

## CURRICULUM VITAE

<b>Zuzana Kroneková, PhD, MSc</b> <b>Email:</b> zuzana.kronekova@savba.sk <b>ORCID:</b> : <a href="https://orcid.org/0000-0002-0265-8901">https://orcid.org/0000-0002-0265-8901</a> <a href="http://www.polymer.sav.sk">www.polymer.sav.sk</a> <a href="http://www.polymer.sav.sk/OVB">http://www.polymer.sav.sk/OVB</a>	<b>Senior Researcher</b> Expert in molecular biology and biochemistry: biocompatibility and immunocompatibility of newly prepared polymers and biomaterials using cell lines and techniques of molecular biology; peptide synthesis; hydrogel microspheres characterization; hydrogels preparation; microscopic techniques: Raman imaging for characterization of polymers spatial distribution, and confocal laser scanning microscopy		
<b>EDUCATION/TRAINING</b>			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
Comenius University, Faculty of Natural Sciences, Bratislava, Slovakia	MSc	1996-2001	Molecular biology
University of Technology, International Max-Planck Research School, Dresden, Germany	PhD	2001-2005	Genetics
Centre of Oncology-Maria Sklodowska-Curie Memorial Institute, Department of Tumor Biology, Gliwice, Poland	Post-doc	2005-2006	Molecular biology
Slovak Academy of Sciences, Bratislava, Slovakia	Post-doc	2006-2009	polymer biomaterials
Slovak Academy of Sciences, Bratislava, Slovakia	Senior Researcher	2016	macromolecular chemistry

**A. Positions and Honors.** List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any public or private advisory committee.

### Positions

2001 – 2005	PhD student, University of Technology, International Max-Planck Research School, Dresden, Germany
2005 – 2006	Post-doctoral fellow, Centre of Oncology-Maria Sklodowska-Curie Memorial Institute, Gliwice, Poland
2006 – 2009	Post-doctoral fellow, Polymer Institute, Slovak Academy of Sciences, Bratislava, Slovakia
2009 – 2016	Research Scientist, Polymer Institute, Slovak Academy of Sciences, Bratislava, Slovakia
2016 – present	Associate Professor, Polymer Institute SAS, Bratislava, Slovakia

### Honors, selected

2018	Finalist of L'OREAL – UNESCO FOR WOMEN IN SCIENCE, Slovakia
2011	Member of the team identified by the independent ranking agency as the Top Team of the Slovak Academy of Sciences
2010	Member of the Scientific and Technical Team of the Year 2010 awarded by the Ministry of Education of the Slovak Republic

### Membership, selected

Member of the Scientific board of the Polymer Institute, Slovak Academy of Sciences (elected 2018-2023)  
Member of the Slovak Chemical Society  
Member of the Polymer Society of Korea

### B. Peer-reviewed publications (in chronological order).

1. Paulovičová, E., **Kroneková, Z.**, Paulovičová, L., Majerčíková, M., Kronek, J.\*\*. Cell-mediated immunoreactivity of poly(2-isopropenyl-2-oxazoline) as promising formulation for immunomodulation. In *Materials*, 2021, vol. 14, art. no. 1371, [18] <https://doi.org/10.3390/ma14061371>
2. Danko, M.\*\*, **Kroneková, Z.**, Krupa, I., Tkáč, J., Matúš, P., Kasák, P.\*\*. Exchange counterion in polycationic hydrogels: Tunability of hydrophobicity, water state, and floating capability for a floating pH device. In *Gels* : open access journal, 2021, vol. 7, art. no. 109, [19] <https://doi.org/10.3390/gels7030109>
3. Majerčíková, M., Nádaždy, P., Chorvát, D. Jr., Satrapinskyy, L., Valentová, H., **Kroneková, Z.**, Šiffalovič, P., Kronek, J.,\*\* - Zahoranová, A.\*\*. Effect of dexamethasone on thermoresponsive behavior of poly(2-oxazoline) diblock copolymers. In *Polymers* : Open Access Polymer Science Journal, 2021, vol. 13, no. 9, art. no. 1357, [18] <https://doi.org/10.3390/polym13091357>

4. Opálková Šišková, A.\*\*\*, Bučková, M., **Kroneková, Z.**, Kleinová, A., Nagy, Š., Rydz, J., Opálek, A., Sláviková, M., Eckstein Andicsová, A.\*\*\*. The drug-loaded electrospun poly(epsilon-caprolactone) mats for therapeutic application. In *Nanomaterials-Basel*, 2021, vol. 11, art. no. 922, [19] <https://doi.org/10.3390/nano11040922>
5. Opálková Šišková, A., Kozma, E., Opálek, A., **Kroneková, Z.**, Kleinová, A., Nagy, Š., Kronek, J., Rydz, J., Eckstein Andicsová, A.\*\*\*. Diclofenac embedded in silk fibroin fibers as a drug delivery system. In *Materials*, 2020, vol. 13, no. 16, art. no. 3580, [14] p. <https://doi.org/10.3390/ma13163580>
6. Haladjova, E.,\*\* - Smolíček, M., - Ugrinova, I., - Momekova, D., - Shestakova, P., - **Kroneková, Z.**, - Kronek, J., - Rangelov, S.. DNA delivery systems based on copolymers of poly(2-methyl-2-oxazoline) and polyethyleneimine: Effect of polyoxazoline moieties on the endo-lysosomal escape. In *Journal of Applied Polymer Science*, 2020, vol. 137, e49400, [16] <https://doi.org/10.1002/app.49400>
7. Bitar, CME., Markwick, K.E., Trel'ova, D., **Kronekova, Z.**, Pelach, M., Selerier, CMO., Dietrich, J., Lacik, I., Hoesli, C.A. Development of a microchannel emulsification process for pancreatic beta cell encapsulation. *Biotechnol Prog* 2019 Nov;35(6):e2851.
8. Danko, M., **Kroneková, Z.**, Mrlík, M., Osička, J., Bin Yousaf, A., Mihálová, A., Tkáč, J., Kasák, P. Sulfobetaines Meet Carboxybetaines: Modulation of Thermo- and Ion-Responsivity, Water Structure, Mechanical Properties, and Cell Adhesion. In *Langmuir*, **2019**, vol. 35, no. 5, p. 1391-1403.
9. **Kroneková, Z.**, Pelach, M., Mazancová, P., Uhelská, L., Trel'ová, D., Rázga, F., Némethová, V., Szalai, S., Chorvát, D. Jr., Mcgarrigle, J. J., Omami, M., Isa, D., Ghani, S., Majková, E., Oberholzer, J., Raus, V., Šiffalovič, P., Lacík, I. Structural changes in alginate-based microspheres exposed to in vivo environment as revealed by confocal Raman microscopy. In *Scientific Reports*, **2018**, vol. 8, art. no. 1637.
10. Nada, A. A, Arul, M. R., Ramos, D. M., **Kroneková, Z.**, Mosnáček, J., Rudraiah, S., Kumbar, S. G. Bioactive polymeric formulations for wound healing. In *Polymers for Advanced Technologies*, **2018**, vol. 29, iss. 6, p.
11. Savin, C. L., Peptu, C., **Kroneková, Z.**, Sedlačík, M., Mrlík, M., Sasinková, V., Peptu, C., Popa, M., Mosnáček, J. Polyglobalide-based porous networks containing poly(ethylene glycol) structures prepared by photoinitiated thiol-ene coupling. In *Biomacromolecules*, **2018**, vol. 19, p. 3331-3342.
12. Palem, R. R., Saha, N., Shimoga, G. D., **Kroneková, Z.**, Sláviková, M., Saha, P. Chitosan-silver nanocomposites: New functional biomaterial for health-care applications. In *International Journal of Polymeric Materials*, **2018**, vol. 67, no. 1, p. 1-10
13. Šrámková, P., Zahoranová, A., **Kroneková, Z.**, Šišková, A., Kronek, J. Poly(2-oxazoline) hydrogels by photoinduced thiol-ene "click" reaction using different dithiol crosslinkers. In *Journal of Polymer Research*, **2017**, vol. 24, art. no. 82, 13p
14. **Kroneková, Z.**, Mikulec, M., Petrenčíková, N., Paulovičová, Ema., Paulovičová, L., Jančinová, V., Nosál R., Reddy, P. S.-Shimoga, G., Chorvát, Jr., D., Kronek, J. Ex Vivo And In Vitro Studies Of Cytotoxicity And Immunomodulative Properties Of Poly(2-Isopropenyl-2-Oxazoline) As New Type Of Biomedical Polymer. *Macromolecular Bioscience* **2016**, 16, 1200-1211
15. Kollár, J., Mrlík, M., Moravčíková, D., **Kroneková, Z.**, Liptaj, T., Lacík, I., Mosnáček, J. Tulips: A Renewable Source Of Monomer For Superabsorbent Hydrogels. *Macromolecules* **2016**, Vol. 49, P. 4047-4056
16. Mrlík, M., Ilčíková, M., Cvek, M., Pavlinek, V., Zahoranová, A., **Kroneková, Z.**, Kasák, P. Carbonyl Iron Coated With Sulfobetaine Moiety As a Biocompatible System And The Magnetorheological Performance of Its Silicone Oil Suspensions, *RSC Adv.*, **2016**, 6, 32823-32830
17. Zahoranová, A., **Kroneková, Z.**, Zahoran, M., Chorvát, Jr, D., Janigová, I., Kronek, J. Poly(2-Oxazoline) Hydrogels Crosslinked With Aliphatic Bis(2-Oxazoline)S: Properties, Cytotoxicity, And Cell Cultivation. *Journal Of Polymer Science, Part A: Polymer Chemistry*, **2016**, 54, 11, 1548-1559
18. Shah, R., **Kroneková, Z.**, Zahoranová, A., Roller, L., Saha, N., Saha, P., Kronek, J. In Vitro Study of Partially Hydrolyzed Poly(2-Ethyl-2-Oxazolines) as Materials for Biomedical Applications. *Journal Of Materials Science: Materials In Medicine*, **2015**, 26, 157
19. Kronek, J., Paulovičová, E., Paulovičová, L., **Kroneková, Z.**, Lustoň, J. Immunomodulatory Efficiency of Poly(2-Oxazolines). *Journal of Materials Science: Materials in Medicine*, **2012**, 23, 6, 1457-1464
20. Kronek, J., **Kroneková, Z.**, Lustoň, J., Paulovičová, E., Paulovičová, L., Mendrek, B. In Vitro Bio-Immunological and Cytotoxicity Studies of Poly(2-Oxazolines). *Journal of Materials Science: Materials in Medicine*, **2011**, 22, 1725 - 1734
21. Fiszer-Kierzkowska, A., Vydra, N., Wysocka-Wycisk, A., **Kroneková, Z.**, Jarzab, M., Lisowska, K. M., Krawczyk, Z. Liposome-Based DNA Carriers May Induce Cellular Stress Response and Change Gene Expression Pattern in Transfected Cells. *BMC Molecular Biology*, **2011**, 12, 27, 9

22. Stach, M., **Kroneková, Z.**, Kasák, P., Kollár, J., Pentrák, M., Mičušík, M., Chorvat, D. Jr., Nunney, T. S., Lacík, I. Polysulfobetaine Films Prepared by Electrografting Technique For Reduction of Biofouling on Electroconductive Surfaces. *Applied Surface Science*, **2011**, 257, 24, 10795-10801
23. Kasák, P., **Kroneková, Z.**, Krupa, I., Lacík, I. Zwitterionic Hydrogels Crosslinked With Novel Zwitterionic Crosslinkers: Synthesis And Characterization. *Polymer : The International Journal For The Science And Technology Of Polymers*, **2011**, 52, 3011 - 3020
24. Kronek, J., Lustoň, J., **Kroneková, Z.**, Paulovičová, E., Farkaš, P., Petrenčíková, N., Paulovičová, L., Janigová, I. Synthesis and Bioimmunological Efficiency of Poly(2-Oxazolines) Containing a Free Amino Group. *Journal of Materials Science: Materials in Medicine*, **2010**, 21, 879 - 886
25. **Kroneková, Z.** – Rödel, G. Organization of Assembly Factors Cbp3p And Cbp4p and Their Effect on *bc(1)* Complex Assembly in *Saccharomyces Cerevisiae*, *Curr Genet.*, **2005** 47, 203-12