Radek Šachl

Date of birth:	December 12th, 1982 in České Velenice, Czech Republic
Nationality:	Czech
Marital status:	Married
Children:	Son Vojta Šachl, born May 28th 2012.
	Son Matěj Šachl, born November 5th 2016
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Education

2007 Master degree in Physical Chemistry at the Faculty of Science, Charles University, Prague

2012 Joint Ph.D. degree in Physical Chemistry between Umeå University, Department of Chemistry, Umeå, Sweden and Faculty of Science, Charles University, Prague

Employment summary

2015 - 2017 staff scientist at J. Heyrovský Institute, Prague, Czech Republic

2018 – J. Heyrovský young scientist position at J. Heyrovský Institute, Prague, Czech Republic

2020 – Head of the department of Biophysical Chemistry at J. Heyrovský Institute

Research stays

2007 - 2012 Ph.D. at Umeå University, Sweden

2013 Post-Doc in the group of prof. Martin Hof at J. Heyrovský Institute, Prague, Czech Republic

2014 Post-Doc in the group of prof. Jerker Widengren, KTH, Stockholm, Sweden.

Teaching Experience:

2010 - 2012 Thermodynamics, Umeå University, Sweden

2010 - 2012 Light Spectroscopy and Quantum Chemistry, Umeå University, Sweden

2017 - presence General Chemistry, Faculty of Science, Charles University, Czech Republic

2020 – presence Methods Based on Fluorescence of Single Molecules, Faculty of Science, Charles University, Czech Republic

Supervision of students

Currently supervisor of 3 PhD students and 1 Master student and consultant of 1 PhD student

Defended thesis: 1 PhD, 2 MSc, 1 Bc. thesis

Language skills:

English - fluently, passed First Certificate in English

German - fluently, passed Mittelstufenprüfung

Swedish – fluently

Awards

2017: Otto Wichterle award for young scientists

Publications

Author of 39 publications

Other scientific activities

Speaker of the German Biophysical Society and organizer the International Membrane Biophysics Meeting in Drübeck, Germany, in 2022 and 2024

Editor of the book Fluorescence Microscopy and Spectroscopy in Biology, Springer, under preparation

Review Editor for Frontiers in Cell and Developmental Biology, Frontiers in Physics and Frontiers in Physiology

List of 10 most important publications within 2020-2016

Corresponding authorships are marked with *.

1. **Šachl, R*.**; Čujová, S.; Singh, V.; Riegerová, P.; Kapusta, P.; Müller, H.-M.; Steringer, J. P.; Hof, M.; Nickel, W. Functional Assay to Correlate Protein Oligomerization States with Membrane Pore Formation. *Anal. Chem.* **2020**, *92*, 14861–14866, **IF = 6.8.**
2. Sarmento, M. J., Hof, M., and **Šachl, R.*** (2020). Interleaflet coupling of lipid nanodomains – insights from in vitro systems. *Front. Cell Dev. Biol.* 8, 284. doi:10.3389/FCELL.2020.00284, **IF = 5.2.**
3. Vinklárek, IS, Vel'as, L, Riegerová, P., Skála, K, Mikhalyov, I, Gretskaya, N, Hof, M and **Šachl, R**.* *J. Phys. Chem. Lett.*, 10, 2024–2030 (2019), **IF = 6.7.**
4. Cebecauer, M., Amaro, M., Jurkiewicz, P., Sarmento, M.J., **Šachl, R.**, Cwiklik, L. and Hof, M. Membrane Lipid Nanodomains. *Chem. Rev.*, 118, 11259–11297, (2018), **IF = 52.613**.
5. Koukalová, A., Pokorná, Š., Boyle, A.L., Mora, N.L., Kros, A., Hof, R. and **Šachl, R.*** Distinct roles of SNARE-mimicking lipopeptides during initial steps of membrane fusion. *Nanoscale*, 4, 19064–19073, (2018), **IF = 7.233**.
6. Braun, S., Pokorná, Š., **Šachl, R.**, Hof, M., Heerklotz, H. and Hoernke, M. Biomembrane Permeabilization: Statistics of Individual Leakage Events Harmonize the Interpretation of Vesicle Leakage. *ACS Nano* 12, 813–819 (2018), **IF = 13.709**.
7. Koukalová, A., Amaro, M., Aydogan, G., Gröbner, G., Williamson, P. T. F., Mikhalyov, I., Hof, M. and **Šachl, R.*** Lipid Driven Nanodomains in Giant Lipid Vesicles are Fluid and Disordered. *Scientific Reports*, 7(1), 5460 (2017), **IF = 4.122**.
8. Steringer, J. P., Lange, S., Čujová, S., **Šachl, R.**, Poojari, C., Lolicato, F., … Nickel, W. Key steps in unconventional secretion of fibroblast growth factor 2 reconstituted with purified components. *eLife*, 6 (2017), **IF = 7.616**.
9. **Šachl, R**.*, Bergstrand, J, Widengren, J and Hof, M. Fluorescence correlation spectroscopy diffusion laws in the presence of moving nanodomains *J. Phys.D Appl. Phys.* 49 (2016), **IF = 2.373**.

10. Amaro, M.; **Šachl, R.**; Aydogan, G.; Mikhalyov, I. I.; Vácha, R.; Hof, M. GM1 Ganglioside Inhibits B-Amyloid Oligomerization Induced by Sphingomyelin. *Angew. Chemie* 55, 9411–9415 (2016), **IF = 12.102**.