Curriculum Vitae

Piotr Szcześniak, PhD

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EDUCATION AND CAREER

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- **from 2020** – Assistant Professor at the Institute of Organic Chemistry, PAS, Warsaw, Poland; manager and investigator of the project *"Photochemical rearrangement of lactams: ''A ring-expansion approach towards structurally diverse heterocycles";*
- **2018–2019** – Post-doc: Institute of Organic Chemistry, PAS, Warsaw, Poland, investigator of the project *"New organocatalytic strategies: towards drugs and bioactive compounds*" supervised by prof. Jacek Młynarski**;**
- **2015–2018** – Post-doc: Jagiellonia University Faculty of Chemistry Kraków, Poland, manager and investigator of the project *"Asymmetric synthesis of cyclic nitrones and imines via organocatalytic Michael addtion reaction*", supervised by prof. Jacek Młynarski;
- **2015–2015** – Post-doc: Institute of Organic Chemistry, PAS, Warsaw, Poland, investigator of the project "*Synthesis of amino acids and their derivatives bearing quaternary carbon atom by asymmetric allyl cyanate-to-isocyanate rearrangement*" supervised by prof. Sebastian Stecko;
- **2010–2015** – PhD: Institute of Organic Chemistry, PAS, Warsaw, Poland, Final thesis *"Application of cyclic imines as building blocks in the synthesis of izidines*", supervisor prof. Bartłomiej Furman;
- **2008–2009** – technologist, Nobilus Ent, a pharmaceutical company, Kutno, Poland;
- **2006–2008** – laboratory technician/scientist at the Institute of Organic Chemistry, PAS, Warsaw, Poland
- **2003–2008** – MSc: Centre of Biotechnology, Warsaw University of Technology, graduate courses: Industrial Biotechnology faculty of Chemical and Process Engineering. Final thesis: "*Intramolecular addition of aryllithium compound to 2,3-dihydro-4-pyridone, as a new method synthesis benzochinolizydine*'' supervisor prof. Bartłomiej Furman.

AWARDS

- **2020** – Award for Outstanding Scientific Achievements in 2019 founded by the Director of the Institute of Organic Chemistry, PAS, Warsaw, Poland;
- **2014** – PhD scholarship granted by the Marshal of the Mazowieckie Voivodeship in Warsaw, project: Scientific potential as a support for the economy of Mazovia.

PUBLICATIONS

- **P. Szcześniak**, S. Stecko, Olga Staszewska-Krajewska & B. Furman; *Sugar-derived cyclic imines: one pot synthesis and direct functionalization; Tetrahedron* **2014**, *70*, 1880-1888;
- O. Staszewska-Krajewska, W. Bocian, M. Maciejko, **P. Szcześniak**, K. Szymczak, M.Chmielewski, B. Furman; *The use of carbonyl group anisotropy effect in determination of the relative configuration of carbapenams*; *ARKIVOC* **2014**, *3*, 143-153;
- **P. Szcześniak**, S. Stecko, E. Maziarz, O. Staszewska-Krajewska, B. Furman; *Syntesis of polyhydroxylated quinolizidine and indolizidine scaffolds from sugar-derived lactams via a one-pot reduction/Mannich/Michael sequence*; *J. Org. Chem.* **2014**, *79*, 10487-10503;

- **P. Szcześniak**, A. Październiok-Holewa, U. Klimczak, S. Stecko; *Synthesis of beta- and gamma-hydroxy alpha-amino acids via enzymatic kinetic resolution and cyanate-to-isocyanate rearrangement*; *J. Org. Chem.* **2014**, *79*, 10487-10503;
- **P. Szcześniak**, S. Stecko; *An approach to asymmetric synthesis of β-aryl alanines by Pd(0)-catalyzed cross-coupling and cyanate-to-isocyanate rearrangement*; *RSC Adv*. **2015**, *5*, 30882-30888
- **P. Szcześniak**, E. Maziarz, S. Stecko, B. Furman; *Synthesis of Polyhydroxylated Piperidine and Pyrrolidine Peptidomimetics via One-Pot Sequential Lactam Reduction/Joullié-Ugi Reaction* ;*J. Org. Chem.* **2015**; *80*, 3621-3633;
- **P. Szcześniak**, M. Pieczykolan, S. Stecko; *The Synthesis of α,α-Disubstituted α-Amino Acids via Ichikawa Rearrangement; J. Org. Chem*., ***2016***, *81*, 1057-1074;
- **P. Szcześniak**, A Ulikowski, O. Staszewska-Krajewska, G. Lipner, B. Furman; *Stereoselective synthesis of benzoquinolizidines and related homologues via intramolecular addition to dihydropyridones*; *Tetrahedron*; **2016**, *72*, 3032-3039;
- **P. Szcześniak**, O. Staszewska-Krajewska, B. Furman, J. Młynarski; *Asymmetric Synthesis of Cyclic Nitrones via Organocatalytic Michael Addition of Aldehydes to Nitroolefins and Subsequent Reductive Cyclization; ChemistrySelect* **2017**, *2*, 2670-2676;
- **P. Szcześniak**, O. Staszewska-Krajewska, B. Furman, J. Młynarski; *Solid supported Hayashi–Jørgensen catalyst as an efficient and recyclable organocatalyst for asymmetric Michael addition reactions; Tetrahedron Asymmetry* **2017***, 28*, 1765-1773;
- **P. Szcześniak**, O. Staszewska-Krajewska, J. Młynarski; *Total Asymmetric Synthesis of (+)-Asenapine; Org. Biomol. Chem.,* **2019***, 17,* 3225-3231;
- **P. Szcześniak**, S. Buda, L. Lefevre, O. Staszewska-Krajewska, J. Młynarski; *Total Asymmetric Synthesis of (+)-Paroxetine and (+)-Femoxetine", Eur. J. Org. Chem.* **2019**; 41, 6973-6982;
- M. A. Dudek, E. Machalska, T. Oleszkiewicz, E. Grzebelus, R. Baranski, **P. Szcześniak**, J. Mlynarski, G. Zajac, A. Kaczor, M. Baranska; *Chiral Amplification in Nature: Cell-extracted Chiral Carotenoid Microcrystals Studied Via RROA of Model Systems", Angew. Chem. Int. Ed.,* **2019***, 58,* 8383–8388.

PATENTS

- M. Dziedzic**, P. Szcześniak**, M. Kożuchowski Z. Kałuża; *Stereoselektywny sposób syntezy (S) pregabaliny,* Patent PL-390015 (22.12.2009);
- **P.Szcześniak**, J. Młynarski; *Sposób otrzymywania izomeru (+)-asenapiny,* Patent PAT.236522 (25.01.2021).

GRANTS

- Fuga 4 (NCN), 2015/16/S/ST5/00440, *''Asymmetric synthesis of cyclic nitrones and imines via organocatalytic Michael addition reaction";*
- Sonata 15 (NCN), 2019/35/D/ST4/00028, *"Photochemical rearrangement of lactams: A ring-expansion approach towards structurally diverse heterocycles".*

CONFERENCES

- *12th JCF-Frühjahrssymposium*, Germany, Göttingen, 17-20 March 2010;
- *VII Multidyscyplinarna Konferencja Nauki o Leku*, Poland, Zakopane, 10-12 May 2010;
- *International Symposium on Homogeneous Catalysis*, Poland, Poznań, 4-9 July 2010;
- *13th Spring Symposium 2011*,Germany, Erlangen, 23-26 March 2011;
- *IX Ogólnopolskie Sympozjum Chemii Organicznej*, Poland, Warsaw, 6-9 April 2011;
- *Conference on Advances in Organic Chemistry*, Czech Republic, Hradec Kralove, 26-30 June 2011;
- *17th European Symposium of Organic Chemistry*, Greece, Hersonissos, 10-15 July 2011;
- *Microsymposium on Asymmetric Synthesis*. Poland, Warsaw, 07 September 2011;

- *International Conference Catalysis in Organic Synnthesis*, Russia, Moscow, 15-20 September 2012;
- *Post Conference Frontiers of Organometallic Chemistry*, Russia, Saint-Petersburg, 21-22 September 2012;
- *13th Tetrahedron Symposium Challenges in Bioorganic & Organic Medicinal Chemistry*, Taipei, Taiwan, 27-30 November 2012;
- *18th European Symposium on Organic Chemistry,* France, Marseille, 7-12 July 2013;
- *15th Tetrahedron Symposium Challenges in Bioorganic and Organic Medicinal Chemistry*, England, London, 24-27 June 2014;
- *8-th Eurasian Meeting on Heterocyclic Chemistry* - EAMHC-2014, Georgia, Tbilisi, 20-24 September 2014;
- *3-rd International Conference of Organic Chemistry* -ICOC-2014, Georgia, Tbilisi, 24-28 September 2014;
- *ACS Publications Symposium Inovation in Molecular Synthesis*; China, Shanghai, 22-24 October, 2017;
- *XI Ogólnopolskie Sympozjum Chemii Organicznej OSCO*, Poland, Warsaw 8-11 April 2018;
- XIII Conference on Organic Synthesis; Italy, Florence, 15-19 September 2018.