Sergio Armentia Matheu

PhD Student

Vienna 1160, Austria

sergio.armentia.matheu@univie.ac.at

+34661344823

Summary

Hard-working, detail-oriented PhD student in Organic Chemistry, with a solid background and experience in complex multi-step synthesis, medicinal chemistry and drug-development research, both academic and corporate. Also acquainted with computational tools for drug design (PyMOL, SeeSAR, LigandScout, Maestro, PDB), as well as with protein chemistry, biopharmaceuticals and basic pharmacology. Excellent communicator, team-player, empathetic and creative analytical-thinker. Always eager to learn and take over new challenges at the best of my abilities. Basic knowledge of coding (Visual Basic, Python, C++).

Work experience

PhD Student *02/2021- current*

Maulide Group, *Vienna, AT.*

- Complex multistep synthesis.
- Complex methodology development.
- Weekly exposure of scientific results through oral presentations and written reports.
- Coordination of simultaneous projects, many involving academic and industrial external collaborators – like Boehringer Ingelheim.

Master Thesis Student *09/2019- 12/2020*

H. Lundbeck A/S, *Copenhagen, DK.*

- Complex multistep synthesis.
- Synthesis of multiple natural product analogues for further biological testing.
- Constant update of results via oral presentations and written reports, in a corporate pharmaceutical environment.

Student Assistant *11/2018- 12/2020*

Amgen, *Copenhagen, DK.*

- Compound registration within the internal database of the company.
- Support role for in-house research activities.
- Administrative support.

Research Assistant *11/2018- 12/2020*

TuDelft, *Delft, NL.*

- Water-plant digested-sludge chemical and physical treatment for alginate-like biopolymer extraction.
- Evaluation of different potential coagulants for water treatment operations via turbidimetric analysis.
- Presentation of litetarure and experimental findings via oral presentations and written reports.

Education

Organic Chemistry - PhD *02/2021- current*

University of Vienna, *Vienna, AT.*

Medicinal Chemistry - MSc *09/2018 - 12/2020*

University of Copenhagen, *Copenhagen, DK.*

Chemistry - BSc *09/2014 – 07/2018*

IQS School of Engineering, *Barcelona, ES.*

Interests

Cinema & shows | Learning languages | Gymnastics | Travelling | Hair & makeup

Publications

Clementson, S., Armentia Matheu, S. *et al.; Erythrina Alkaloid Analogues as nAChR Antagonists – A Flexible Platform for Leads in Drug Discovery; J. Org. Chem.*, **2021**, 86, 12, 8248-8262.

Philipp Spieß, Sergio Armentia Matheu, *et al.; Ni-Catalyzed Stereoconvergent Reductive Dimerization of Bromocyclobutenes; Org. Lett.*, **2024** 26 (1), 355-359

Projects

- **Design and synthesis of potential anti-cancer agents –** PhD (September 2022 – current) – Collaboration with Boehringer Ingelheim based on the design and synthesis of particular scaffolds aim to target different proteins involved in cancer progression.
- **Metal-catalyzed cyclobutene dimerization –** PhD (December 2021 – current) – methodology project exploring the reactivity of cyclobutenes; almost ready for submission - publication expected soon.
- **Synthesis of heterocyclic-based fluorescent dyes –** PhD (March 2021 – current) – development of versatile in-house fluorescent dyes with a lot of potential applications as labeling agents - some of them already proven.
- **Total synthesis of a cyclobutene-containing natural product –** PhD (February 2021- December 2021) – project lead to satisfactory results; however, had to be terminated due to the difficulties involved in reaching its completion.
- **Lipid total synthesis** – PhD (February 2021 – April 2021) – big scale total synthesis of a triglyceride to provide for an interdisciplinary collaboration with the Physiological Chemistry institute within the University of Vienna.
- **Synthesis and biological evaluation of Erythrina alkaloid derivatives** – Master Thesis (September 2019 – December 2020).
- **Total synthesis of a pyrido-pyrimidinic potential covalent tyrosin-kinase inhibitor –** Bachelor Thesis (April 2018 – July 2018).

Languages

- **Spanish** (native)
- **Catalan** (native)
- **English**(C1)
- **French** (C1)
- **German** (B2)
- **Italian** (self-lerned)
- **Lithuanian** (learning)