

Seznam publikací a jiných výsledků vědecké práce

RNDr. Ondřej Sedláček, Ph.D.

1. recenzované články v mezinárodních časopisech s IF (cizojazyčné)

63. Thioether-based poly (2-oxazoline) s: from optimized synthesis to advanced ROS-responsive nanomaterials
Semira Bener, Ewa Pavlova, Hynek Beneš, **Ondřej Sedláček***, *Polym. Chem.* 2023, 14 (42), 4838-4847, IF = 4.6

62. Cationic ring-opening polymerization of 2-oxazolines and 2-oxazines in biomass-derived solvents
Niccolo Lusiani, Vyshakh Panakkal, **Ondřej Sedlacek***, *Polymer* 2023, 287, 126442, IF = 4.6

61. Antifouling Properties of Poly (2-Oxazoline) s and Poly (2-Oxazine) s: Direct Comparison of Polymer-Coated Surfaces with the Same Coating Parameters
Jan Svoboda, Niccolo Lusiani, Radoslava Sivkova, Ognen Pop-Georgievski, **Ondřej Sedlacek***, *Macromol. Rapid Commun.* 2023, 2300168, IF = 4.6

60. Conformational Parameters and Hydrodynamic Behavior of Poly (2-Methyl-2-Oxazoline) in a Broad Molar Mass Range
Alexander S Gubarev, Alexey A Lezov, Anna N Podsevalnikova, Nina G Mikusheva, Petr A Fetin, Ivan M Zorin, Vladimir O Aseyev, **Ondřej Sedlacek**, Richard Hoogenboom, Nikolai V Tsvetkov, *Polymers* 2023, 15 (3), 623, IF = 5.0

59. Multifunctional Poly (2-ethyl-2-oxazoline) Copolymers Containing Dithiolane and Pentafluorophenyl Esters as Effective Reactive Linkers for Gold Surface Coatings
Ondřej Sedlacek, Tim Egghe, Patricia Khashayar, Martin Purino, Paula Lopes, Jan Vanfleteren, Nathalie De Geyter, Richard Hoogenboom, *Bioconjugate Chem.* 2023, 34, 12, 2311–2318, IF = 4.7

58. Synthesis of ¹⁹F MRI Nanotracers by Dispersion Polymerization-Induced Self-Assembly of N-(2,2,2-Trifluoroethyl)acrylamide in Water
Vyshakh M Panakkal, Dominik Havlicek, Ewa Pavlova, Marcela Filipová, Semira Bener, Daniel Jirak, **Ondřej Sedlacek***, *Biomacromolecules* 2022, 23, 11, 814. IF = 6.979, Q1, D1

57. Influence of Chain Length of Gradient and Block Copoly(2-oxazoline)s on Self-Assembly and Drug Encapsulation
Ondřej Sedlacek, Valentin Bardoula, Elina Vuorimaa-Laukkanen, Lars Gedda, Katarina Edwards, Aurel Radulescu, Grigoriy A Mun, Yong Guo, Junnian Zhou, Hongbo Zhang, Véronique Nardello-Rataj, Sergey Filippov, Richard Hoogenboom, *Small* 2022, 18, 17, 2106251. IF = 15.153, Q1, D1

56. Phase Separation and pH-Dependent Behavior of Four-Arm Star-Shaped Porphyrin-PNIPAM₄ Conjugates
Nadiia Velychkivska, **Ondřej Sedláček**, Anastasiia B Shatan, Monika Spasovová, Sergey K Filippov, Mandeep K Chahal, Larisa Janisova, Jiří Brus, Lenka Hanyková, Jonathan P Hill, Francoise M Winnik, Jan Labuta, *Macromolecules* 2022, 2022, 55, 6, 2109. IF = 6.057, Q1

55. Thermoresponsive Triblock Copolymers as Widely Applicable ¹⁹F Magnetic Resonance Imaging Tracers
Kristyna Kolouchova, Ondrej Groborz, Miroslav Slouf, Vit Herynek, Laurens Parmentier, David Babuka, Zulfiya Cernochova, Filip Koucky, **Ondřej Sedlacek**, Martin Hruby, Richard Hoogenboom, Sandra Van Vlierberghe, *Chem. Mater.* 2022, 2022, 34, 24, 10902. IF = 10.508, Q1

54. Linear Poly(ethylenimine-propylenimine) Random Copolymers for Gene Delivery: From Polymer Synthesis to Efficient Transfection with High Serum Tolerance
M Rachèl Elzes, Ine Mertens, **Ondřej Sedlacek**, Bart Verbraeken, Aniek CA Doensen, Maarten A Mees, Mathias Glassner, Somdeb Jana, Jos MJ Paulusse, Richard Hoogenboom, *Biomacromolecules* 2022, 23, 6, 2459-2470. IF = 6.979, Q1, D1

53. Fluorinated Ferrocene Moieties as a Platform for Redox-Responsive Polymer ¹⁹F MRI Theranostics
Pavel Švec, Oleg V Petrov, Jan Lang, Petr Štěpnička, Ondřej Groborz, David Dunlop, Jan Blahut, Kristýna

Kolouchová, Lenka Loukotová, **Ondřej Sedláček**, Tomáš Heizer, Zdeněk Tošner, Miroslav Šlouf, Hynek Beneš, Richard Hoogenboom, Martin Hrubý, *Macromolecules* 2022, 2022, 55, 2, 658–671. IF = 6.057, Q1

52. A unified kinetic Monte Carlo approach to evaluate (a)symmetric block and gradient copolymers with linear and branched chains illustrated for poly(2-oxazoline)s

Robert Conka, Yoshi W Marien, **Ondřej Sedlacek**, Richard Hoogenboom, Paul HM Van Steenberge, Dagmar R D'hooze, *Polymer Chemistry* 2022, 13, 1559-1575. IF = 5.364, Q1

51. Self-Assembly, Drug Encapsulation, and Cellular Uptake of Block and Gradient Copolymers of 2-Methyl-2-oxazine and 2-*n*-Propyl/butyl-2-oxazoline

David Babuka, Kristyna Kolouchova, Lenka Loukotova, **Ondřej Sedlacek**, Ondrej Groborz, Aneta Skarkova, Alexander Zhigunov, Ewa Pavlova, Richard Hoogenboom, Martin Hruby, Petr Stepanek, *Macromolecules* 2021, 54, 23, 10667. IF = 6.057, Q1

50. Antifouling fluoropolymer-coated nanomaterials for ¹⁹F MRI

Daniel Jirak, Jan Svoboda, Marcela Filipová, Ognen Pop-Georgievski, **Ondřej Sedlacek***, *Chem. Commun.* 2021, 2021, 57, 4718-4721. IF = 6.065, Q2

49. Fluorine-Containing Block and Gradient Copoly (2-oxazoline) s Based on 2-(3, 3, 3-Trifluoropropyl)-2-oxazoline: A Quest for the Optimal Self-Assembled Structure for ¹⁹F Imaging
Leonid I Kabarov, Zhansaya Kaberova, Anastasiia Murmiliuk, Jiri Trousil, **Ondřej Sedlacek**, Rafal Konefal, Alexander Zhigunov, Ewa Pavlova, Martin Vít, Daniel Jiráček, Richard Hoogenboom, Sergey K Filippov, *Biomacromolecules* 2021, 22, 7, 2963–2975. IF = 6.979, Q1, D1

48. A broad tuneable birdcage coil for mouse ¹H/¹⁹F MR applications
M Vít, M Burian, Z Berková, J Lacik, **O Sedlacek**, Richard Hoogenboom, Z Raida, D Jirak, *Journal of Magnetic Resonance* 2021, 329, 107023. IF = 2.734, Q3

47. Fluorinated Water-Soluble Poly(2-oxazoline)s as Highly Sensitive ¹⁹F MRI Contrast Agents
Sedlacek, O.,* Jirak, D., Vit, M., Ziołkowska, N., Janouskova, O., and Hoogenboom, R. *Macromolecules* 2020, 53, 15, 6387. IF = 6.057, Q1

46. Immiscibility of Chemically Alike Amorphous Polymers: Phase Separation of Poly(2-ethyl-2-oxazoline) and Poly(2-*n*-propyl-2-oxazoline)

Ella Schoolaert, Ronald Merckx, Jana Becelaere, Melissa Everaerts, Joachim FR Van Guyse, **Ondřej Sedlacek**, Bruno G De Geest, Guy Van den Mooter, Dagmar R D'hooze, Karen De Clerck, Richard Hoogenboom, *Macromolecules* 2020, 53, 17, 7590. IF = 6.057, Q1

45. Drug Delivery Systems Based on Poly(2-Oxazoline)s and Poly (2-Oxazine)s

Sedlacek, O.,* and Hoogenboom, R. *Adv. Ther.* 2020, 3, 1900168. IF = 5.003, Q1

44. Poly (2-methyl-2-oxazoline) conjugates with doxorubicin: From synthesis of high drug loading water-soluble constructs to in vitro anti-cancer properties

Sedlacek, O.,* Van Driessche, A., Uvyn, A., De Geest, B., and Hoogenboom, R. *J. Control. Release* 2020, 326, 53. IF = 11.467, Q1, D1

43. Iodinated Choline Transport-Targeted Tracers

Pavel Švec, Zbyněk Nový, Jan Kučka, Miloš Petřík, **Ondřej Sedláček**, Martin Kuchař, Barbora Lišková, Martina Medvedíková, Kristýna Kolouchová, Ondřej Groborz, Lenka Loukotová, Rafał Ł Konefał, Marián Hajdúch, Martin Hrubý, *J. Med. Chem.* 2020, 63, 24, 15960–15978. IF = 8.039, Q1, D1

42. Reactive oxygen species (ROS)-responsive polymersomes with site-specific chemotherapeutic delivery into tumors via spacer design chemistry

Jager, E., Sincari, V., Albuquerque, L., Jager, A., Humajova, J., Kucka, J., Pankrac, J., Paral, P., Heizer, T., Janouskova, O., Konefał, R., Pavlova, E., **Sedlacek, O.**, Giacomelli, F.C., Pouckova, P., Sefc, L., Stepanek, P., and Hruby, M. *Biomacromolecules* 2020, 21 (4) 1437. IF = 6.979, Q1, D1

41. Poly(2-ethyl-2-oxazoline) Conjugates with Salicylic Acid via Degradable Modular Ester Linkages
Bernhard, Y., **Sedlacek, O.**, Van Guyse, J., Bender, J., Zhong, Z., De Geest, B. G., and Hoogenboom, R. *Biomacromolecules* 2020, 21, 8, 3207–3215. IF = 6.979, Q1, D1

40. Implant-forming polymeric ¹⁹F MRI-tracer with tunable dissolution
Kolouchova, K., Jirak, D., Groborz, O., **Sedlacek, O.**, Ziolkowska, N., Vit, M., Sticova, E., Galisova, A., Svec, P., Trousil, J., Hajek, M., and Hruby, M., *J. Control. Release* 2020, 327, 50-60. IF = 11.467, Q1, D1

39. Unexpected Reactivity Switch in the Statistical Copolymerization of 2-Oxazolines and 2-Oxazines Enabling the One-Step Synthesis of Amphiphilic Gradient Copolymers
Sedlacek, O., Lava, K., Verbraeken, B., Kasmi, S., De Geest, B., Hoogenboom, R. *J. Am. Chem. Soc.*, 2019, 141, 24, 9617-9622. IF = 16.363, Q1, D1

38. Straightforward route to new poly (2-oxazoline)s via acylation of well-defined polyethyleneimine
Sedlacek, O., Janouskova, O., Verbraeken, B., Hoogenboom, R. *Biomacromolecules*, 2019, 20, 1, 222-230. IF = 6.979, Q1, D1

37. Poly (2-amino-2-oxazoline)s: a new class of thermoresponsive polymers
Sedlacek, O.*, Bera, D., Hoogenboom, R. *Polym. Chem.*, 2019, 10, 34, 4683-4689. IF = 5.364, Q1

36. Visualization and design of the functional group distribution during statistical copolymerization
Van Steenberge, P., **Sedlacek, O.**, Hernandez-Ortiz, J., Verbraeken, B., Reyniers, M.-F., Hoogenboom, R., D'hooge, D. *Nat. Commun.*, 2019, 10, 1, 1-14. IF = 17.694, Q1, D1

35. Solvent-control over monomer distribution in the copolymerization of 2-oxazolines and the effect of a gradient structure on self-assembly
Bera, D., **Sedlacek, O.**, Hoogenboom, R. *Polym. Chem.*, 2019, 10, 37, 5116-5123. IF = 5.364, Q1

34. Poly(2-oxazoline)-protein conjugates
Sedlacek, O., Rosa, V., Hoogenboom, R. *Eur. Polym. J.*, 2019, 120, 109246. IF = 5.546, Q1

33. Synthesis of defined high molar mass poly(2-methyl-2-oxazoline)
Sedlacek, O.*, Monnery, B., Hogenboom, R. *Polym. Chem.*, 2019, 10, 11, 1276-1290. IF = 5.364, Q1

32. Poly(2-oxazoline)s One-Pot Polymerization and Surface Coating: From Synthesis to Antifouling Properties Out-Performing Poly(ethylene oxide)
Svoboda, J., **Sedlacek, O.**, Riedel, T., Hruby, M., Pop-Georgievski, O. *Biomacromolecules*, 2019, 20, 9, 3453-3463. IF = 6.979, Q1, D1

31. SET-LRP Synthesis of Well-Defined Light-Responsible Block Copolymer Micelles
Sedlacek, O.*, Filippov, S., Svec, P., Hruby, M. *Macromol. Chem. Phys.*, 2019, 220, 19, 1900238. IF = 2.996, Q2

30. Defined High Molar Mass Poly(2-Oxazoline)s
Monnery, B., Jerca, V., **Sedlacek, O.**, Verbraeken, B., Cavill, R., Hoogenboom, R. *Angew. Chem. Int. Ed.*, 2018, 57, 47, 15400-15404. IF = 16.823, Q1, D1

29. ¹⁹F Magnetic Resonance Imaging of Injectable Polymeric Implants with Multiresponsive Behavior
Sedlacek, O.*, Jirak, D., Galisova, A., Jager, E., Laaser, J., Lodge, T., Stepanek, P., Hruby, M. *Chem. Mater.*, 2018, 30, 15, 4892-4896. IF = 10.508, Q1

28. Self-Assembled Thermoresponsive Polymeric Nanogels for ¹⁹F MR Imaging
Kolouchova, K., **Sedlacek, O.**, Jirak, D., Babuka, D., Blahut, J., Kotek, J., Vit, M., Trousil, J., Konefal, R., Janouskova, O., Podhorska, B., Slouf, M., Hruby, M. *Biomacromolecules*, 2018, 19, 8, 3515-3524. IF = 6.979, Q1, D1

27. Biopolymer strategy for the treatment of Wilson's disease
Vetrik, M., Mattova, J., Mackova, H., Kucka, J., Pouckova, P., Kukackova, O., Brus, J., Eigner-Henke, S., **Sedlacek, O.**, Sefc, L., Stepanek, P., Hruby, M. *J. Control. Release*, 2018, 273, 131. IF = 11.467, Q1, D1

26. Polymer nitric oxide donors potentiate the treatment of experimental solid tumours by increasing drug accumulation in the tumour tissue

Studenovsky, M., Sivak, L., **Sedlacek, O.**, Konefal, R., Horkova, V., Etrych, T., Kovar, M., Rihova, B., Sirova, M. *J. Control. Release*, 2018, 269, 214-224. IF = 11.467, Q1, D1

25. Porous heat-treated polyacrylonitrile scaffolds for bone tissue engineering

Vetrik, M., Parizek, M., Hadraba, D., Kukackova, O., Brus, J., Hlidkova, H., Komankova, L., Hodan, J., **Sedlacek, O.**, Slouf, M., Bacakova, L., Hruby, M., *ACS Appl. Mater. Interfaces*, 2018, 10, 10, 8496-8506. IF = 10.383, Q1

24. Conformational properties of biocompatible poly (2-ethyl-2-oxazoline) s in phosphate buffered saline

Gubarev, A., Monnery, B., Lezov, A., **Sedlacek, O.**, Tsvetkov, N., Hoogenboom, R., Filippov, S. *Polym. Chem.*, 2018, 9, 17., 2232-2237. IF = 5.364, Q1

23. Poly(2-ethyl-2-oxazoline) conjugates with doxorubicin for cancer therapy: in vitro and in vivo evaluation and direct comparison to poly [N-(2-hydroxypropyl) methacrylamide] analogues

Sedlacek, O.*, Monnery, B., Mattova, J., Kucka, J., Panek, J., Janouskova, O., Hoherl, A., Verbraeken, B., Vergaelen, M., Zadinova, M., Hoogenboom, R., Hruby, M. *Biomaterials*, 2017, 146, 1-12, IF = 8.8

22. A simple neridronate-based surface coating strategy for upconversion nanoparticles: highly colloidally stable 125I-radiolabeled NaYF₄: Yb³⁺/Er³⁺@ PEG nanoparticles for multimodal in vivo tissue imaging

Kostiv, U., Lobaz, V., Kucka, J., Svec, P., **Sedlacek, O.**, Hruby, M., Janouskova, O., Francova, P., Kolarova, V., Sefc, L., Horak, D. *Nanoscale*, 2017, 9, 43, 16680-16688, IF = 7.2

21. Therapeutic targeting of non-coding RNAs in cancer

Slaby, O., Laga, R., **Sedlacek, O.** *Biochem. J.*, 2017, 474, 24, 4219-4251, IF = 3.8

20. Reductively Degradable Poly (2-hydroxyethyl methacrylate) Hydrogels with Oriented Porosity for Tissue Engineering Applications

Mackova, H., Plichta, Z., Hlidkova, H., **Sedlacek, O.**, Konefal, R., Sadakbayeva, Z., Duskova-Smrckova, M., Horak, D., Kubinova, S. *ACS Appl. Mater. Interfaces*, 2017, 9, 10544-10553, IF = 8.1

19. Radiolabelled Polymeric Materials for Imaging and Treatment of Cancer: Quo Vadis?

Pant, K., **Sedlacek, O.**, Nadar, R., Hruby, M., Holger, S. *Adv. Healthcare Mater.*, 2017, 6, 6, 1601115, IF = 5.6

18. The effect of ionizing radiation on biocompatible polymers: From sterilization to radiolysis and hydrogel formation

Sedlacek, O.*, Kucka, J., Monnery, B.D., Slouf, M., Vetrik, M., Hoogenboom, R., Hruby, M. *Polym. Degrad. Stab.*, 2017, 137, 1-10, IF = 3.2

17. Thermoresponsive polymers for nuclear medicine: Which polymer is the best?

Sedlacek, O., Cernoch, P., Kucka, J., Konefal, R., Stepanek, P., Vetrik, M., Lodge, T.P., Hruby, M. *Langmuir*, 2016, 32, 6115-6122, IF = 4.0

16. Double stimuli-responsive polymer systems: How to use crosstalk between pH-and thermosensitivity for drug depots

Bogomolova, A., Kabarov, L., **Sedlacek, O.**, Filippov, S.K., Kral, V., Wang, X.Y., Liu, S.L., Ye, X.D., Hruby, M. *Eur. Polym. J.*, 2016, 84, 54-64, IF = 3.5

15. Optimized protocol for the radioiodination of hydrazone-type polymer drug delivery systems

Sedlacek, O., Kucka, J., Hruby, M. *Appl. Radiat. Isot.*, 2015, 95, 129-134, IF = 1.1

14. Multi Responsive Polymer Micelles as Ellipticine Delivery Carriers for Cancer Therapy

Studenovsky, M., **Sedlacek, O.**, Hruby, M., Panek, J., Ulbrich, K. *Anticancer Res.*, 2015, 35 (2), 753-757, IF = 1.9

13. Multistage-targeted pH-responsive polymer conjugate of Auger electron emitter: optimized design and in vivo activity

Sedlacek, O., Kucka, J., Mattova, J., Parizek, M., Studenovsky, M., Zadinova, M., Pouckova, P., Hruby, M. *Eur. J. Pharm. Sci.* 2014, 63, 216-225, IF = 3.0

12. Glycogen-graft-poly(2-alkyl-2-oxazolines) – the new versatile biopolymer-based thermoresponsive macromolecular toolbox

Pospisilova A., Filippov, S.K, Bogomolova, A., Turner, S., **Sedlacek, O.**, Matushkin, N., Cernochova, Z., Stepanek, P., Hruby, M. *RSC Adv.*, 2014, 4, 61580-61588, IF = 3.8

11. Silver-coated monolithic columns for scavenging of radioactive iodine

Sedlacek, O., Kucka, J., Svec, F., Hruby, M. *J. Sep. Sci.* 2014, 7 (37), 798-802, IF = 2.6

10. Study of Complex Thermosensitive Amphiphilic Polyoxazolines and Their Interaction with Ionic Surfactants. Are Hydrophobic, Thermosensitive and Hydrophilic Moieties Equally Important?

Bogomolova, A., Filippov, S., Starovoytova, L., Angelov, B., Konarev, P., **Sedlacek, O.**, Hruby, M., Stepanek, P. *J. Phys. Chem. B*, 2014, 118 (18), 4940–4950, IF = 3.7

9. Fine tuning of the pH-dependent drug release rate from polyHPMA-ellipticinium conjugates

Sedláček, O., Studenovský, M., Větvicka, D., Ulbrich, K., Hrubý, M. *Bioorg. Med. Chem.* 2013, 21 (18), 5669-5672, IF = 2.9

8. SAXS and light scattering study of hybrid nanoparticles composed of thermoresponsive triblock copolymer F127 and thermoresponsive statistical poly-oxazolines with hydrophobic moieties

Bogomolova, A., Hruby, M., Panek, J., Rabyk, M., Turner, S., Bals, S., Steinhart, M., Zhigunov, A., **Sedlacek, O.**, Stepanek, P., Filippov, S. *J. Appl. Crystallogr.* 2013, 46 (6), 1690-1698, IF = 4.0

7. Chelating polymeric particles intended for the therapy of Wilson's disease

Škodová, M., Kučka, J., Vetrík, M., Skopal, J., Walterová, Z., **Sedláček, O.**, Štěpánek, P., Mattová, J., Poučková, P., Urbánek, P., Hrubý, M. *React. Funct. Polym.* 2013, 73 (11), 1426-1431, IF = 2.8

6. Collective polyelectrolyte diffusion as a function of counterion size and dielectric constant

Filippov, S., Seery, T.A., P., Kříž, J., Hrubý, M., Černoch, P., **Sedláček, O.**, Kadlec, P., Pánek, J., Štěpánek, P. *Polym. Int.* 2013, 62 (9), 1271-1276, IF = 2.2

5. Glycogen as Biodegradable Construction Nanomaterial for in vivo Use

Filippov, S., **Sedlacek, O.**, Bogomolova, A., Vetrík, M., Jirak, D., Kovar, J., Kucka, J., Bals, S., Turner, S., Stepanek, P., Hruby, M. *Macromol. Biosci.* 2012, 12 (12), 1731-1738, IF = 3.7

4. Poly(2-oxazoline)s – where are they more advantageous for biomedical applications than other polymer types?

Sedláček, O., Monnery B., D., Filippov, S., Hoogenboom, R., Hrubý, M. *Macromol. Rapid Commun.* 2012, 33 (19), 1648-1662, IF = 4.9

3. Polymer conjugates of acridine-type anticancer drugs with pH-controlled activation

Sedláček, O., Hrubý, M., Studenovský, M., Větvicka, D., Svoboda, J., Kaňková, D., Kovář, J., Ulbrich, K. *Bioorg. Med. Chem.* 2012, 20 (13), 4056-4063, IF = 2.9

2. Ellipticine-aimed polymer-conjugated Auger electron emitter: multistage organelle targeting approach

Sedláček O., Hrubý M., Studenovský M., Kučka J., Větvicka D., Kovář L., Ulbrich K. *Bioconjug. Chem.* 2011, 22(6), 1194-1201, IF = 4.9

1. The synthesis of the 8-C-substituted 2,6-diamino-9-[2-(phosphonomethoxy)ethyl]purine (PMEDAP) derivatives by diverse cross-coupling reactions

Sedláček, O., Břehová, P., Pohl, R., Holý, A., Janeba, Z. *Can. J. Chem.* 2011, 89, 488-498, IF = 1.4

2. kapitoly v monografiích

Sedlacek, Ondrej, Victor R. de la Rosa, and Richard Hoogenboom. "Poly (2-oxazoline)–protein conjugates." In: *Polymer-Protein Conjugates*. Elsevier, 2020. 407-420.

3. práce v recenzovaných sbornících

1. Poly(2-ethyl-2-oxazoline) conjugate of doxorubicin bound via pH-sensitive hydrazone linker: comparison with poly[N-(2-hydroxypropyl)methacrylamide] peer, **Sedlacek, O.**, Monnery, B.D., Mattova, J., Janouskova, O., Kucka, J., Hoherl, A., Panek, J., Hoogenboom, R., Hruby, M., 4th Symposium on Innovative Polymers for Controlled Delivery (SIPCD) 2016, published in J. Control. Release 2017, pp E100
2. New treatment of Wilson's disease, Vetrik, M, Mattova, J, Kucka, J, Mackova, H, **Sedlacek, O.**, Pouckova, P., Policianova, O, Brus, J., Eigner, S., Sevc, L., Stepanek, P., Hruby, M, 4th Symposium on Innovative Polymers for Controlled Delivery (SIPCD) 2016, published in J. Control. Release 2017, pp E97

4. zvané přednášky

Invited speaker:

"Amphiphilic gradient poly(2-oxazolines) as delivery systems for hydrophobic drugs" at 1st Virtual European Chemistry Conference (2020)

"Drug delivery systems based on poly(2-oxazolines) and poly(2-oxazines)" at Reading University Macromolecular Chemistry Lectures (2021)

5. patenty národní a zahraniční

Poly (2-oxazoline) s and methods for preparing them, Hoogenboom ,R, Sedlacek, O, - US Patent App. 17/293,669, 2022

6. kvalifikační práce

Polymer carriers for nuclear medicine. SEDLÁČEK, Ondřej. Dizertační práce, vedoucí Hrubý, Martin. Univerzita Karlova, Přírodovědecká fakulta, Katedra fyzikální a makromol. chemie, 2015.

7. řešení grantů

1.	2021-2023	PRIMUS/21/SCI/007 - Controlled chemical communication between polymer-based artificial cell models / O.S. jako hlavní řešitel	PRIMUS–Charles Univ.
2.	2022-2024	22-03102S - Polymerization-induced self-assembly of sequence-defined polymer materials / O.S. jako hlavní řešitel	GAČR
3.	2022-2024	22-02836S - Water-soluble fluorinated polymers for the next-generation antifouling coatings and multimodal in vivo tracing / O.S. jako spoluřešitel	GAČR
4.	2022-2024	NU22-08-00286 - Evaluation of new transplant sites for pancreatic islets using non-invasive imaging methods in animal models / O.S. jako spoluřešitel	AZV