

Approaches to the synthesis of organoselenium-decorated heterocycles

CURRICUL VITAE

Ricardo Schumacher



1 Short CV

Ricardo F. Schumacher obtained his undergraduate degree in Industrial Chemistry from the Federal University of Santa Maria (UFSM - Brazil), where he also obtained his PhD in 2012 under the guidance of Prof. Gilson Zeni. He moved to Federal University of Pelotas (UFPe - Brazil) to perform postdoctoral research in the group of Prof. Eder J. Lenardão. In 2013, Ricardo started his independent career at the UFPe. Currently, he is Adjunct Professor at the UFSM. His research focuses on the synthesis and reactivity of heterocycles and the chemistry of organochalcogen compounds.

2 Bibliometric data

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Publications (journals): 78

H Index (Web of Science): 22

Publications (book chapters): 01

Patents (INPI – Brazil): 04

3 Selection of the 10 most relevant publications and/or patents

[01] Anjos, T.; Gutterres, E. L.; Barancelli, D. A.; Cargnelutti, R.; Godoi, B.; Barcellos, T.; Schumacher, R. F. Synthesis of chalcogenyl-functionalized 4*H*-chromen-4-ones via cyclization/chalcogenation of alkynyl aryl ketones mediated by Selectfluor®. *New J. Chem.* **2023**, 47, 1076-1080.

[02] Belladonna, A. L.; Dilelio, M. C.; Cargnelutti, R.; Barcellos, T.; Silveira, C. C.; Schumacher, R. F. Direct and Regioselective C-H Selenylation of 4-Aminocoumarin Derivatives Mediated by Selectfluor®. *ChemistrySelect* **2023**, 8, e202300377.

- [03] Bartz, R. H.; Dapper, L. H.; Kazmierczak, J. C.; Schumacher, R. F.; Perin, G.; Thurow, S.; Penteado, F.; Lenardão, E. J. Lighting Up the Organochalcogen Synthesis: A Concise Update of Recent Photocatalyzed Approaches. *Catalysts* **2023**, *13*, 520.
- [04] Gutterres, E. L.; Anjos, T.; Santos, F. B.; Bandeira, P. T.; Penteado, F.; Schumacher, R. F. Recent Approaches in Transition Metal-Catalyzed Chalcogenative Heteroannulation of Alkenes and Alkynes. *Catalysts* **2023**, *13*, 1300.
- [05] Santos, F.; Pezzini, E.; Cargnelutti, R.; Penteado, F.; Schumacher, R.F. Synthesis of two isomers of pyrido/benzo[b][1,4]selenazines: a selective catalyst-dependent formation of C-N and C-Se bonds. *Adv. Synth. Catal.* **2023**, *365*, 4286-4292.
- [06] Cargnelutti, R.; Schumacher, R. F.; Belladona, A. L.; Kazmierczak, J. C. Coordination chemistry and synthetic approaches of pyridyl-selenium ligands: A decade update. *Coord. Chem. Rev.* **2021**, *426*, 213537.
- [07] Schumacher, R. F.; Cargnelutti, R.; Sperança, A.; Kazmierczak, J. C.; Anjos, T.; Hartmann, C. M.; Godoi, B. Regioselective C-H selenylation of heteroarenes under metal-free conditions. *Curr. Org. Chem.* **2021**, *25*, 2068-2088.
- [08] Zeni, G.; Godoi, B.; Jurinic, C. K.; Belladona, A. L.; Schumacher, R. F. Transition Metal-Free Synthesis of Carbo- and Heterocycles via Reaction of Alkynes with Organylchalcogenides. *Chem. Rec.* **2021**, *21*, 2880-2895.
- [09] Xavier, M. C. D. F.; Sandagorda, E. M. A.; Santos Neto, J. S.; Schumacher, R. F.; Silva, M. S. Synthesis of 3-selanylbenzo[b]furans promoted by SelectFluor®. *RSC Adv.* **2020**, *10*, 13975-13983.
- [10] Belladona, A. L.; Cervo, R.; Alves, D.; Barcellos, T.; Cargnelutti, R.; Schumacher, R. F. C-H functionalization of (hetero)arenes: Direct selanylation mediated by Selectfluor. *Tetrahedron Lett.* **2020**, *61*, 152035.