Curriculum Vitae

Last name, First name: ZACHAROV SERGEJ

Gender: male

Nationality: Czech

Overall Scientific Expertise:

Scientific expertise in 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 neurotoxicity, 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; personal involvement in ASHT II and ASHT III projects, preparation of CERM sheets (Chemical Emergency Risk Management) for DG SANTE. National Exercise Planner, Controller, and Evaluator in exercises Quicksilver/Quicksilver Plus, risk assessor in exercise Iridium.

Professional Experience

| Years employed from – to | Title of position | Employer – name and location | Areas of professional specialisation |
|--------------------------------|--|--|---|
| 2011 – till now | Head of the Czech Toxicological Information Centre | General University Hospital, Prague | Clinical, occupational and environmental toxicology; toxikovigilance; pharmacovigilance; chemical emergencies public health crisis preparedness |
| 2011 – till now | Assistant Professor of the Department of Occupational Medicine | 1 st Faculty of Medicine, Charles University in Prague | Occupational medicine; occupational and industrial toxicology; nanotoxicology; occupational exposure assessment |
| 2010 – till now | Head of the Centre for special health care for radiation exposed persons | General University Hospital, Prague | Deterministic and stochastic effects of ionizing radiation; diagnostics; treatment of internal contamination; radioantidotes |
| 2007- 2011 | Physician of the Department of Occupational Medicine | General University Hospital, Prague | Occupational medicine; occupational diseases; diagnostics, treatment, surveillance |
| 2000- 2005 | Postdoctoral student, assistant professor | Department of Forensic Medicine, Samara State Medical University, Russia | Forensic toxicology, forensic medicine |

| 1998- | Physician of | Samara State Medical University, | Traumatology and |
|-------|--------------|----------------------------------|------------------|
| 2000 | Traumatology | Russia | orthopedy |
| | Department | | |

Educational Background

[Starting with the most recent, please provide the details of your <u>post-secondary</u> education and/or professional training (e.g. university or its equivalent, postgraduate, postdoctoral). Please copy and paste more rows if needed.]

| Year | Degree | Educational Institution – name and location | Areas of educational |
|------|-----------|--|------------------------------|
| | awarded | | specialisation* |
| 2012 | Ph.D. | Charles University in Prague, Czech | Preventive medicine |
| | | Republic | |
| 2010 | Certified | Charles University, 1 st Medical Faculty, | Occupational medicine |
| | specialis | Czech Republic | |
| | t | | |
| 2003 | CSc. | Samara State Medical University, Russia | Forensic medicine and public |
| | | | health |
| 2003 | Certified | Samara State Medical University, Russia | Forensic medicine |
| | specialis | | |
| | t | | |
| 2000 | Certified | Samara State Medical University, Russia | Traumatology and orthopedy |
| | specialis | | |
| | t | | |
| 1998 | General | Medical Faculty, Samara State Medical | General medicine |
| | medicine | University, Russia | |
| | diploma | | |

Memberships in Scientific Advisory Bodies/Committees/Panels (if any):

- 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

Memberships in Learned Societies (if any):

Board Member of the European Association of Poisons Centers and Clinical Toxicologists (EAPCCT) Czech Society of Occupational Medicine of the Czech Medical Society of J.E.Purkynje Pneumological and Phthisiological Society of the Czech Medical Association of J.E. Purkyne

Memberships in Editorial Boards (if any):

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

List of Publications:

Author of more than 50 publications, including 32 publications with impact factor in the last 5 years (first author in 20), total impact factor for the last 5 years – 75.0, H-index 7; co-author of the textbook Occupational Diseases and Intoxications (Karolinum Praha, 2014) and e-learning course in toxicology.

1. Zakharov S, Pelclova D, Navratil T, et al. 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; (**IF 2014: 8.52**).

2. Zakharov S, Pelclova D, Urban P, et al. Use of out-of-hospital ethanol administration to improve outcome in mass methanol outbreaks. Annals of Emergency Medicine, 2016, doi 10.1016/j.annemergmed.2016.01.010 IF (2015): 4,676.

3. Pelclova D, Zakharov S, Barosova H, et al. Raman microspectroscopy of exhaled breath condensate and urine in workers exposed to fine and nano TiO 2 particles: a cross-sectional study. Journal of Breath Research, 2015, 9, 036008. **IF** (2015): 4.631

4. Pelclova D, Zakharov S, Zdimal V, et al. Oxidative stress markers are elevated in exhaled breath condensate of workers exposed to nanoparticles during iron oxide pigment production. Journal of Breath Research, 2016, Feb 1; 10(1): 016004. **IF** (2015): 4.631

5. Pelclova D, Zakharov S, Zdimal V, et al. Markers of oxidative damage of nucleic acids and proteins among workers exposed to TiO 2 (nano) particles. Occupational and Environmental medicine, 2016; 73(2): 110-118. **IF** (2015) 3.267

6. Zakharov S, Pelclova D, Urban P, et al. Czech mass methanol outbreak 2012: Epidemiology, challenges and clinical features. Clinical Toxicology, 2014, 52(10), 1013-24. ISSN 1556-3650. **IF (2014/15): 3,673.**

7. Zakharov S, Pelclova D, Navratil T, et al. 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.**IF** (2015): 3,673.

8. Zakharov S, Pelclova D, Urban P, et al. Long-term visual damage after acute methanol poisonings: longitudinal cross-sectional study in 50 patients. Clinical Toxicology, 2015, 53(9), 884-92. **IF** (2014/15): 3,673.