

PERSONAL INFORMATION



Family name, First name: Mykhailiuk Pavel

Date of birth: 5 April 1984

URL for web site: Researchgate (www.researchgate.net), Scopus (www.scopus.com) databases

EDUCATION

- 2006-2008 PhD in organic chemistry (supervisor – Prof. Anne Ulrich)
Karlsruhe Institute of Technology, Germany, Karlsruhe.
- 2000-2005 MS in organic chemistry (supervisor – Prof. Igor Komarov)
Kyiv National Taras Shevchenko University, Ukraine, Kyiv.

CURRENT POSITIONS

- Since 2014: Docent
Kyiv National Taras Shevchenko University, Ukraine, Kyiv.
- Since 2013: Chief Scientific Officer
Enamine Ltd, Ukraine, Kyiv

PREVIOUS POSITIONS

- 2009-2013 Research scientist with teaching in Organic Chemistry
Kyiv National Taras Shevchenko University, Ukraine, Kyiv.
- 2011-2012 Head of Custom Synthesis Department
Enamine Ltd, Ukraine, Kyiv
- 2009-2010 Project Manager at Custom Synthesis Department
Enamine Ltd, Ukraine, Kyiv

FELLOWSHIPS AND AWARDS

- 2014 Runner-up of [EFMC Prize for a Young Medicinal Chemist](#) to be awarded at EFMC-ISMIC conference (Lisbon, Portugal), 7-11 September, 2014).
- 2013 “*Excellence in science*” award (Kyiv National Taras Shevchenko University, Ukraine)
2^d place in rating “[Top-60 scientists of Kyiv National Taras Shevchenko University](#)”.
- 2013 “*Bronze short lecture award*” by Roche. 11th German Peptide Symposium, Germany.
- 2008 “*Wolff & Sohn-Prize*” (Karlsruhe Institute of Technology, Germany).
- 2006-08 Research grant of Alexander von Humboldt Foundation, Germany.
- 2001-02 Scholarship from the President of Ukraine.
- 2000 Bronze medal at “[32nd International Chemistry Olympiad](#)” in Copenhagen, Denmark.
- 1999 Silver medal at “[33th Mendeleev Chemistry Olympiad](#)” in Minsk, Belarus.

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2 Master Students, co-supervision of 5 PhD students.

Management of 20 chemists at *Enamine Ltd* during 2011-2012 (Pavel Mykhailiuk was a “Head of Custom Synthesis Department” at *Enamine Ltd*).

TEACHING ACTIVITIES

- Since 2014 “How to interestingly present the results of scientific research” (students of 6th Year)
Kyiv National Taras Shevchenko University, Ukraine, Kyiv.
- Since 2009 “Basics of organic chemistry” (students of 2nd, 3rd Years)
Kyiv National Taras Shevchenko University, Ukraine, Kyiv.

INSTITUTIONAL RESPONSIBILITIES

- Since 2013: Member of the Scientific Commission of *Kyiv National Taras Shevchenko University, Ukraine, Kyiv.*

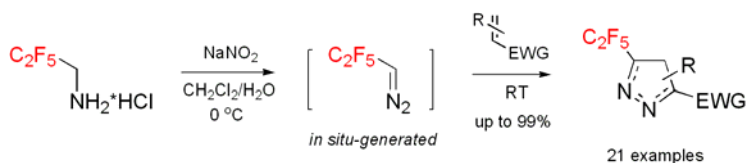
PUBLICATIONS

Pavel Mykhailiuk has co-authored 70 publications in peer-reviewed research journals (H = 10). Among them are 13 papers in 2014. The full list of publications can be viewed at Scopus (www.scopus.com) and Researchgate (www.researchgate.net) databases.

Ten representative papers 2013-2014:

1. **In situ-generation of C₂F₅CHN₂ and its first reaction – [3+2]-cycloaddition with alkenes.**
P. K. Mykhailiuk*
Chem. Eur. J. **2014**, *17*, 4942-4947 (Back Cover Picture).

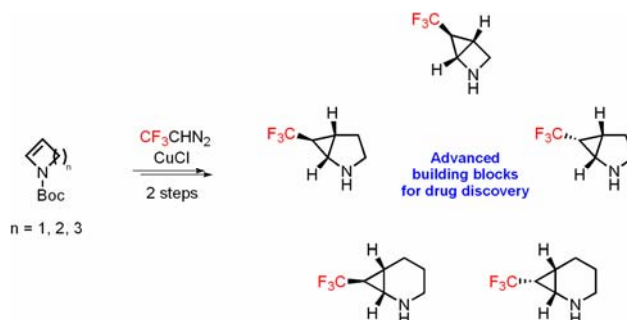
highlighted in: **Diazoalkane Expands Fluorine Focus On Ethyl Groups**
S. K. Ritter
Chemical & Engineering News, **2014**, *92* (17).



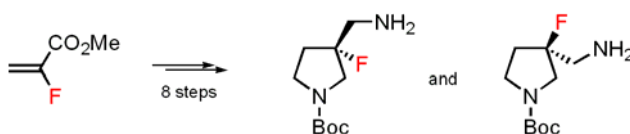
2. **One-pot synthesis of CF₃-substituted pyrazolines / pyrazoles from electron-deficient alkenes / alkynes and in situ generated CF₃CHN₂.**
E. Y. Slobodyanyuk, O. S. Artamonov, O. V. Shishkin, P. K. Mykhailiuk*
Eur. J. Org. Chem. **2014**, 2487-2495.



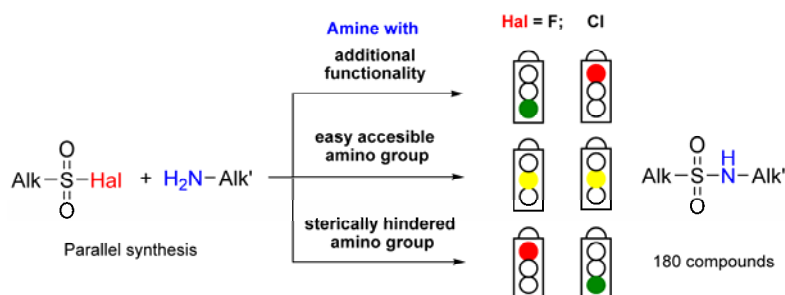
3. **Synthesis of trifluoromethyl-substituted 3-azabicyclo[n.1.0]alkanes: advanced building blocks for drug discovery.**
O. S. Artamonov, E. Y. Slobodyanyuk, I. V. Komarov, A. A. Tolmachev, P. K. Mykhailiuk*
Eur. J. Org. Chem. **2014**, 3592-3599.



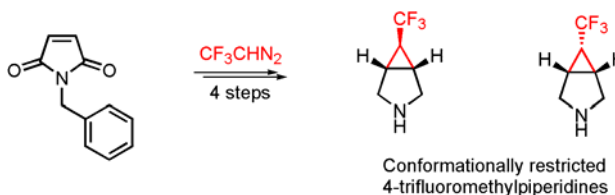
4. **Convenient synthesis of enantiopure (R-) and (S)-3-fluoro-3-aminomethylpyrrolidines.**
 V. S. Yarmolchuk, V. L. Mykhalchuk, P. K. Mykhailiuk*
Tetrahedron **2014**, *70*, 3011-3017.



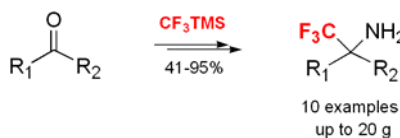
5. **Sulfonyl fluorides as alternative to sulfonyl chlorides in parallel synthesis of aliphatic sulfonamides.**
 A. V. Bogolubsky, Y. S. Moroz,* P. K. Mykhailiuk,* S. E. Pipko, I. V. Sadkova, A. Tolmachev
ACS Comb. Sci. **2014**, *16*, 192-197.



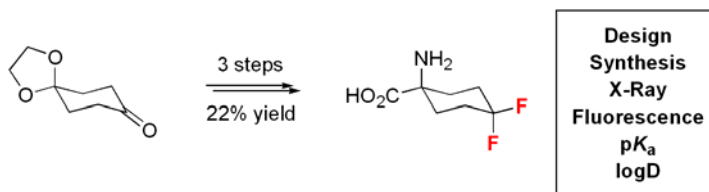
6. **Synthesis of Isomeric 6-Trifluoromethyl-3-azabicyclo[3.1.0]hexanes: Conformationally Restricted Analogues of 4-Trifluoromethylpiperidine.**
 O. S. Artamonov, E. Y. Slobodyanyuk, O. V. Shishkin, I. V. Komarov, P. K. Mykhailiuk*
Synthesis. **2013**, 225-230.



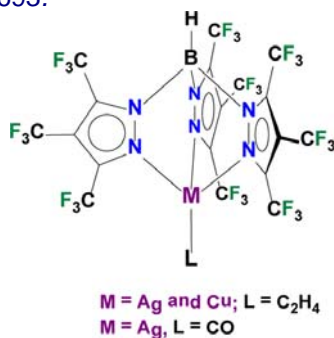
7. **An easy synthesis of α -trifluoromethyl-amines from aldehydes or ketones using the Ruppert-Prakash reagent.**
 D. S. Radchenko, O. M. Michurin, A. V. Chernykh, O. Lukin,* P. K. Mykhailiuk*
Tetrahedron Lett. **2013**, *54*, 1897-1898.



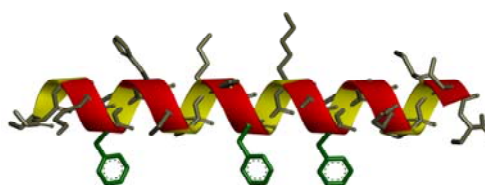
8. **1-Amino-4,4-difluorocyclohexanecarboxylic acid as a promising building block for drug discovery. Design, synthesis and characterization.**
 P. K. Mykhailiuk,* V. Starova, V. Iurchenko, S. V. Shishkina, O. V. Shishkin, O. Zaporozhets
Tetrahedron **2013**, *13*, 4066-4075.



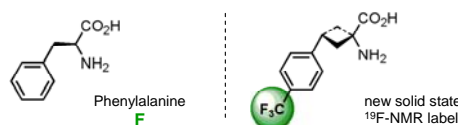
9. **Ag(I) and Cu(I) Adducts of a Tris(pyrazolyl)borate Decorated with Nine CF₃-Groups.**
N. B. Jayaratna, I. I. Gerus,* R. V. Mironets, P. K. Mykhailiuk,* M. Yousufuddin, H. V. R. Dias*
Inorg. Chem. **2013**, *52*, 1691-1693.



10. **Design, synthesis and application of a CF₃-phenylalanine analogue as a label to study peptides by solid state ¹⁹F-NMR.**
A. N. Tkachenko, D. S. Radchenko, P. K. Mykhailiuk,* S. Afonin,* A. S. Ulrich, I. V. Komarov
Angew. Chem. Int. Ed. **2013**, *125*, 6632-6635.



GIGK-F-LHSAKK-F-GKA-F-VGEIMNS



PATENTS, BOOK CHAPTERS

- Peptidomimetics possessing photo-controlled biological activity.**
O. Babii, S. Afonin, P. K. Mykhailiuk, A. S. Ulrich, I. V. Komarov
PCT/EP2014/000482.
- Trifluoromethyl-substituted α-amino acids as solid state ¹⁹F-NMR labels for structural studies of membrane-bound peptides.**
V. S. Kubyskin, I. V. Komarov, S. Afonin, P. M. Mykhailiuk, S. L. Grage, A. S. Ulrich
Fluorine in Pharmaceutical and Medicinal Chemistry, Gouverneur, V.; Müller, K., Eds.; Imperial College Press, London, **2012**.

PRESENTATIONS

Pavel Mykhailiuk delivered ~ 20 lectures worldwide (meetings, conferences, academic institutions and pharmaceutical/agrochemical companies).

Ten representative presentations 2013-2014:

- Development of Novel Building Blocks to Accelerate Drug Discovery**
P. K. Mykhailiuk, oral talk to be communicated at
13th Symposium on Medicinal Chemistry, EFMC-ISMC (Lisbon, Portugal)
7-11 September, **2014**
- CF₃CHN₂, C₂F₅CHN₂: underestimated reagents for organic synthesis.**
P. K. Mykhailiuk (invited talk)
Bordeaux Fluorine Days (Bordeaux, France), 6-10 July **2014**
- Decent advances in the synthesis of fluorinated amino acids**
P. K. Mykhailiuk (invited talk)
Technical University of Berlin (Berlin, Germany) 20 May, **2014**

4. **Synthesis of novel fluorinated amino acids - promising ¹⁹F NMR labels.**
P. K. Mykhailiuk (invited talk)
2^d Humboldt workshop on bioactive peptides and nanostructures (Kiev, Ukraine)
18-21 November, **2013**
5. **Recent scientific discoveries at Enamine Ltd.**
P. K. Mykhailiuk (oral talk)
Bayer HC (Wuppertal, Germany)
15 November, **2013**
6. **Novel structural elements for drug discovery**
P. K. Mykhailiuk (invited oral talk)
2^d Medicinal Chemistry & Computer Aided Drug Designing, (Las Vegas, USA)
15-17 October, **2013**
7. **Novel fluorinated amino acids for peptide studies. .**
P. K. Mykhailiuk (oral talk)
11th FinMedChem biannual symposium (Helsinki, Finland)
28-30 August, **2013**
8. **Novel fluorinated units for drug discovery.**
P. K. Mykhailiuk (invited talk)
ESPCI ParisTech (Paris, France)
23 July, **2013**
9. **Novel structural elements for drug discovery.**
P. K. Mykhailiuk (oral talk)
Gilead company (Las Vegas, USA)
16 June, **2013**
10. **Novel fluorinated amino acids as solid state ¹⁹F NMR labels for peptide studies.**
P. K. Mykhailiuk (oral talk)
5th Advances in Synthetic and Medicinal Chemistry, ASMC (Moscow, Russia)
5-8 May, **2013**

MAJOR COLLABORATIONS (ongoing)

Prof. Anne Ulrich (Karlsruhe Institute of Technology, Karlsruhe, Germany)

“Synthesis of novel fluorinated amino acids as ¹⁹F-NMR labels for peptide studies.”

Prof. Nedilko Budissa (Technical University of Berlin, Berlin, Germany)

“Synthesis of unnatural amino acids for peptide/protein stabilization.”

Prof. Igor Komarov (Institute of High Technologies, Kiev, Ukraine)

“Synthesis and evaluation of light-sensible peptidomimetics.”

Prof. Rasika Dias (University of Texas, Arlington, USA)

“Synthesis of novel fluorinated pyrazoles – transition-metal ligands for carbene reactions.”

Prof. Olga Zaporozhnetz (Kyiv National Taras Shevchenko University, Kyiv, Ukraine)

“Evaluation of fluorine on physico-chemical properties of organic molecules.”

Prof. Andrey Tolmachev (Enamine Ltd, Kyiv, Ukraine)

“Elaboration of novel combinatorial methods to efficiently produce compound libraries.”

OTHER

Languages	German (<i>very good</i>), English (<i>fluent</i>), Russian (<i>native</i>), Ukrainian (<i>native</i>).
Research interests	Organofluorine chemistry, drug design, unnatural amino acids.
Reviewer	<i>Org. Lett.</i> , <i>J. Fluorine Chem.</i> , <i>Synthesis</i> , <i>EurJOC</i> , <i>Amino Acids</i>