcher of an innovation teaching project and now she participates in another one (LESIE).

The scientific production up to now has been **45 publications** in JRC international scientific journals (13 of them as first author) and 9 in other journals, **68 contributions in congresses** and **19 in workshops**, **18 chapters** of books, **1 book**, a PhD thesis and **editor of 3 books**. She has participated in **17 international projects (11 of them European)** and **19 national**, being the **coordinator at UPC** of a total of **7** and one in Australia.

List of Publications

Articles in JCR journals

- Puig, M.; Darbra, R.M. Innovations and insights in environmental monitoring and assessment in port areas. *Current opinion in environmental sustainability*, 70. 2024.
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- Azarkamand. S., Ferré, G, Darbra, R.M. “Development of a standardized tool to calculate carbon footprint in ports”. *Journal of Maritime Research*, vol. 17, n. 3, pp. 74-80. 2020.

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