Javier Carrascosa Tejedor

3rd Year PhD Student

Date and Place of Birth: 31th December 1995 (Madrid, Spain)

Address: 57 Rue León Jouhaux 38100 Grenoble, France

Telephone number: (+33) 7 67 76 85 07 (French number)

Email: carrascosa-tejedor@ill.fr / javier.carrascosa.tejedor@gmail.com

Linkedin: https://www.linkedin.com/in/javier-carrascosa-tejedor-94233a187/

(+34) 6 78 00 16 33 (Spanish number)



EDUCATION AND TRAINING

PhD

09 2019 - present



The University of Manchester

University of Manchester

School of Health Sciences, Division of Pharmacy and Optometry

PhD title: <u>Controlling Reservoir Formation at the Air/Water Interface by Nanoparticle</u> <u>Design: a bridge from Biocompatible Model Systems to Lung Surfactant Function</u>

Based full-time at the Institute Laue-Langevin (Grenoble, France). Supervisors: Jayne Lawrence (University of Manchester), Richard A. Campbell (University of Manchester) and Armando Maestro (Institut Laue-Langevin)

The project combines the use of several interfacial tools including <u>neutron reflectometry</u> to understand and control the formation of extended structures in polyelectrolyte/surfactant films spread at the air/water interface

Master's Degree

2018 - 2019



Universidad Complutense de Madrid

Faculty of Chemical Sciences

Master's Degree in Chemical Science and Technology

Master's Thesis title: <u>Endocytosis across the Scales</u>. Experimental work carried out at the Institute Laue—Langevin (see Work experience for more information)

Bachelor's Degree

2013 - 2018



Universidad Complutense de Madrid

Faculty of Chemical Sciences

Bachelor's Degree in Chemistry

Bachelor's Thesis Title: <u>Light Scattering of Micellar Solutions</u>. Study of micellar systems formed by anionic surfactants in order to determine structural parameters and accurately characterize the interactions present in these systems by means of static and dynamic light scattering

WORK EXPERIENCE

Internship

03/2019 - 06/2019



Internship

09/2017 - 11/2017



Internship at the Institut Laue-Langevin (Erasmus+ Program) Large Scale Structures group

Study of clathrin mediated endocytosis. Structural and kinetic characterization of lipid monolayers at the air water interface and its interaction with endocytic proteins

Techniques: ellipsometry, Langmuir trough and X-ray reflectometry

Internship at Cones S.A. (Structures and soil control)

Large Scale Structures group

Laboratory technician and office technician. Performed soil and rock tests, quality control of materials and developed geotechnical and material reports

PUBLICATIONS

- Two manuscripts in preparation about controlling the formation of extended structures at the air water interface on polyelectrolyte/surfactant films at the air/water interface.
- Associate Editor assigned → Schnurbus, M.; Hardt, M.; Steinforth, P.; Carrascosa-Tejedor, J.; Winnall, S.; Gutfreund, P.; Schönhoff, M.; Campbell, R. A.; Braunschweig, B. Responsive Material and Interfacial Properties Through Remote Control of Polyelectrolyte-Surfactant Mixtures. Applied Materials & Interfaces, 2021.
- Carrascosa-Tejedor. J., Santamaria, A., Pereira, D.; Maestro, A. Structure of DPPC Monolayers at the Air/Buffer Interface: A Neutron Reflectometry and Ellipsometry Study. Coatings 2020, 10 (6), 507; https://www.mdpi.com/2079-6412/10/6/507

LANGUAGES

• Spanish: Mother tongue

• English: C1 IELTS certificate (12/07/2019)

• Italian: intermediate level

French: basic level

IT AND PERSONAL SKILLS

• Mircosoft Office: Word, Excel, Powerpoint

- Origin
- Matlab (basic)
- <u>Techniques</u> used during my career: static and dynamic light scattering, differential refractometry, Langmuir troughs, ellipsometry, Brewster angle microscopy, X-ray reflectometry and Neutron reflectometry
- Good ability to adapt to multicultural environments
- Research and Information Management: identify sources of information applicable to a given problem
- <u>Analysis and Problem-Solving</u>: design a plan, model or experiment that defines a problem, tests potential resolutions and implement a solution
- <u>Written and oral communication</u>: prepare concise and logically-written materials and organize and communicate ideas effectively in oral presentations, both to expert and novice audiences

ADDITIONAL INFORMATION

- 5/09/2021 10/09/2021: Conference of the European Colloid and Interface Society. **Poster presentation**: "Controlling Reservoir Formation at the Air/Water interface"
- 18/05/2021 25/05/2021: NSCIS21: Neutron Scattering in Colloid and Interface Science. <u>Oral presentation</u>: "Controlling Reservoir Formation at the Air/water Interface".
- 03/2020 04/2020: full time participant in the HERCULES European School, Session B: applications to biomolecular structure and dynamics. <u>Poster presentation</u>: "Controlling Reservoir Formation at the Air/Water Interface by Nanoparticle Design"
- 12/2018: Second prize of the IV edition of the contest "Polymers, a world to discover". Contest of posters organized by the Faculty of Chemical Sciences of Universidad Complutense de Madrid and PlasticsEurope AISBL.
- 11/2018: Scientific dissemination activities during the Science week 2018 at Universidad Complutense de Madrid