

CURRICULUM VITAE

Name **Tomáš Mašek**
Date of birth 10.07.1987
Work address IOCB Prague, Flemingovo sq. 2, Prague 6, 16610, Czech Republic
Contact tomas.masek@uochb.cas.cz

EDUCATION

2013-present **Ph.D. in Organic Chemistry (in prog.), Charles University in Prague/IOCB Prague**
Advisor: Dr. Ullrich Jahn, Ph.D.
Topic: *Enolate oxidation in the synthesis of polyphenolic natural products*

2009-2013 **MSc. in Organic Chemistry, UCT Prague/IOCB Prague**
Advisors: Prof. Jaroslav Kvíčala, Dr. Ullrich Jahn, Ph.D.
Topic: *Cross-metathesis of allylsilanes*

2006-2009 **B.S. in Chemistry (Eurobachelor), UCT Prague**
Advisor: Ilya Lyapkalo, Ph.D., Prof. Pavel Drašar
Topic: *Synthesis of the alicyclic part of Akanthomycin*

Research and teaching experience

2013-present **RESEARCH:** IOCB Prague, Chemistry of Natural Products
Topics: *Oxidation of enolates, enantioselective conjugate addition, natural polyphenols*

2020-present **RESEARCH & TEACHING:** Charles University in Prague and IOCB Prague
Advisor, co-investigator and author of research proposal for B.S. thesis, Tomáš Svoboda
Topic: *Enolate oxidation in the synthesis of stilbenolignans*

2018 **TEACHING:** Charles University in Prague, Faculty of Science
Course: *Organic Chemistry Seminar for Non-chemistry Field of Study*

2017-2018 **RESEARCH & TEACHING:** Charles University in Prague and IOCB Prague
Advisor, co-investigator and author of research proposal for B.S. thesis, Gabriela Presová
Topic: *Enolate oxidation in the synthesis of stilbenolignans*

2016-2018 **RESEARCH:** Gilead Sciences collaboration with IOCB Prague
Topic: *Macrocyclic antiviral agents*

2010-2011 **RESEARCH:** University of Glasgow, School of Chemistry
Topic: *Synthesis of marine natural product (6S,7S,9R,10R)-6,9-epoxynonadec-18-ene-7,10-diol*, Erasmus stay - synthetic project, advisor: Prof. Stephen Clark

2006-2010 **RESEARCH:** IOCB Prague, Organic Synthesis
Topics: *Phosphazene bases, total synthesis*, advisor: Ilya Lyapkalo Ph.D.

Participation in international conferences and meetings

2019 GRC Natural Products and Bioactive Compounds, Andover, New Hampshire, USA
Topic: *Synthesis of topologically different cyclolignans*, poster

2019 Chemistry at the Via Carolina, FAU Erlangen-Nürnberg, Germany
Topic: *Oxidative intermediate switching for the synthesis of stilbenolignans*, speaker

2018 9th Barrande-Vltava French-Czech Chemistry Meeting, Université de Strasbourg, France
Topic: *Oxidative intermediate switching for the synthesis of lignan classes*, poster

- 2017-2021 Interdisciplinary Meeting of Young Biologists, Biochemists and Chemists, Milovy, CR
Topic: *Oxidative intermediate switching for the total synthesis of lignans*, speaker, poster
- 2015 19th European Symposium on Organic Chemistry ESOC2015, Lisboa, Portugal
Topic: *Oxidative C-C bond cleavage of ketone enolates*, poster
- 2008-2021 Advances in Organic, Bioorganic and Pharmaceutical Chemistry, Czech Republic
Topics: *Phosphazene bases, enolate oxidation, total synthesis of stilbenolignans*, speaker, poster presenter, regular attendee

Publications

- 2022 *Manuscript in preparation*. Mašek, T., Presová G., Pohl, R., Císařová, I., Jahn, U.
"Enantioselective total synthesis of furoindane stilbenolignans using one-pot oxidative cascade."
- 2021 Mašek, T., Jahn, U. "Enolate-Based Regioselective Anti-Beckmann C-C Bond Cleavage of Ketones." *J. Org. Chem.* **2021**, 86 (17), 11608-11632.
- 2013 Alexandrova, A. V., Mašek, T., Polyakova, S. M., Císařová, I., Saame, J., Leito, I., Lyapkalo, I. M. "Synthesis of electron-rich sterically hindered P1 phosphazene bases by the staudinger reaction." *Eur. J. Org. Chem.* **2013**, (9), 1811-1823.
- 2009 Mašek, T., Lyapkalo I. M. "New expedient synthesis of (*S*)-propargylglycine, a potent antibiotic compound." *Chem. Listy* **2009**, (103), 783-784.

Research interests

Enolate chemistry, conjugate addition, single electron transfer, radical chemistry. stereoselective synthesis, desymmetrization, dimeric and oligomeric natural polyphenols.

Other Research Output

- 2018 - G. Presová B.S. thesis (advisor)
<https://dspace.cuni.cz/bitstream/handle/20.500.11956/98482/130232061.pdf?sequence=1&isAllowed=y>
- 2015 - 19th European Symposium on Organic Chemistry
https://esocxix.eventos.chemistry.pt/images/Book_abstracts.pdf
- 2008 - 43rd Advances in Organic, Bioorganic and Pharmaceutical Chemistry
<http://www.chemicke-listy.cz/ojs3/index.php/chemicke-listy/article/view/1470/1470>