

CURRICULUM VITAE

DANIELE RIBEIRO DE ARAUJO (PhD)

Date of birth: 21st, August. 1977.
Nationality: Brazilian
Contact: draraujo2012@gmail.com or daniele.ribeiro@unifesp.br



Education:

Postdoctoral Research in Biopharmaceutics and Pharmacokinetics

University of Parma-Italy, Department of Pharmacy.
Development of new pharmaceutical formulations patches for skin drug-delivery
(supervisor: Prof. Patrizia Santi, from May-2007 to May 2008).

PhD in Functional and Molecular Biology (State University of Campinas, Campinas, Sao Paulo, Brazil, 2002 to 2005)

Master in Functional and Molecular Biology (State University of Campinas, Campinas, Sao Paulo, Brazil, 2000 to 2002)

Pharmacy Bachelor (Federal University of Maranhão, São Luis/MA, Brazil, 1995 to 1999)

Current Position: Associate Professor in Department of Biophysics, Paulista School of Medicine, Federal University of Sao Paulo.

Publications: 120 articles in indexed international and national journals; 11 book chapters, 2 book editions, 4 special issues edition, 12 patents (6 granted and 3 depots). 3945 citations and H-index = 37, (GoogleScholar); 2386 citations and H-index= 30 (ResearcherID); 2490 citations and H-index= 32 (Scopus)

Editorial board: Pharmaceutics (topic editor), **Future Pharmacology** (editorial board), **Frontiers in Pharmacology** (editorial board), **Current Topics in Medicinal Chemistry** (topic editor)

Supervisions: 03 undergraduate, 03 Master and 06 PhD students (**in course**); 25 undergraduates, 11 Master and 12 PhD students (**concluded**). **Post-doc supervision:** 04 concluded

Grants: 08 concluded and 02 in course

Current and Research Capabilities

Nanobiomaterials, Nanobiotechnology, Physico-chemistry, Biopharmaceutics and Biochemical Pharmacology: development of novel drug-delivery systems (parenteral and skin delivery). Poloxamer-based systems such as micelles, hydrogels, organogels (lecithin, lanolin, oleic acid, and their mixtures) isolated or in association with polymers (hyaluronic acid, alginate, chitosan and cellulose derivatives). Physico-chemical characterization techniques: Dynamic Light Scattering, Rheology, Differential Scanning Calorimetry, Scanning Electron Microscopy, Formulations Stability, High Performance Liquid Chromatography, FTIR. *In vitro* permeation (pig ear skin and Strat-M[®]) and release assays with mathematic modelling. Structural and physico-chemical evaluation of epidermis for skin-delivery design. Design and development of drug-delivery systems for the treatment of inflammatory processes (osteoarthritis, rheumatoid arthritis, atopic dermatitis) and post-operative pain.

CV Links:

CVLattes: <http://lattes.cnpq.br/6434758592103771>

Google Scholar: https://scholar.google.com.br/citations?hl=pt-BR&user=FRaV48EAAA&view_op=list_works&sortby=pubdate

ORCID: <https://orcid.org/0000-0002-9289-4229>

ResearcherID: <https://publons.com/researcher/2236077/daniele-ribeiro-de-araujo/>

Sao Paulo, March 13th, 2024. Brazil.

Grants

Development and pharmacological evaluation of modified release systems containing tramadol in thermoreversible hydrogels for pain treatment (FAPESP# 2010 / 11475-1) Coordinator: Daniele R de Araujo (2010-2012)

Thermoreversible polymeric hydrogels as systems for modified drug release: anesthetics, analgesics and antimigranous (CNPq#487619/2012-9) Coordinator: Daniele R de Araujo (2012-2014)

Nanostructured hybrid systems for modified NSAIDs release: development and pharmacological evaluation (FAPESP# process 2014 / 26200-9) Coordinator: Daniele R de Araujo (2015-2017)

Lipid-based carriers as a strategy to increase encapsulation and the power of local anesthetics. (FAPESP#2014/14457-5) Coordinator: Eneida de Paula; Principal investigator: Daniele R de Araujo (2014-2019)

Organogels lecithine-poloxamer as drug carriers for topical application: development, permeation profiles and stratum corneum structural evaluation. (FAPESP#2018 / 04036-3) Supervisor: Daniele R de Araujo, PhD-fellowship: Aryane Alves Vigato (2018-2021)

Poloxamer-hyaluronic acid hydrogels as systems for sulforaphane release and osteoarthritis treatment (CNPq#402838/2016-5) (2018-2020)

Thermosensitive organogels as strategies for the treatment of inflammatory processes: from supramolecular structure to pharmacological evaluation (FAPESP#2019/20303-4) Coordinator: Daniele R de Araujo (2020-2022)

Nanostructured lipid organogels as drug carrier systems through the skin (CNPq#307718/2019-0) Coordinator: Daniele R de Araujo (2020-2022)

Polymeric-protein nanobiomaterials for the treatment of inflammatory dermatoses: from development to biological applications of gels and films (CNPq#308819/2022-5) Coordinator: Daniele R de Araujo (2023-in course)

Biosensing and delivery point-of-care technologies based on microneedles to improve healthcare testing and treatments (FAPESP 2022/14753-0). Coordinator: Wendel Andrade Alves; Principal investigator: Daniele R de Araujo (2023-in course)

List of main publications: scientific articles

SEPULVEDA, A. F. ; KUMPGDEE-VOLLRATH, M. ; FRANCO, M. K. ; YOKAICHIYA, F. ; de Araujo DR . Supramolecular structure organization and rheological properties modulate the performance of hyaluronic acid-loaded thermosensitive hydrogels as drug-delivery systems. *Journal Of Colloid And Interface Science*, v. 630, p. 328-340, 2023.

DE CASTRO, KARINE CAPPuccio ; COCO, JULIA CEDRAN ; DOS SANTOS, ÉRICA MENDES ; ATAIDE, JANAÍNA ARTEM ; MARTINEZ, RENATA MILIANI ; DO NASCIMENTO, MÔNICA HELENA MONTEIRO ; PRATA, JOÃO ; DA FONTE, PEDRO RICARDO MARTINS LOPES ; SEVERINO, PATRÍCIA ; MAZZOLA, PRISCILA GAVA ; BABY, ANDRÉ ROLIM ; SOUTO, ELIANA BARBOSA ; de Araujo, Daniele Ribeiro ; LOPES, ANDRÉ MORENI . Pluronic® triblock copolymer-based nanoformulations for cancer therapy: A 10-year overview. *JOURNAL OF CONTROLLED RELEASE*, v. 353, p. 802-822, 2023.

Borges, Roger ; ZAMBANINI, TELMA ; PELOSINE, AGATHA MARIA ; JUSTO, GISELLE ZENKER ; SOUZA, ANA CAROLINA S. ; MACHADO, JOEL ; SCHNEIDER, JOSE FABIAN ; de Araujo, Daniele R. ; Marchi, Juliana . A colloidal hydrogel-based drug delivery system overcomes the limitation of combining bisphosphonates with bioactive glasses: in vitro evidence of a potential selective bone cancer treatment allied with bone regeneration. *Biomaterials Advances*, v. 1, p. 213441-1, 2023.

VILLARREAL, GABRIELA PATRICIA UNIGARRO ; SANTO PEREIRA, ANDERSON DO ESPIRITO ; MATOS DE FREITAS, ROBERTA RANIELLE ; MORAES, MARIA CAROLINA BLASSIOLI ; Sepulveda, Anderson Ferreira ; de

Araujo, Daniele Ribeiro ; FRACETO, Leonardo Fernandes . Zein-based nanoformulations with encapsulated methyl salicylate incorporated in 3D printing biopolymer devices targeting potential uses in pest management. COLLOIDS AND SURFACES A-PHYSICO-CHEMICAL AND ENGINEERING ASPECTS, v. 1, p. 131511-1, 2023.

de Araujo, Daniele Ribeiro; Padula, Cristina . Topical Drug Delivery: Innovative Controlled Release Systems. PHARMACEUTICS, v. 15, p. 1716-1717, 2023.

SHRIKY, BANA ; VIGATO, ARYANE ALVES ; Sepulveda, Anderson Ferreira ; MACHADO, IAN POMPERMAYER ; de Araujo, Daniele Ribeiro . Poloxamer-based nanogels as delivery systems: how structural requirements can drive their biological performance?. BIOPHYSICAL REVIEWS, v. 1, p. 1-22, 2023.

WU, JIAMIN ; JONES, NATALIE ; FAYEZ, NOJOUND A.L. ; CHAO, PO-HAN ; WU, ANGELINE ; de Araujo, Daniele Ribeiro ; ROUHOLLAHI, ELHAM ; JIA, ANALISA ; LI, SHYH-DAR . Protamine-mediated efficient transcellular and transmucosal delivery of proteins. JOURNAL OF CONTROLLED RELEASE, v. 356, p. 373-385, 2023.

SILVA, E. M. ; YARIWAKE, V. Y. ; ALVES, R. W. ; **DE ARAUJO, D.R.** ; ANDRADE-OLIVEIRA, V. Crosstalk between incretin hormones, Th17 and Treg cells in inflammatory diseases. PEPTIDES, v. 1, p. 170834, 2022.

TOLEDO, G. ; ALMEIDA, J. ; BRITO, A. ; BATISTA, C. ; ANDRADE, L. ; **DE ARAUJO, D.R.** ; ICIMOTO, M. ; BROCHSZTAIN, S. ; NANTES, I. L. Harvesting of Surfactant-Solubilized Asphaltenes by Magnetic Nanoparticles. ENERGY & FUELS (ONLINE), v. 1, p. 1, 2022.

SEPULVEDA, A. F.; KUMPGDEE-VOLLRATH, M. ; FRANCO, M. K. ; YOKAICHIYA, F. ; **DE ARAUJO DR** . Supramolecular structure organization and rheological properties modulate the performance of hyaluronic acid-loaded thermosensitive hydrogels as drug-delivery systems. Journal of Colloid And Interface Science, v. 1, p. 1-12, 2022.

PADULA, C. ; MACHADO, I. P. ; VIGATO, A. A. ; **DE ARAUJO DR** . New strategies for improving budesonide skin retention. PHARMACEUTICS, v. 14, p. 1-12, 2022.

NASCIMENTO, M. H. M. ; **DE ARAUJO, D.R.** . Exploring the Pharmacological Potential of Glycyrrhizic Acid: From Therapeutic Applications to Trends in Nanomedicine. FUTURE PHARMACOLOGY, v. 2, p. 1-15, 2022.

VIGATO, A. A. ; MACHADO, I. P. ; VALLE, M. ; ANA, P. A. ; SEPULVEDA, A. F. ; YOKAICHIYA, F. ; FRANCO, M. K. K. D. ; LOIOLA, M. C. ; TOFOLI, G. R. ; CEREDA, C. M. S. ; SAIRRE, M. I. ; **DE ARAUJO, D.R.** Monoketonic curcuminoid-lidocaine co-deliver using thermosensitive organogels: from drug synthesis to epidermis structural studies. PHARMACEUTICS, v. 14, p. 1-20, 2022.

ROGERIO, C. ; ABRANTES, D. C. ; OLIVEIRA, J. L. ; **DE ARAUJO, D.R.** ; COSTA, T. G. ; LIMA, R. ; FRACETO, L. F. . Cellulose Hydrogels Containing Geraniol and Icaridin Encapsulated in Zein Nanoparticles for Arbovirus Control. ACS APPLIED BIO MATERIALS, v. 1, p. 1, 2022.

SATO, E. T. ; MACHADO, N. ; **DE ARAUJO, D.R.** ; PAULINO, L. C. ; MARTINHO, H. S. . Fourier-Transform Infrared Absorption on dry Stratum Corneum, corneocyte-lipid 2 interfaces: experimental and vibrational spectroscopy calculations. SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, v. 249, p. 119218-119225, 2021.

DEMURTAS, A. ; PESCHINA, S. ; NICOLI, S. ; SANTI, P. ; **DE ARAUJO, D.R.** ; PADULA, C. . Validation of an HPLC-UV method for the quantification of budesonide in skin layers. JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, v. 1, p. 1-10, 2021.

DAS, G. ; SHIN, H. ; CAMPOS, E. V. R. ; FRACETO, L. F. ; RODRIGUEZ-TORRES, M. P. ; MARIANO, K. C. F. ; **DE ARAUJO, D.R.** ; FERNANDEZ-LUQUENO, F. ; GRILLO, R. ; PATRA, J. K. . Sericin based nanoformulations: a comprehensive review on molecular mechanisms of interaction with organisms to biological applications. JOURNAL OF NANOBIO TECHNOLOGY, v. 19, p. 1-22, 2021.

GUILGER-CASAGRANDE, M. ; BARROS, C. T. ; ANTUNES, V. A. N. ; **DE ARAUJO DR** ; LIMA, R. . Perspectives and Challenges in the Fight Against COVID-19: The Role of Genetic Variability. FRONTIERS IN CELLULAR AND INFECTION MICROBIOLOGY, v. 11, p. 1-15, 2021.

ZAMBANINI, T. ; BORGES, R. ; SOUZA, A. C. S. ; JUSTO, G. Z. ; MACHADO JR, J. ; **DE ARAUJO, D.R.** ; MARCHI, J. . Holmium-doped containing bioactive glasses dispersed in Poloxamer 407 hydrogel as a theragenerative composite for bone cancer treatment. MATERIALS, v. 1, p. 1-17, 2021.

BORGES, ROGER ; KAI, KAREN C. ; LIMA, CASSIO A. ; ZECELL, DENISE M. ; **DE ARAUJO, D R.** ; MARCHI, JULIANA . Bioactive glass/poloxamer 407 hydrogel composite as a drug delivery system: The interplay between glass dissolution and drug release kinetics. COLLOIDS AND SURFACES B-BIOINTERFACES, v. 206, p. 111934, 2021.

MONTEIRO DO NASCIMENTO, MONICA HELENA ; AMBROSIO, FELIPE NOGUEIRA ; FERRARAZ, DÉBORA CARAJILIASCOV ; WINDISCH-NETO, HERMANN ; QUEROBINO, SAMYR MACHADO ; NASCIMENTO-SALES, MICHELLE ; ALBERTO-SILVA, CARLOS ; CHRISTOFFOLETE, MARCELO AUGUSTO ; FRANCO, MARGARETH K.K.D. ; KENT, BEN ; YOKAICHYIA, FABIANO ; LOMBELLO, CHRISTIANE BERTACHINI ; **DE ARAUJO, DR.** Sulforaphane-loaded hyaluronic acid-poloxamer hybrid hydrogel enhances cartilage protection in osteoarthritis models. MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, v. 128, p. 112345, 2021.

CAMPOS, E. V. R. ; PROENCA, P. L. F. ; COSTA, T. G. ; LIMA, R. ; HEDTRICH, S. ; FRACETO, L. F. ; **DE ARAUJO, D.R.** . Hydrogels Containing Budesonide-Loaded Nanoparticles to 2 Facilitate Percutaneous Absorption for Atopic Dermatitis Treatment Applications. ACS APPLIED POLYMER MATERIALS, v. 1, p. 1-1, 2021.

MARIANO, K. C. F. ; PAPINI, J. Z. B. ; FARIA, N. C. ; HELUANY, D. N. C. ; BOTEAGA, A. L. L. ; CEREDA, C. M. S. ; PAULA, E. ; TOFOLI, G. R. ; **DE ARAUJO DR** . ROPIVACAINE-LOADED POLOXAMER BINARY HYDROGELS FOR PROLONGED REGIONAL ANESTHESIA - STRUCTURAL ASPECTS, BIOCOMPATIBILITY AND PHARMACOLOGICAL EVALUATION. BIOMED RESEARCH INTERNATIONAL, v. 2021, p. 7300098-7300098, 2021.

DE MOURA, LUDMILLA DAVID ; RIBEIRO, LÍGIA N. M. ; DE CARVALHO, FABÍOLA V. ; RODRIGUES DA SILVA, GUSTAVO H. ; LIMA FERNANDES, PRISCILA C. ; BRUNETTO, SÉRGIO Q. ; RAMOS, CELSO D. ; VELLOSO, LÍCIO A. ; **DE ARAÚJO, D R.** ; de Paula, Eneida . Docetaxel and Lidocaine Co-Loaded (NLC-in-Hydrogel) Hybrid System Designed for the Treatment of Melanoma. PHARMACEUTICS, v. 13, p. 1552-1577, 2021.

ABRANTES, DANIELE CARVALHO ; ROGERIO, CAROLINA BARBARA ; DE OLIVEIRA, JHONES L. ; CAMPOS, ESTEFÂNIA V. R. ; **DE ARAÚJO, DR** ; PAMPANA, LAURINDO CESAR ; DUARTE, MARCELO JOSÉ ; VALADARES, GEÓRGIO FREESZ ; FRACETO, LEONARDO FERNANDES . Development of a Mosquito Repellent Formulation Based on Nanostructured Lipid Carriers. FRONTIERS IN PHARMACOLOGY, v. 12, p. 1, 2021.

CALIXTO, GIOVANA MARIA FIORAMONTI ; MUNIZ, BRUNO VILELA ; CASTRO, SIMONE R. ; DE ARAUJO, JAIZA SAMARA MACENA ; DE SOUZA AMORIM, KLINGER ; RIBEIRO, LÍGIA N. M. ; FERREIRA, LUIZ EDUARDO NUNES ; **DE ARAÚJO, DR** ; DE PAULA, ENEIDA ; FRANZ-MONTAN, MICHELLE . Mucoadhesive, Thermoreversible Hydrogel, Containing Tetracaine-Loaded Nanostructured Lipid Carriers for Topical, Intranasal Needle-Free Anesthesia. PHARMACEUTICS, v. 13, p. 1760, 2021.

CASTRO, SIMONE R. ; RIBEIRO, LÍGIA N. M. ; BREITKREITZ, MÁRCIA C. ; GUILHERME, VIVIANE A. ; RODRIGUES DA SILVA, GUSTAVO H. ; MITSUTAKE, HERY ; ALCÂNTARA, ANA C. S. ; YOKAICHIYA, FABIANO ; FRANCO, MARGARETH K. K. D. ; CLEMENS, DANIEL ; KENT, BEN ; LANCELLOTTI, MARCELO ; **DE ARAÚJO, D. R.** ; DE PAULA, ENEIDA . A pre-formulation study of tetracaine loaded in optimized nanostructured lipid carriers. SCIENTIFIC REPORTS, v. 11, p. 1-15, 2021.

ULLOA ROJAS, JOSE EDUARDO ; OLIVEIRA, VIVIAN LEITE DE ; **DE ARAUJO, DR** ; TOFOLI, GIOVANA RADOMILLE ; DE OLIVEIRA, MATHEUS MENDES ; CARASTAN, DANILO JUSTINO ; PALACI, MOISES ; GIUNTINI, FRANCESCA ; ALVES, WENDEL ANDRADE. Silk Fibroin/Poly(vinyl Alcohol) Microneedles as Carriers

for the Delivery of Singlet Oxygen Photosensitizers. ACS BIOMATERIALS SCIENCE & ENGINEERING, v. 1, p. 1-1, 2021.

LOSITO, DANILO WAISMANN ; **DE ARAUJO, DR**; BEZZON, VINÍCIUS DANILO NONATO ; OSELIERO FILHO, PEDRO LEONIDAS ; FONSECA, FERNANDO LUIZ AFFONSO ; CHAGAS, CAMILA DOS SANTOS ; BARBOSA, EMERSON ; OLIVEIRA, CRISTIANO LUIS PINTO ; FANTINI, MARCIA CARVALHO DE ABREU ; FERREIRA, FABIO FURLAN ; MARTINS, TEREZA DA SILVA ; HADDAD, PAULA SILVIA . Mesoporous Silica-Fe O Nanoparticle Composites as Potential Drug Carriers. Acs Applied Nano Materials, v. 1, p. 1-1, 2021.

MARIANO, K. C. F. ; NASCIMENTO, M. H. M. ; QUEROBINO, S. M. ; CAMPOS, E. V. R. ; OLIVEIRA, J. L. ; YOKAICHIYA, F. ; FRANCO, M.K.K.D. ; ALBERTO-SILVA, C. ; DE PAULA, E. ; LOMBELLO, C. B. ; LIMA, R. ; FRACETO, L. F. ; **DE ARAUJO, DR**. Influence of chitosan-tripolyphosphate nanoparticles on thermosensitive polymeric hydrogels: structural organization, drug release mechanisms and cytotoxicity. International Journal of Polymeric Materials and Polymeric Biomaterials, v. 69, p. 592-603, 2020.

LÁZARO, CAROLINA MARTINS ; DE OLIVEIRA, CAROLINA C. ; GAMBERO, ALESSANDRA ; ROCHA, THALITA ; CEREDA, CINTIA MARIA SAIA ; **DE ARAÚJO, D R**; TOFOLI, GIOVANA RADOMILLE . Evaluation of Budesonide-Hydroxypropyl- β -Cyclodextrin Inclusion Complex in Thermoreversible Gels for Ulcerative Colitis. DIGESTIVE DISEASES AND SCIENCES, v. 1, p. 1-8, 2020.

ABDALLA, H. B. ; NAPIMOGA, M. H. ; MACEDO, C. G. ; BONFANTE, R. ; **DE ARAÚJO, D.R.** ; MELLO, N. F. S. ; CARVALHO, L. B. ; FRACETO, L. F. ; CLEMENTE-NAPIMOGA, J. T. . Poloxamer micellar system for intra-articular injection of 15-deoxy--12,14-prostaglandin J2 with improved bioavailability and anti-inflammatory properties in the temporomandibular joint of rats. INTERNATIONAL JOURNAL OF PHARMACEUTICS, v. 583, p. 119383, 2020.

DA FONSECA JUNIOR, ALDCEJAM MARTINS ; GAITA, VINCENZO ; ARGUMEDO, DANIEL RICARDO ; CASTRO, LETICIA ; LOSANO, JOÃO DIEGO DE AGOSTINI ; LEITE, ROBERTA FERREIRA ; NICHI, MARCILIO ; ASSUMPÇÃO, MAYRA ELENA ORTIZ D'ÁVILA ; **DE ARAÚJO, DR** ; NEVES, ANTONIO ALVARO RANHA ; MILAZZOTTO, MARCELLA PECORA . Changes in fertilization medium viscosity using hyaluronic acid impact bull sperm motility and acrosome status. REPRODUCTION IN DOMESTIC ANIMALS, v. 1, p. 1, 2020.

CAMPOS, E. V. R. ; PROENCA, P. L. F. ; DORETTO-SILVA, L. ; ANDRADE-OLIVEIRA, V. ; FRACETO, L. F. ; **DE ARAUJO DR**. Trends in nanoformulations for atopic dermatitis treatment. Expert Opinion on Drug Delivery, v. 17, p. 1615-1630, 2020.

FRANCO, M. K. K. D. ; SEPULVEDA, A. F. ; VIGATO, A. A. ; OSHIRO, A. ; MACHADO, I. P. ; KENT, B. ; CLEMMENS, D. ; YOKAICHIYA, F. ; **DE ARAUJO DR**. Supramolecular structure of temperature-dependent polymeric hydrogels modulated by drug incorporation. CHEMISTRYSELECT, v. 5, p. 12853-12861, 2020.

MARIANO, K. C. F. ; NASCIMENTO, M. H. M. ; QUEROBINO, S. M. ; CAMPOS, E. V. R. ; OLIVEIRA, J. L. ; YOKAICHIYA, F. ; FRANCO, M.K.K.D. ; ALBERTO-SILVA, C. ; de Paula, E. ; LOMBELLO, C. B. ; LIMA, R. ; FRACETO, L. F. ; **DE ARAUJO, D. R**. Influence of chitosan-tripolyphosphate nanoparticles on thermosensitive polymeric hydrogels: structural organization, drug release mechanisms and cytotoxicity. INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS, v. 69, p. 592-603, 2020.

LÁZARO, CM; DE OLIVEIRA, CC; GAMBERO, A.; ROCHA, T.; CEREDA, CMS; **DE ARAUJO, DR.**, TOFOLI, GR. Evaluation of Budesonide-Hydroxypropyl- β -Cyclodextrin Inclusion Complex in Thermoreversible Gels for Ulcerative Colitis. DIGESTIVE DISEASES AND SCIENCES, 1:1-8, 2020.

ABDALLA, H. B.; NAPIMOGA, M. H; MACEDO, C. G.; BONFANTE, R.; **DE ARAUJO, D.R.** ; MELLO, N. F. S. ; CARVALHO, L. B. ; FRACETO, L. F. ; CLEMENTE-NAPIMOGA, J. T. . Poloxamer micellar system for intra-articular injection of 15-deoxy--12,14-prostaglandin J2 with improved bioavailability and anti-inflammatory properties in the temporomandibular joint of rats. INTERNATIONAL JOURNAL OF PHARMACEUTICS, 583:119383, 2020.

VIGATO, A. A. ; QUEROBINO, S. M. ; FARIA, N. C. ; CANDIDO, A. C. B. B. ; CALDAS, L. G. M. ; CEREDA, Cíntia Maria Saia ; TOFOLI, G. R. ; CAMPOS, E. V. R. ; MACHADO, I. P. ; FRACETO, L. F. ; SAIRRE, M. I. ; **DE**

ARAUJO, D.R. . Physico-Chemical Characterization and Biopharmaceutical Evaluation of Lipid-Poloxamer-Based Organogels for Curcumin Skin Delivery. *FRONTIERS IN PHARMACOLOGY*, v. 10, p. 1006, 2019.

QUEROBINO, SAMYR M.; DE FARIA, NAIALLY C. ; VIGATO, ARYANE A. ; DA SILVA, BRUNA G.M. ; MACHADO, IAN P. ; COSTA, MARICILIA S. ; COSTA, FANNY N. ; **DE ARAUJO, D.R.** ; ALBERTO-SILVA, CARLOS. Physicochemical data of Oleic Acid-Poloxamer Organogel for intravaginal Voriconazole delivery. *DATA IN BRIEF*, v. 1, p. 104180, 2019.

DE ARAUJO, D. R.; NUNES, L.; DE PAULA, E. Lipid-based carriers for the delivery of local anesthetics. *Expert Opinion on Drug Delivery*, v. 16, p. 1-19, 2019.

NAPIMOGA, M. H. ; CLEMENTE-NAPIMOGA, J. T. ; MACHABANSKI, N. M. ; JULIANI, M. E. A. ; ACRAS, P. H. B. C. ; MACEDO, C. G. ; ABDALLA, H. B. ; PINHO JR, A. J. ; SOARES, A. B. ; SPERANDIO, M. ; **DE ARAUJO, D. R.** Topical administration of 15d-PGJ2 hydrogel ameliorates atopic dermatitis. *MOLECULAR MEDICINE REPORTS*, v.19, p. 4536-4544, 2019.

GRILLO, R.; DIAS, F.V.; QUEROBINO, S. M.; ALBERTO-SILVA, C.; FRACETO, L. F.; DE PAULA, E.; **DE ARAUJO, D.R.** Influence of hybrid polymeric nanoparticle/thermosensitive hydrogels systems on formulation tracking and in vitro artificial membrane permeation: a promising system for skin drug-delivery. *COLLOIDS AND SURFACES B-BIOINTERFACES*, v. 174, p. 56-62, 2019.

VIGATO, A.A.; QUEROBINO, S.M.; DE FARIA, N.C.; DE FREITAS, A.C.P.; LEONARDI, G.R.; DE PAULA, E.; CEREDA, C.M.S.; TÓFOLI, G.R.; **DE ARAUJO, D.R.** Synthesis and characterization of nanostructured lipid-poloxamer organogels for enhanced skin local anesthesia. *EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES*, v. 128, p. 270-278, 2019.

QUEROBINO, S.M.; DE FARIA, N. C.; VIGATO, A.A.; DA SILVA, B.G.M.; MACHADO, I. P.; COSTA, M. S.; COSTA, F. N.; **DE ARAUJO, D.R.**; ALBERTO-SILVA, C. Sodium alginate in oil-poloxamer organogels for intravaginal drug delivery: Influence on structural parameters, drug release mechanisms, cytotoxicity and in vitro antifungal activity. *MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS*, v. 99, p. 1350-1361, 2019.

MELO, N.F.S.; CAMPOS, E.V.R.; FRANZ-MONTAN, M.; DE PAULA, E.; SILVA, C.M.G.; MARUYAMA, C.R.; STIGLIANI, T.P.; LIMA, R.; **DE ARAUJO, D.R.**; FRACETO, L.F. Characterization of Articaine-Loaded Poly(ϵ -caprolactone) Nanocapsules and Solid Lipid Nanoparticles in Hydrogels for Topical Formulations. *JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY*, v. 18, p. 4428-4438, 2018.

PELEGRINO, M.T.; **DE ARAUJO, D.R.**; SEABRA, A.B. S-nitrosoglutathione-containing chitosan nanoparticles dispersed in Pluronic F-127 hydrogel: Potential uses in topical applications. *JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY*, v. 43, p. 211-220, 2018.

NASCIMENTO, M.H.M.; FRANCO, M.K.K.D.; YOKAICHYIA, F.; de Paula, E.; LOMBELLO, C.B.; **DE ARAUJO, D.R.** Hyaluronic acid in Pluronic F-127/F-108 hydrogels for postoperative pain in arthroplasties: Influence on physico-chemical properties and structural requirements for sustained drug-release. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, v. 1, p. 1-12, 2018.

OYAFUSO, M.H.; CARVALHO, F.; TAKESHITA, T.; DE SOUZA, A.; **DE ARAUJO, D.R.**; MERINO, V.; GREMIÃO, M.P.D.; CHORILLI, M. Development and In Vitro Evaluation of Lyotropic Liquid Crystals for the Controlled Release of Dexamethasone. *POLYMERS*, v. 9, p. 330, 2017.

PAPINI, J.Z.B. ; CEREDA, C.M.S. ; NAPIMOGA, J.T.C. ; BATISTA, C. ; FRANZ-MONTAN, M. ; **DE ARAUJO, D.R.** ; TOFOLI, G.R. Tramadol In Thermoreversible Gels Evoked Antihypersensitivity Effects In A Model of Postoperative Pain. *CLINICAL THERAPEUTICS*, v. 39, p. e29-e30, 2017.

GONÇALVES, L. C.; SEABRA, A. B.; PELEGRINO, M. T.; **DE ARAUJO, D.R.** ; BERNARDES, J. S. ; HADDAD, P. S. Superparamagnetic iron oxide nanoparticles dispersed in Pluronic F127 hydrogel: potential uses in topical applications.

RSC ADVANCES: AN INTERNATIONAL JOURNAL TO FURTHER THE CHEMICAL SCIENCES, v. 7, p. 14496-14503, 2017.

AKKARI, A. C. S. ; CAMPOS, E. V. R. ; KEPLER, A. F. ; FRACETO, LEONARDO F. ; DE PAULA, ENEIDA ; TOFOLI, GIOVANA R. ; **DE ARAUJO, D.R.** Budesonide-hydroxypropyl- β -cyclodextrin inclusion complex in binary poloxamer 407/403 system for ulcerative colitis treatment: a physico-chemical study from micelles to hydrogels. COLLOIDS AND SURFACES. B, BIOINTERFACES, v. 138, p. 138-147, 2016.

CEREDA, C. M. S. ; ALKSCHBIRS, M. I. ; BRITO-JUNIOR, R. B. ; TOFOLI, GIOVANA R. ; FRANZ-MONTAN, M. ; **DE ARAUJO, D.R.** ; DE PAULA, E. Liposomal butamben Gel Formulations: Toxicity assays and Topical anesthesia in an animal model. JOURNAL OF LIPOSOME RESEARCH, v. 28, p. 1-9, 2016.

AKKARI, A.C.S. ; PAPINI, J. Z. B. ; GARCIA, G. K. ; K. D. FRANCO, MARGARETH K. ; CAVALCANTI, L. P. ; GASPERINI, A. ; ALKSCHBIRS, M. I. ; YOKAICHIYA, F. ; DE PAULA, E. ; TOFOLI, GIOVANA R. ; **DE ARAUJO DR** . Poloxamer 407/188 binary thermosensitive hydrogels as delivery systems for infiltrative local anesthesia: Physico-chemical characterization and pharmacological evaluation. MATERIALS SCIENCE & ENGINEERING. C, BIOMIMETIC MATERIALS, SENSORS AND SYSTEMS, v. 68, p. 299-307, 2016.

FRANZ-MONTAN, M. ; CEREDA, C. M. S. ; NUNES, L. ; TOFOLI, G. R. ; **DE ARAUJO, DR** ; GROPPA, F. C. ; VOLPATO, M. C. ; DE PAULA, E. Recent advances and perspectives in oral topical anesthesia. EXPERT OPINION ON DRUG DELIVERY, v. 1, p. 1-12, 2016.

SCHMIDT, C. ; YOKAICHIYA, F. ; DO'ANGÜZEL, N. ; FRANCO, M.K.K.D. ; CAVALCANTI, L. ; BROWN, M. ; ALKSCHBIRS, M.I. ; **DE ARAUJO, D.R.** ; KUMPUGDEE-VOLLRATH, M. ; STORSBERG, J. An Abraded Surface of Doxorubicin-Loaded Surfactant-Containing Drug Delivery Systems Effectively Reduces the Survival of Carcinoma Cells. BIOMEDICINES, v. 4, p. 22, 2016.

SANTOS, A. C. M. ; AKKARI, A. C. S. ; FERREIRA, I. R. S. ; MARUYAMA, C. R. ; PASCOLI, M. ; GUILHERME, V.A. ; DE PAULA, E. ; FRACETO, LF ; LIMA, R. ; MELLO, P. S. ; **DE ARAUJO, D. R.** Poloxamer-based binary hydrogels for delivering tramadol hydrochloride: sol-gel transition studies, dissolution-release kinetics, in vitro toxicity, and pharmacological evaluation. International Journal of Nanomedicine, v. 10, p. 2391-2401, 2015.

FRACETO, L. F. ; PADULA, C. ; **DE ARAUJO, D. R.** Editorial (Thematic Issue: Nanoparticle Carriers in Medicinal Chemistry and Pharmaceutical Sciences. CURRENT TOPICS IN MEDICINAL CHEMISTRY, v. 15, p. 280-281, 2015.

NASCIMENTO, M. H. M. ; AKKARI, A. C. S. ; MARIANO, K. C. F. ; BRAZ, A. S. K. ; LOMBELLO, C. B. ; **DE ARAUJO, D. R.** Cyclodextrin-based delivery systems for arthritic diseases: from development to experimental therapeutics. CURRENT PHARMACEUTICAL DESIGN, v. 21, p. 4907-4916, 2015.

OSHIRO, A. ; DA SILVA, D. C. ; DE MELLO, J. C. ; DE MORAES, V. W. R. ; CAVALCANTI, L. P. ; FRANCO, M. K. K. D. ; ALKSCHBIRS, M. I. ; FRACETO, L.F. ; YOKAICHIYA, F. ; RODRIGUES, T. ; **DE ARAUJO, D. R.** Pluronic F-127/L-81 Binary Hydrogels as Drug-Delivery Systems: Influence of Physicochemical Aspects on Release Kinetics and Cytotoxicity. LANGMUIR, v. 30, p. 13689-13698, 2014.

DE ARAUJO, D. R. ; DA SILVA, D.C. ; BARBOSA, R M ; FRANZ-MONTAN, M. ; CEREDA, C. M. S. ; PADULA, C. ; SANTI, P. ; DE PAULA, E. Strategies for delivering local anesthetics to the skin: focus on liposomes, solid lipid nanoparticles, hydrogels and patches. EXPERT OPINION ON DRUG DELIVERY, v. 10, p. 1-13, 2013.

List of main patent processes (Brazil)

Liposomes as local anesthetics delivery systems. Patent PI 0306245-7 (INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2003.

Local anesthetics and cyclodextrins inclusion complexes as controlled release formulations. Patent PI03039846, INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2003.

Pharmaceutical composition of 15-deoxy-delta-12,14-prostaglandin j2 in a poloxamer-based micellar system and its use for treatment of inflammatory conditions. Patent PI020140029789. INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2014.

Production of chitosan-tripolyphosphate nanoparticles in thermosensitive hydrogels for drug intra-articular delivery. Patent BR1020160181801. INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2016.

Production of composite biomaterial for treatment, reconstruction and drug release for bone tissues. BR10201700642. INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2017.

Process for obtaining hydrogel composition, hydrogel composition and use of hydrogel composition. BR10201900824. INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2019.

Human recombinant antibodies for inhibition of human tissue kallikrein 7 (klk7) and their use in diseases related to the skin process. BR10202000967. INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2020.

Micellar Supramolecular Structure Software (MiSS). INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL (INPI), Brazil. 2021.

Book chapters and editions

VIGATO, A. A.; MACHADO, I. P. ; FRANCO, M. K. D. ; YOKAICHIYA, F. ; SAIRRE, M. I. ; **DE ARAUJO, D.R. .** Chemical and structural characterization of hybrid delivery systems studied by FTIR, NMR, and SAS techniques. In: Prashant Kesharwani; NK Jain. (Org.). Hybrid Nanomaterials for Drug Delivery. 1ed.Cambridge. 2022, v. 1, p. 27-51.

SEPULVEDA, AF; BORGES, R; MARCHI, J; **DE ARAUJO, DR.** Biomedical Applications of Stimuli-Responsive Hydrogels. In: Patra, J.K.; Fraceto, L.F.; Das, G.; Campos, E.V.R.. (Org.). Nanotechnology in the Life Sciences. 1ed.: Springer International Publishing, 2020, v. 1, p. 1-20.

VIGATO, A.A.; GRILLO, R.; FRACETO, L.F.; **ARAUJO, D.R.** Síntese e caracterização físico-química de nanopartículas de quitosana-tripolifosfato para aplicação tópica de fármacos. Teorias e Métodos da Biofísica. 1ed.: Antonella Carvalho de Oliveira, 2019, v. 1, p. 94-108.

FRANCO, M.K.K.D.; **DE ARAUJO, D.R. ;** DE PAULA, E.; CAVALCANTI, L. ; YOKAICHIYA, F. X-Ray Scattering Techniques Applied in the Development of Drug Delivery Systems. In: Alicia Esther Ares. (Org.). X-Ray Scattering. 1ed.Rijeka, Croatia: InTech, 2017, v. 1, p. 135-142.

FRANZ-MONTAN, M.; **DE ARAUJO, D.R.;** DE MORAIS, L.N.M.; DE MELO, N.F.S.; DE PAULA, E. Nanostructured systems for transbuccal drug delivery. Nanostructures for Oral Medicine. 1ed.: Elsevier, 2017, v. , p. 87-121.

YOKAICHIYA, F. ; NASCIMENTO, M. H. M. ; REZENDE NETO, N. B. ; PAULA, E. ; FRANCO, M. K. ; **DE ARAUJO, DR.** Poloxamer-based formulations as skin drug-delivery systems: physico-chemical, biopharmaceutical and toxicological aspects. In: Vishnu Priya. (Org.). Drug delivery systems. 1ed.Berlim: AvidScience, 2017, v. 1, p. 1-28.

MELO, PS ; Marcato, PD ; **DE ARAUJO, D.R.;** DURÁN, N . In vitro cytotoxicity assays of nanoparticles on different cell lines. In: Durán N; Guterres SS; Alvez OL. (Org.). Nanotoxicology: materials, methodologies and assessments. 1ed.New York: Springer, 2014, v. 1, p. 111-123.

DE ARAUJO, D.R.; OSHIRO, A ; DA SILVA, D.C. ; AKKARI, A.C.S. ; MELLO, J. C. ; RODRIGUES, T . Poloxamers as drug-delivery systems: physicochemical, pharmaceutical and toxicological aspects. In: Durán N; Guterres SS; Alvez OL. (Org.). Nanotoxicology: materials, methodologies and assessments. 1ed. New York: Springer, 2014, v. 1, p. 281-298

FRACETO LF, PADULA C, **DE ARAUJO, D.R.** (Editors). Current Topic in Medicinal Chemistry - Thematic Issue: Nanoparticle Carriers in Medicinal Chemistry and Pharmaceutical Sciences. Curr Top Med Chem. 2015;15(4). ISSN: 1873-4286. Ed. Bentham Science.

FRACETO LF, **DE ARAUJO, D.R.** (Organizers) Microspheres: technologies, applications and role in drug delivery. 1. ed. New York: Nova Science Publishers Inc, 2014. v. 1. 281p. ISBN: 978-1-63463-048-1.

DE ARAUJO, D.R.; PADULA, C. Topical Drug Delivery: Innovative Controlled Release Systems. 2021. Pharmaceutics. (Special issue editor).

DE ARAUJO DR; VAMVAKAKI, M; SONVICO, F.; PESSOA, C. O. "Smart Delivery Systems: Contributions to Nanomedicine". Frontiers in Pharmacology. 2021. (Special issue editor).

DE ARAUJO, D.R.; RAFFIN, F. N.; VISERA, C.; BARBOSA, R. M. Trends in Drug Delivery for Wounds Treatment. Pharmaceutics. 2021. (Special issue editor).

DE ARAUJO DR, CARNEIRO-RAMOS, MS. Biotechnology Applied to Inflammatory Diseases. Springer Nature (Book editor).