

CURRICULUM VITAE



Name: Zuzana **KRONEKOVÁ**, born **efová**
Nationality: Slovak
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Slovakia
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Education

PhD., Genetics (10/2001-07/2005)

**International Max-Planck Research School at the University of Technology,
Dresden, Germany**

Title of PhD thesis: Assembly of mitochondrial ubiquinol-cytochrome *c*
oxidoreductase complex in yeast *Saccharomyces cerevisiae*

Supervisor: Prof. Dr. G. Rödel, Institute for Genetics, TU-Dresden, Dresden

M. Sc., Molecular biology (1996-2001)

Faculty of Natural Sciences, Comenius University, Bratislava, Slovakia

Title of Diploma thesis: Construction and characterization of *RAD51* deletion mutant
in *Saccharomyces cerevisiae*

Supervisor: J. Brozmanová, PhD, Cancer Research Institute, SAV, Bratislava

Professional/research experience

Since 2006 **Research Scientist**, Polymer Institute, Slovak Academy of Sciences,
Bratislava, Slovakia

2005 - 2006 **Post-doctoral position** in Department of Tumor Biology, Centre of Oncology-
Maria Skłodowska-Curie Memorial Institute, Gliwice, Poland

2001- 2005 **Doctoral fellow** of International Max Planck Research School. University of
Technology, Dresden, Germany. Supervisor: Prof. Dr. G. Rödel

2000 ó 2001 **Diploma thesis fellow** of Comenius University, Faculty of Natural Sciences,
Bratislava, Slovakia. Thesis supervisor: Dr. J. Brozmanova

1999 ó 2000 **student** in Cancer Research Institute, Slovak Academy of Sciences (SAV),
Bratislava, Slovakia. Training supervisor: Dr. Miroslav Chovanec

Awards and Stipends

- best poster award on 59th Meeting of Chemical Societies in Tatranské Matliare (2007)
- Stipend Kasy im. Józefa Mianowskiego, Fundacja popierania nauki, Poland (2006)

Membership in scientific organization

- Slovak Chemical Society

Participation on the projects

Participation on 6 Slovak and 6 international projects, coordinator of Slovak- Research Project VEGA (2011-2014 and 2015-2017)

Scientific techniques and skills

Methods to study polymer cytotoxicity and biocompatibility: MTT assay, Cell viability staining techniques (FDA/PI staining, neutral red, dithizone staining, DAPI), cell adhesion

Protein methods: SDS-PAGE, Western-blot, Blue-Native PAGE, Co-immunoprecipitation techniques, Tandem Affinity Purification (TAP-method)

DNA methods: DNA-isolation and purification, DNA restriction analysis, DNA-cloning, ligation, PCR, DNA-sequencing, Southern-blot, Pulse Field Gel Electrophoresis (PFGE)

RNA methods: RNA-isolation and purification, cRNA synthesis, GeneChip expression analysis (Affymetrix)

Genetic methods: transformation of *E. coli* and yeast, yeast Genetics, tetrads analysis, PET test, eukaryotic cell line techniques

Biochemical methods: HPLC, Lipid extraction, Thin Layer Chromatography (TLC), Enzyme activity measurements, Enzyme kinetics, Chloramphenicol acetyltransferase (CAT) assay, ELISA

Microscopy techniques: Confocal Raman Microscopy (CRM), Confocal Laser Scan Microscopy (CLSM)

Languages

Slovak, English, German, Polish, Czech: fluent

List of Publications

Books or chapters in book:

1. KRONEK, Juraj - PAULOVÍ OVÁ, Ema - PAULOVÍ OVÁ, Lucia - KRONEKOVÁ, Zuzana - LUSTO, Jozef. Biocompatibility and immunocompatibility assessment of poly(2-oxazolines). In Practical applications in biomedical engineering. - Rijeka, Croatia : InTech, 2012, chapter 11, p. 257- 284.

Publication in CC journals:

1. KOLLÁR, Jozef - MRLÍK, Miroslav - MORAVÍKOVÁ, Daniela - KRONEKOVÁ, Zuzana - LIPTAJ, Tibor - LACÍK, Igor - MOSNÁ EK, Jaroslav. Tulips: A renewable source of monomer for superabsorbent hydrogels. In *Macromolecules*, 2016, vol. 49, p. 4047-4056, DOI: 10.1021/acs.macromol.6b00467
2. MRLÍK, M. - ILÍKOVÁ, 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, DOI: 10.1039/C6RA03919G.
3. KRONEKOVÁ, Zuzana - MIKULEC, Marcel - PETRENIKOVÁ, Nadejda - PAULOVÍKOVÁ, Ema - PAULOVÍKOVÁ, Lucia - JANÍKOVÁ, Viera - NOSÁ Radomír - REDDY, Palem Subba - SHIMOOGA Ganesh - CHORVÁT, JR., Du-an - KRONEK, Juraj. 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, DOI: 10.1002/mabi.201600016
4. ZAHORANOVÁ, Anna - KRONEKOVÁ, Zuzana - ZAHORAN, Miroslav - CHORVÁT, JR - Du-an - JANÍKOVÁ, Ivica - KRONEK, Juraj, Poly(2-oxazoline) Hydrogels Crosslinked with Aliphatic bis(2-oxazoline)s: Properties, Cytotoxicity, and Cell Cultivation. In *Journal of Polymer Science, Part A: Polymer Chemistry*, 2016, vol.54,no. 11, p. 1548-1559
5. SHAH, Rushita - KRONEKOVÁ, Zuzana - ZAHORANOVÁ, Anna - ROLLER, Ladislav - SAHA, Nabanita - SAHA, Petr - KRONEK, Juraj. In vitro study of partially hydrolyzed poly(2-ethyl-2-oxazolines) as materials for biomedical applications. In *Journal of Materials Science: Materials in Medicine*, 2015, vol. 26, art.no. 157
6. KRONEK, Juraj - PAULOVÍKOVÁ, Ema - PAULOVÍKOVÁ, Lucia - KRONEKOVÁ, Zuzana - LUSTO Jozef. Immunomodulatory efficiency of poly(2-oxazolines). In *Journal of Materials Science: Materials in Medicine*, 2012, vol. 23, no. 6, p. 1457-1464.
7. KRONEK, Juraj - KRONEKOVÁ, Zuzana - LUSTO Jozef - PAULOVÍKOVÁ, Ema - PAULOVÍKOVÁ, Lucia - MENDREK, Barbara. In vitro bio-immunological and cytotoxicity studies of poly(2-oxazolines). In *Journal of Materials Science: Materials in Medicine*, 2011, vol. 22, p. 1725 - 1734.
8. FISZER-KIERZKOWSKA, Anna - VYDRA, Natalia - WYSOCKA-WYCISK, Aleksandra - KRONEKOVÁ, Zuzana - JARZAB, Michal - LISOWSKA, Katarzyna Marta - KRAWCZYK, Zdzislaw. Liposome-based DNA carries may induce cellular stress response and change gene expression pattern in transfected cells. In *BMC Molecular Biology*, 2011, vol. 12, art.no. 27, p. [9].
9. STACH, Marek - KRONEKOVÁ, Zuzana - KASÁK, Peter - KOLLÁR, Jozef - PENTRÁK, Martin - MIŠTÍK, Matej - CHORVÁT, Du-an Jr. - NUNNEY, Tim S. - LACÍK, Igor. Polysulfobetaine films prepared by electrografting technique for reduction of biofouling on electroconductive surfaces. In *Applied Surface Science*, 2011, vol. 257, no. 24, p. 10795-10801.

10. KASÁK, Peter - KRONEKOVÁ, Zuzana - KRUPA, Igor - LACÍK, Igor. Zwitterionic hydrogels crosslinked with novel zwitterionic crosslinkers: Synthesis and characterization. In *Polymer : the International Journal for the Science and Technology of Polymers*, 2011, vol. 52, p. 3011 - 3020.
11. KRONEK, Juraj - LUSTO, Jozef - KRONEKOVÁ, Zuzana - PAULOVÍČOVÁ, Ema - FARKAŠ, Pavol - PETRENIČKOVÁ, Nadežda - PAULOVÍČOVÁ, Lucia - JANIGOVÁ, Ivica. Synthesis and bioimmunological efficiency of poly(2-oxazolines) containing a free amino group. In *Journal of Materials Science: Materials in Medicine*, 2010, vol. 21, p. 879 - 886.
12. KRONEKOVÁ, Zuzana - RÖDEL, Gerhard. Organization of assembly factors Cbp3p and Cbp4p and their effect on *bc(1)* complex assembly in *Saccharomyces cerevisiae*, *Curr Genet.*, 2005 Apr;47(4):203-12.

Publication in non-CC journals:

1. Förster, T., Strohhofer, C., Bock, K., Kasak, P., Danko, M., **Kronekova, Z.**, Nedelcev, T., Krupa, I., Lacik, I. Biosensor for calcium based on a hydrogel optical waveguide with integrated sensor proteins (2009) *TRANSDUCERS 2009 - 15th International Conference on Solid-State Sensors, Actuators and Microsystems*, art. no. 5285877, p. 1218-1221.