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Portuguese.
Born July 20, 1962 in Luanda, Angola.
CNRS Senior Scientist

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Education

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1980-86 Bachelor in Physics, University of Lisbon. Master in Physics, University of Lyon I.

1986-89 PhD : Polymers at Interfaces. University of Lyon I.

1994 Habilitation. University of Strasbourg.

Professional Career

1987-89 Teaching assistant at the Ecole Normale Supérieure de Lyon.

1989-95 CNRS Research Scientist at Institut Charles Sadron, Strasbourg.

1989-90 Post Doctoral position, Cavendish Laboratory, Cambridge.

1995-96 Sabbatical leave, University of California in Santa Barbara.

1996-98 C.N.R.S.-Rhodia-Princeton University Complex Fluid Laboratory, visiting scientist Princeton University.

1998-19 CNRS Research Scientist, Strasbourg. Senior Scientist since 2002.

Awards

1994 Bronze CNRS Medal ; 1999 CNRS Equipes Jeunes ACI ; 2004 Alsace Research Award.

Teaching Experience

1987-89 Condensed Matter and Quantum Mechanics. ENS-Lyon and ULP Strasbourg

1993 Self-Assembled Systems, Curso de Post-Graduação. USP, Brazil.

1993-95 Polymer Physics. Ecole Supérieure de Plasturgie, Oyonnax.

1998 Physics of Membranes, Short Course. Princeton University.

2004-19 A Random Walk in Soft Land. UNAM, Mexico. USP, Brazil. University of Strasbourg

1999-19 Kinetics of Soft Matter and Advanced Soft Matter, University of Strasbourg.

Published 140 articles, choice of 5

- [062] Impact of Polymer Tether Length on Multiple Ligand-Receptor Bond Formation. Jeppesen, C. et al. *Science*, 2001, **293**, 465. [A quantitative study of the role of ligand spacers on bio-adhesion](#).
- [081] Photo-induced Destruction of Giant Vesicles in Methylene Blue Solutions. Caetano, W. et al. *Langmuir*, 2007, **23**, 1307. [First visualisation of photo-induced oxidation of lipid membranes](#).
- [107] Gel-Assisted Formation of Giant Unilamellar Vesicles. Weinberger, A. et al. *Biophys. J.*, 2013, **105**, 154. [The easiest, fastest and most universal giant unilamellar vesicle's growing method](#).
- [110] Enhanced Chemical Synthesis at Soft Interfaces : A Universal Reaction-Adsorption Mechanism in Microcompartments. Fallah-Araghi, A. et al. *Phys. Rev. Lett.*, 2014, **112**, 028301. [Was life born in a droplet ?](#)
- [113] Polymer collapse in miscible good solvents is a generic phenomenon driven by preferential adsorption Mukherji, D. et al. *Nature Communications*, 2014, **5**, 4882. [A counterintuitive simple explanation](#).

[NEW] **The Giant Vesicle Book**, Ed. R. Dimova and C. Marques, CRC Press, Sept 2019.

Present Research

The science of lipid membranes : giant unilamellar vesicles as lipid bilayer platforms ; lipid oxidation ; DNA, peptide and nanoparticle interactions with lipid membranes ; specific adhesion ; reaction-diffusion and confinement ... and also co-non-solvency ; fiber compression ; pebble erosion ...

