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FORMACIÓN ACADÉMICA

Doctorado en Fisicoquímica Molecular
Universidad Andrés Bello
Santiago, Chile (2017- en curso)

Magíster en Neurociencias
Universidad Autónoma de Chile
Santiago, Chile (2019- en curso)

Químico Ambiental
Universidad de Chile
Santiago, Chile (2010-2016)

PARTICIPACIÓN EN PROYECTOS DE INVESTIGACIÓN

- Marzo 2019 - actualidad. Universidad Andrés Bello / Pontificia Universidad Católica de Chile. Santiago, Chile.

Tesis doctoral "Diseño, síntesis y caracterización de complejos de tierras raras para posible aplicación en terapia fotodinámica. Estudio teórico y experimental".

- Marzo 2016 - Enero 2017. Fraunhofer Chile Research, Santiago, Chile.

Proyecto FONDECYT N° 11140476 "Development of light-active targeting units (laTU) for nanocarrier surfaces".

- Septiembre 2015- Enero 2017. Pontificia Universidad Católica de Chile, Santiago, Chile.

Proyecto FONDECYT N° 1130707 "Synthesis, characterization and theoretical study of Curcumin derivatives, candidates as new biological active compounds".

- Marzo 2016 – Diciembre 2016. Universidad Autónoma de Chile, Santiago, Chile.

Proyecto FONDECYT N° 1140770 "Astrochemistry: Modeling formation and destruction pathways of molecules and molecular ions. A theoretical chemistry study".

- Septiembre 2013- Agosto 2015. Universidad Bernardo O'higgins, Santiago, Chile.

Proyecto FONDECYT N° 1130707 "Synthesis, Characterization and Theoretical Study of Curcumin Derivatives, Candidates as New Biological Active Compounds".

PARTICIPACIÓN EN EVENTOS CIENTÍFICOS

- 11th Workshop of Computational Chemistry and Molecular Spectroscopy. "Design, synthesis and characterization of rare earth complexes for potential application in photodynamic therapy. Theoretical and experimental study". Octubre 2018. Concón, Chile.
- 3rd version of the International Conference on Material Science. "Powder diffraction data of (E)-2-{[(2-Aminopyridin-3-yl)imino]-metyl}-4,6-di-trt-butylphenol". Octubre 2017. Valdivia, Chile.
- 10th Workshop of Computational Chemistry and Molecular Spectroscopy. "Synthesis of new pyrazoles and isoxazoles complexes as dyes for DSSC". Octubre 2016. Punta de Tralca, Chile.
- 32° Congreso Latinoamericano de Química CLAQ. "Synthesis of new piridazynes with possible applications as pesticides". Enero 2016. Concepción, Chile.
- 3rd version of the International Conference on Material Science. "Formation and destruction pathways of HCO^+". Octubre 2015. Valdivia, Chile.

PUBLICACIONES

- Barra, T. Arrue, L. Urzúa, E .Ratjen, L. Synthesis of photocaged diamines and their application in photoinduced self assembly. *Journal of Physical Organic Chemistry.*1-8 (2019)
- Arrue, L., Barra, T., Camarada, M. B., Zarate, X. & Schott, E. Electrochemical and theoretical characterization of the electro-oxidation of dimethoxycurcumin. *Chem. Phys. Lett.* 677, 35–40 (2017).
- Arrue, L. *et al.* Synthesis, characterization, spectroscopic properties and DFT study of a new pyridazinone family. *J. Mol. Struct.* 1148, 162–169 (2017).
- Arrue, L. & Ratjen, L. Internal Targeting and External Control: Phototriggered Targeting in Nanomedicine. *ChemMedChem* 12, 1908–1916 (2017).
- Arrue, L., Zarate, X., Schott-Verdugo, S. & Schott, E. Substituted phenylhydrazono derivatives of curcumin as new ligands, a theoretical study. *Chem. Phys. Lett.* 623, 42–45 (2015).