Pedro Salas-Ambrosio

Current position: PhD candidate
Laboratory: LCPO, Université Bordeaux / CNRS ENSCBP
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Research interests

Based on the expertise I have developed in polymer chemistry, I am interested in developing a new generation of biomimetic materials based on amino acids but with resistance to proteases. These materials made of peptidomimetic polymers will be used in biomedical applications such as tissue engineering or as therapeutic agents.

EDUCATION

2012: Degree in Pharmaceutical Chemistry at the Universidad Nacional Autonoma de Mexico, Mexico.

2015: Degree in MaSc in Chemistry at the Universidad Nacional Autonoma de Mexico, Mexico.

RESEARCH EXPERIENCE

2017-2020: PhD at the University of Bordeaux in the laboratory of Organic Polymer Chemistry in the field of **polypeptide chemistry** under the supervision of Dr Colin Bonduelle and Pr. Pierre Verhaeghe.

2013-2015: M.Sc. thesis in the laboratory of biopolymers (head of the group Dr Ricardo Vera) at the Institute of Research in Materials (IIM), UNAM, Mexico.

Topic: Development by electrospinning of drug delivery systems based on nanofibers constituted of polycaprolactone, collagen and diclofenac for wound burns applications.

2012-2013: Internship in the laboratory of inorganic chemistry (head of the group Dr Jesus Gracia Mora) at the faculty of chemistry, UNAM, Mexico. (Grade: 8.3/10)

Topic: Synthesis of magnetic nanoparticles coated with a molecular imprinted polymer able to deliver the anti-cancer drug doxorubicin.

PARTICIPATION IN CONGRESSES (Scientific talk)

1. Salas P., Verhaeghe P., Bonduelle C. “Synthesis of antimicrobial polypeptoid polymers by ring-opening polymerization*”* at the *47ème journées d'études des polymères du Groupe Français d’études et d’applications des Polymères,* September 29th- October 05th 2019, Latresne, France.
2. Salas P., Dupuy P., Verhaeghe P. “Synthesis of antimicrobial polypeptoid polymers " Flash coomunicatio at the *47e Colloque National du GFP 2018,* November 26th-29th 2018, Toulouse, France.

PARTICIPATION IN CONGRESSES (Poster sessions)

1. Salas P., Verhaeghe P., Bonduelle C “Synthesis of polypeptoid polymers by ring-opening polymerization” at the *21ème Journée de l'EDSC*, June 7th 2019, Bordeaux, France
2. Salas P., Dupuy P., Verhaeghe P. “Synthesis of antimicrobial polypeptoid polymers " presented at the *47e Colloque National du GFP 2018,* November 26th-29th 2018, Toulouse, France.
3. Salas P., Dupuy P., Bonduelle C., Verhaeghe P. “Polypeptoid polymers as simplified analogues of antimicrobial peptides" presented at the *Euroscience Open Forum (ESOF),* July 9th-13th 2018, Toulouse, France.

4. Salas P., Dupuy P., Bonduelle C., Verhaeghe P. "Polypeptoids as simplified analogues of polypeptides against Clostridium difficile" presented during the *XXXIIème journée Chimie - Biologie – Santé*, April 13th 2018, Toulouse, France.
5. Salas P., Bernad M.J. Linares M.A., Gómez M.B, García GA. "Preformulation studies of liposomes with sirolimus for the treatment of eye dry syndrome" presented at the *XLIX Congreso Nacional de Ciencias Farmacéuticas y VII Congreso Internacional de Ciencias Farmacéuticas*, September 4th-7th 2016, Oaxaca, México
6. Salas P., Vera R., Bernad M. J., Maciel A. "Functionalization of poly-caprolactone with maleic anhydride for the potential usage in tissue engineering and drug delivery" presented at the *Congreso red BIT*, December 1st 2014, Mexico City, México.
7. Salas P., Gracia J., Dernad M.J. "Synthesis and characterization of magnetic nanoparticles covered with molecular imprinted polymer templated with doxorubicin" presented at the *POLYMAT SILQCOM*, October 13th-17th 2013, Oaxaca, Mexico.
8. Salas P., Mayren A., Sanchéz L. "Bioremediation of water polluted with azo textile dyes using broccoli enzymatic extract" presented at the *VIII Encuentro Participación de la Mujer en la Ciencia,* May 18th 2011, Guanajuato, México.

PUBLICATIONS (Scientific production)

1. Grazon, C., Salas-Ambrosio, P., Ibarboure, E., Buol, A., Garanger, E., Grinstaff, M. W., Lecommandoux, S. and Bonduelle, C. (2019), Aqueous Ring-Opening Polymerization Induced Self-Assembly (ROPISA) of N-carboxyanhydrides. Angew. Chem. Int. Ed.. doi:10.1002/anie.201912028