

Curriculum vitae

Name: Associate Professor Sergej Zacharov, MD, PhD

Nationality: Czech

Professional address: Department of Occupational Medicine, General University Hospital, Na Bojisti 1, 120 00, Prague, Czech Republic

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Professional and academic position:

Head of Toxicological Information Center,

Associate Professor of Department of Occupational Medicine, First Faculty of Medicine, Charles University and General University Hospital in Prague

Membership of International Scientific Societies:

Executive Committee member (Treasurer) of the Board and Scientific Committee member of the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT)

Member of the International Commission on Occupational Health (ICOH)

- Member of the Scientific Committee on Occupational Medicine (SCOM)
- Member of the Scientific Committee on Occupational Toxicology (SCOT)
- Member of the Scientific Committee on Nanomaterial Workers' Health

Member of the European Respiratory Society

Member of the European Commission SCHEER (Scientific Commission on Health, Environment, and Emerging Risks) of DG SANTE (Health and Food Safety)

Membership of National Societies and advisory committees:

Czech Society of Occupational Medicine of the Czech Medical Society of J.E.Purkyně

Czech Pneumological and Physiological Society of the Czech Medical Society of J.E.Purkyně

Overall Scientific Expertise:

Occupational and environmental toxicology, chemical risk assessment, toxicology of nanomaterials, long-term health effects of exposure to toxic agents.

Main research activities: exposure to solvents, toxic alcohols, methanol toxicity, biomarkers of toxic effects, environmental factors in chronic neurodegenerative processes, nanotoxicology, psychoactive substances, poisons control centres.

Expertise in chemical risk assessment: national contact point for RASCHEM network, member of ECHEMNET expert group; SCHEER expert.

Reviewer in international journals with impact factor: Clinical Toxicology; Basic and Clinical Toxicology and Pharmacology, Interdisciplinary Toxicology, Medical Principles and Practice, American Journal of Drug and Alcohol Abuse

Publications:

Author of more than 50 publications, including 37 publications with impact factor in the last 5 years (first author in 23), total impact factor for the last 5 years – 96, H-index 9 (Web of Science);

co-author of the textbook Occupational Diseases and Intoxications (Karolinum Praha, 2014) and e-learning course in toxicology.

Examples of publications:

1. ZAKHAROV, Sergey, PELCLOVA, Daniela, NAVRATIL, Tomas, BELACEK, Jaromir, KURCOVA, Ivana, KOMZAK, Ondrej, SALEK, Tomas, LATTA, Jiri, TUREK, Radovan, BOCEK, Robert, KUCERA, Cyril, HUBACEK, Jaroslav, FENCLOVA, Zdenka, PETRIK, Vit, CERMAK, Martin, HOVDA, Knut Erik. Intermittent hemodialysis is superior to continuous veno-venous hemodialysis/hemodiafiltration to eliminate methanol and formate during treatment for methanol poisoning. *Kidney International*, 2014, **86**(1), 199-207. ISSN 0085-2538. **IF (2014): 8,563.**

2. PELCLOVA, Daniela, ZDIMAL, Vladimir, KACER, Petr, FENCLOVA, Zdenka, VLCKOVA, Stepanka, SYSLOVA, Kamila, NAVRATIL, Tomas, SCHWARZ, Jaroslav, ZIKOVA, Nadezda, BAROSOVA, Hana, TURCI, Francesco, KOMARC, Martin, PELCL, Tomas, BELACEK, Jaromir, KUKUTSCHOVA, Jana, ZAKHAROV, Sergey. Oxidative stress markers are elevated in exhaled breath condensate of workers exposed to nanoparticles during iron oxide pigment production. *Journal of Breath Research*, 2016, 10(1): 016004. doi: . ISSN1752-7155. **IF (2015): 4.177.**

3. PELCLOVA, Daniela, ZDIMAL, Vladimir, FENCLOVA, Zdenka, VLCKOVA, Stepanka, TURCI, Francesco, CORAZZARI, Ingrid, KACER, Petr, SCHWARZ, Jiri, ZIKOVA, Nadezda, MAKES, Ondrej, SYSLOVA, Kamila, KOMARC, Martin, BELACEK, Jaromir, NAVRATIL, Tomas, MACHAJOVA, Michaela, ZAKHAROV, Sergey. Markers of oxidative damage of nucleic acids and proteins among workers exposed to TiO₂ (nano) particles. *Occupational and Environmental medicine*, 2016; doi 10.1136/oemed-2015-103161. ISSN 1470-7926. **IF (2015) 3,745.**

4. PELCLOVA, Daniela, FENCLOVA, Zdenka, VLCKOVA, Stepanka, KLUSACKOVA, Pavlina, LEBEDOVA, Jindriska, SYSLOVA, Kamila, BELACEK, Jaromir, KUZMA, Marek, NAVRATIL, Tomas, ZAKHAROV, Sergey, KACER, Petr. Occupational asthma follow-up – which markers are elevated in exhaled breath condensate and plasma? *International Journal of Occupational Medicine and Environmental Health*, 2014, **27**(2), 206-15. ISSN 1232-1087. **IF (2014): 1,365.**

5. ZAKHAROV, Sergey, PELCLOVA, Daniela, URBAN, Pavel, NAVRATIL, Tomas, NURIEVA, Olga, KOTIKOVA, Katerina, DIBLIK, Pavel, KURCOVA, Ivana, BELACEK, Jaromir, KOMARC, Martin, EDDLESTON, Michael, HOVDA, Knut Erik. Use of pre-hospital ethanol administration to improve outcome in mass methanol outbreaks. *Annals of Emergency Medicine*, 2016, 68(1), 52-61. ISSN 0196-0644. **IF (2016): 5,008.**

6. PELCLOVA, Daniela, BAROSOVA, Hana, KUKUTSCHOVA, Jana, ZDIMAL, Vladimir, NAVRATIL, Tomas, FENCLOVA, Zdenka, VLCKOVA, Stepanka, SCHWARZ, Jaroslav, ZIKOVA, Nadezda, KACER, Petr, KOMARC, Martin, BELACEK, Jaroslav, ZAKHAROV, Sergey. Raman microspectroscopy of exhaled breath condensate and urine in workers exposed to fine and nano TiO₂ particles: a cross-sectional study. *Journal of Breath Research*, 2015, 9, 036008. doi:10.1088/1752-7155/9/3/036008. ISSN1752-7155. **IF (2015): 4.177.**

7. PELCLOVA D, ZDIMAL V, KACER P, FENCLOVA Z, VLCKOVA S, KOMARC M, NAVRATIL T, SCHWARZ J, ZIKOVA N, MAKES O, SYSLOVA K, BELACEK J, ZAKHAROV S. Leukotrienes in exhaled breath condensate and fractional exhaled nitric oxide in workers exposed to TiO₂ nanoparticles. *Journal of Breath Research*, 2016, 10, 036004. doi: 10.1088/1752-7155/10/3/036004. **IF (2015): 4.177.**
8. ZAKHAROV, Sergey, PELCLOVA, Daniela, URBAN, Pavel, NAVRATIL, Tomas, DIBLIK, Pavel, KUTHAN, Pavel, HUBACEK, Jaroslav, MIOVSKY, Michal, KLEMPER, Jiri, VANECKOVA, Manuela, SEIDL, Zdenek, PILIN, Alexander, FENCLOVA, Zdenka, PETRIK, Vit, KOTIKOVA, Katerina, NURIEVA, Olga, RIDZON, Petr, RULISEK, Jan, KOMARC, Martin, HOVDA, Knut Erik. Czech mass methanol outbreak 2012: Epidemiology, challenges and clinical features. *Clinical Toxicology*, 2014, **52**(10), 1013-24. ISSN 1556-3650. **IF (2014): 3,673.**
9. ZAKHAROV, Sergey, PELCLOVA, Daniela, NAVRATIL, Tomas, BELACEK, Jaromir, KOMARC, Martin, EDDLESTON, Michael, HOVDA, Knut Erik. Fomepizole versus ethanol in the treatment of acute methanol poisoning: Comparison of clinical effectiveness in a mass poisoning outbreak. *Clinical Toxicology*, 2015, **53**(8), 797-806. ISSN 1556-3650. **IF (2015): 2,886.**
10. ZAKHAROV, Sergey, PELCLOVA, Daniela, URBAN, Pavel, NAVRATIL, Tomas, DIBLIK, Pavel, KUTHAN, Pavel, HUBACEK, Jaroslav, MIOVSKY, Michal, RUZICKA, Evzen, KLEMPER, Jiri, BEZDICEK, Ondrej, VANECKOVA, Manuela, SEIDL, Zdenek, KOTIKOVA, Katerina, NURIEVA, Olga, KOMARC, Martin, YURCHENKO, Maxim, JANIKOVA, Barbara, HOVDA, Knut Erik. Long-term visual damage after acute methanol poisonings: longitudinal cross-sectional study in 50 patients. *Clinical Toxicology*, 2015, **53**(9), 884-92. ISSN 1556-3650. **IF (2015): 2,886.**
11. ZAKHAROV S, KOTIKOVA K, VANECKOVA M, SEIDL Z, NURIEVA O, NAVRATIL T, CAGANOVA B, PELCLOVA D. Acute methanol poisoning: Prevalence and predisposing factors of haemorrhagic and non-haemorrhagic brain lesions. *Basic Clin Pharmacol Toxicol* 2016, 119(2), 228-238. **IF (2015): 3,097.**
12. ZAKHAROV, Sergey, NAVRÁTIL, Tomas, PELCLOVÁ, Daniela. Suicide attempts by deliberate self-poisoning in children and adolescents. *Psychiatry Research*, 2013, **210**(1): 302-7. ISSN 0165-1781. **IF (2013): 2,682.**
13. ZAKHAROV, Sergey, KURCOVA, Ivana, NAVRATIL, Tomas, SALEK, Tomas, PELCLOVA, Daniela. Is the measurement of serum formate concentration useful in the diagnostics of acute methanol poisoning? A prospective study of 38 patients. *Basic & Clinical Pharmacology & Toxicology*, 2015, **116**(5), 445-51. ISSN 1742-7835. **IF (2015): 3,097.**
14. ZAKHAROV, Sergey, NAVRÁTIL, Tomas, PELCLOVÁ, Daniela. Non-fatal suicidal self-poisonings in children and adolescents over a 5-year period (2007-2011). *Basic & Clinical Pharmacology & Toxicology*, 2013, **112**(6), 425-30. ISSN 1742-7835. **IF (2013): 2,294.**
15. ZAKHAROV, Sergey, NAVRÁTIL, Tomas, PELCLOVÁ, Daniela. Analysis of medication errors of health care providers on the basis of data from the Czech Toxicological Information Centre over an 11-year period (2000-2010). *Basic & Clinical Pharmacology & Toxicology*, 2012, **110**(5), 427-32. ISSN 1742-7835. **IF (2012): 2,124.**

16. ZAKHAROV, Sergey, VANECKOVA, Manuela, SEIDL, Zdenek, DIBLIK, Pavel, KUTHAN, Pavel, URBAN, Pavel, NAVRATIL, Tomas, PELCLOVA, Daniela. Successful use of hydroxocobalamin and sodium thiosulfate in acute cyanide poisoning: a case report with follow-up. *Basic & Clinical Pharmacology & Toxicology*, 2015, **117**(3), 209-12. ISSN 1742-7835. **IF (2015): 3,097.**
17. ZAKHAROV, Sergey, CSOMOR, Jan; URBANEK, Petr, PELCLOVA, Daniela. Toxic epidermal necrolysis after exposure to dithiocarbamate fungicide mancozeb. *Basic & Clinical Pharmacology & Toxicology*, 2016, 118(1), 87-91. ISSN 1742-7835. **IF (2015): 3,097.**
18. ZAKHAROV, Sergey, NURIEVA, Olga, NAVRATIL, Tomas, DIBLIK, Pavel, KUTHAN, Pavel, PELCLOVA, Daniela. Acute methanol poisonings: Folates administration and visual sequelae. *Journal of Applied Biomedicine*, 2014, **12**(4), 309-16. ISSN 1214-021X. **IF (2014): 1,302.**
19. ZAKHAROV, Sergey, NAVRATIL, Tomas, PELCLOVA, Daniela. Fomepizole in the treatment of acute methanol poisonings: experience from the Czech mass methanol outbreak 2012-2013. *Biomedical papers of the Medical Faculty of the University Palacký*, 2014, **158**(4), 641-9. ISSN 1213-8118. **IF (2014): 1,200.**
20. ZAKHAROV, Sergey, NAVRATIL, Tomas, SALEK, Tomas, KURCOVA, Ivana, PELCLOVA, Daniela. Fluctuations in serum ethanol concentration in the treatment of acute methanol poisoning: a prospective study of 21 patients. *Biomedical papers of the Medical Faculty of the University Palacký*, 2015, **159**(4), 666-76. ISSN 1213-8118. **IF (2015): 0,924.**
21. ZAKHAROV, Sergey, NAVRÁTIL, Tomas, PELCLOVÁ, Daniela. Medication errors - an enduring problem for children and elderly patients. *Upsala Journal of Medical Sciences*, 2012, **117**(3), 309-17. ISSN 0300-9734. **IF (2012): 1.420.**
22. ZAKHAROV, Sergey, NAVRATIL, Tomas, PELCLOVA, Daniela. Analysis of serum anion gap and osmolal gap in diagnosis and prognosis of acute methanol poisoning: clinical study in 86 patients. *Monatshefte für Chemie - Chemical Monthly*, 2015, **146**(5), 787-94. ISSN 0026-9247. **IF (2015): 1,131.**
23. ZAKHAROV, Sergey, NURIEVA, Olga, KOTIKOVA, Katerina, URBAN, Pavel, NAVRATIL, Tomas, PELCLOVA, Daniela. Factors predicting optic nerve axonal degeneration after methanol-induced acute optic neuropathy: A two-year prospective study in 54 patients. *Monatshefte für Chemie - Chemical Monthly*, 2016, **147** (1): 251-261. ISSN 0026-9247. **IF (2015): 1,131.**
24. NURIEVA, Olga, KOTIKOVA, Katerina, URBAN, Pavel, PELCLOVA, Daniela, PETRIK, Vit, NAVRATIL, Tomas, ZAKHAROV, Sergey. Prevalence, dynamics, and biochemical predictors of optic nerve remyelination after methanol-induced acute optic neuropathy: A two-year prospective study in 54 patients. *Monatshefte für Chemie - Chemical Monthly*, 2016, **147** (1): 239-249. ISSN 0026-9247. **IF (2015): 1,131.**
25. S ZAKHAROV, O NURIEVA, K KOTIKOVA, J BELACEK, T NAVRATIL, D PELCLOVA. Positive serum ethanol concentration on admission to hospital as the factor

predictive of treatment outcome in acute methanol poisoning. *Monatshefte für Chemie - Chemical Monthly*, 2016, doi 10.1007/s00706-016-1846-z. ISSN 0026-9247. **IF (2015): 1,131.**

26. ZAKHAROV, Sergey. The assessment of expert testimony relevance and admissibility in medical malpractice cases in the Czech Republic. *Romanian Journal of Legal Medicine*, 2011, **19**(1), 59-68. ISSN 1221-8618. IF (2011): 0,398. **IF (2011): 0,398.**

27. ZAKHAROV, Sergey. The problems of a medical expert's testimony reliability assessment in medical malpractice cases. *Romanian Journal of Legal Medicine*, 2011, **19**(4), 291-4. ISSN 1221-8618. IF (2011): 0,398. **IF (2011): 0,398.**

28. HUBACEK, Jaroslav A, PELCLOVA, Daniela, SEIDL, Zdenek, VANECKOVA, Manuela, KLEMPÍR, Jiri, RUZICKA, Evzen, RIDZON, Petr, URBAN, Pavel, FENCLOVA, Zdenka, PETRIK, Vit, DIBLIK, Pavel, KUTHAN, Pavel, MIOVSKY, Michal, JANIKOVA, Barbara, ADAMKOVA, Vera, ZAKHAROV, Sergey. Rare alleles within the CYP2E1 (MEOS system) could be associated with better short-term health outcome after acute methanol poisoning. *Basic & Clinical Pharmacology & Toxicology*, 2015, **116**(2), 168-72. ISSN 1742-7835. **IF (2015): 3,097.**

29. HUBACEK, Jaroslav A, ZAKHAROV, Sergey. Response to 'CYP2E1 Polymorphism and Better Outcome After Methanol Poisoning'. *Basic & Clinical Pharmacology & Toxicology*, 2015, **117**(1), 3-4. ISSN 1742-7835. **IF (2015): 3,097.**

30. SCHMIDT, Matous, FARNA, Hana, KURCOVA, Ivana, ZAKHAROV, Sergey, FRIC, Michal, WALDAUF, Petr, ILGOVA, Zuzana, PAZOUT, Jaroslav, PACHL, Jan, DUSKA, Frantisek. Successful treatment of supralethal caffeine overdose with a combination of lipid infusion and dialysis – a case report. *The American Journal of Emergency Medicine*, 2015, **33**(5), 738.e5–e7. ISSN 0735-6757. **IF (2015): 1,504.**

31. URBAN, Pavel, ZAKHAROV, Sergey, DIBLÍK, Pavel, PELCLOVÁ, Daniela, RIDZON, Petr. Visual evoked potentials in patients after methanol poisoning. *International Journal of Occupational Medicine and Environmental Health*, 2016, **29**(3), doi 10.13075/ijomeh.1896.00452. ISSN 1232-1087. **IF (2015): 1,554.**

32. VANECKOVA M, ZAKHAROV S, KLEMPÍR J, RUZICKA E, BEZDICEK O, BROZOVA H, DIBLIK P, MIOVSKY M, HUBACEK JA, URBAN P, RIDZON P, PELCLOVA D, BURGETOVA A, MASEK M, KOTIKOVA K, PETEROVA K, LISKOVA I, HAMPLOVA L, SEIDL Z. Imaging findings after methanol intoxication (cohort of 46 patients). *Neuro Endocrinol Letters* 2015, **36**(8), 737-744. **IF (2015) 0,946.**

33. VANĚČKOVÁ, Manuela, ZAKHAROV, Sergey, KLEMPÍŘ, Jiří, RŮŽIČKA, Evžen, BEZDÍČEK, Ondřej, LIŠKOVÁ, Irena, DIBLÍK, Pavel, MIOVSKÝ, Michal, HUBÁČEK, Jaroslav A, URBAN, Pavel, RIDZON, Petr, PELCLOVÁ, Daniela, BURGETOVÁ, A, MAŠEK, M, SEIDL, Zdeněk. Methanol Intoxication on Magnetic Resonance Imaging – Case Reports. *Česká a slovenská neurologie a neurochirurgie*, 2014, **77/110**(2), 235-9. ISSN: 1210-7859. **IF (2014): 0,165.**

34. BEZDÍČEK, Ondřej, KLEMPÍŘ, Jiří, LIŠKOVÁ, Irena, MICHALEC, J, VANĚČKOVÁ, Manuela, SEIDL, Zdeněk, JANÍKOVÁ, Barbara, MIOVSKÝ, Michal, HUBÁČEK, Jaroslav A,

DIBLÍK, Pavel, KUTHAN, Pavel, PILIN, Alexander, KURCOVÁ, Ivana, FENCLOVÁ, Zdenka, PETRIK, Vít, NAVRÁTIL, Tomáš, PELCLOVÁ, Daniela, RŮŽIČKA, Evžen, ZAKHAROV, Sergey. Sequelae of Methanol Poisoning for Cognition. *Česká a slovenská neurologie a neurochirurgie*, 2014, **77/110**(3), 320-5. ISSN: 1210-7859. **IF (2014): 0,165.**

35. HLUŠIČKA J, VEISOVA E, ULLRYCH M, KUBECEK M, NAVRATIL T, ZAKHAROV S. Serum calcium and phosphorus concentrations and the outcome of calciphylaxis treatment with sodium thiosulfate. *Monatshefte für Chemie - Chemical Monthly*, 2016; doi 10.1007/s00706-016-1850-3. ISSN 0026-9247. **IF (2015): 1,131.**