

CURRICULUM VITAE

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Czech University of Life Sciences Prague
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EDUCATION

- 2004–2007 Ph.D. in Crop Sciences (Czech University of Life Sciences Prague)
Ph.D. Thesis: “Chemically Enhanced Phytoextraction of Heavy Metals from Soils Contaminated by Metallurgy”
- 2005 IP Socrates Summer School “Soil-Plant-Microbe Interactions” (SLU Uppsala, Sweden)
- 1998 General state examination in English from the The Language School of the Capital City of Prague
- 1998–2003 MSc. in Environmental Geology (Faculty of Science, Charles University in Prague)

WORK EXPERTISE

- Since 2016 Full Professor and Head of the Department of Environmental Geosciences, Czech University of Life Sciences Prague
Head of Research Group “Environmental and Isotope Geochemistry”
- 2011–2015 Associate Professor and Head of the Department of Environmental Geosciences, Czech University of Life Sciences Prague
- 2010, 2011 Habilitation (Habilitation à diriger des recherches) at the University of Limoges (France) and Habilitation at the Czech University of Life Sciences Prague
“Contamination of Soils with Metals: Different Aspects of their Characterization and Remediation”
- 2007–2011 Research Assistant at the Department of Agro-Environmental Chemistry and Plant Nutrition, Czech University of Life Sciences Prague
- 2005–2007 Technician at the Department of Agrochemistry and Plant Nutrition, Czech University of Life Sciences Prague

FELLOWSHIPS & INVITED LECTURES

- 2016 Invited lecturer at Hong Kong Polytechnic University
- 2012 Fulbright Scholar Fellowship at Western Michigan University (USA)
- 2009, 2014 Visiting scientist at the University of Limoges (France)
- 2006, 2007 Visiting scientist at the Faculty of Biotechnology, University of Ljubljana (Slovenia), program Kontakt (Czech-Slovenian scientific cooperation)

AWARDS

2016	Honors of the CULS Rector for best published results
2011	Honors of the President of the Czech Science Foundation

TEACHING ACTIVITIES

Since 2015	Director of the MSc. Programme Environmental Geosciences
Since 2015	Environmental Soil Chemistry (MSc.)
Since 2012	Environmental Geochemistry and Mineralogy (MSc.)
Since 2012	Environmental Contamination and Remediation Technology (MSc.)
2008–2011	Seminars in Agro-Environmental Chemistry
2005–2011	Agrochemistry, practical course
2008	Invited lecturer at the UFA Summer School in Limoges, France, “Décontamination des eaux et des sols”; University of Limoges (France) and University of Bayreuth (Germany)
Supervisor of successfully defended 4 Ph.D. thesis; 5 postdocs	
Socrates/Erasmus programme coordinator between CULS Prague and Université de Limoges (France), Université de Rennes (France), Universitat de Girona (Spain), University of Wroclaw (Poland)	

MEMBERSHIP

Since 2014	American Chemical Society (ACS)
Since 2013	European Geosciences Union (EGU)
Since 2011	European Association of Geochemistry (EAG)
Since 2011	International Society of Trace Element Biogeochemistry (ISTEB)
Since 2006	Association of Chemistry and the Environment (ACE)

OTHER ACTIVITIES

Since 2014	Member of the Expert Panel (Earth Sciences) of the Research, Development and Innovation Council, an advisory body to the Government of the Czech Republic
2014–2016	Member of the Internal Grant Agency of the Czech University of Life Sciences Prague
Since 2012	Member of the Scientific Board of the Faculty of Environmental Sciences, Czech University of Life Sciences Prague
Since 2011	Member of the Academic Senate of the Czech University of Life Sciences Prague

RESEARCH INTERESTS

Biogeochemistry and speciation of metals/metalloids in the environment

Environmental soil chemistry

Adsorption and surface complexation modeling

Chemical stabilization and phytostabilization of metals/metalloids in contaminated soils

Metal isotopes as tracers of contamination sources and geochemical processes

PROJECTS

Principal investigator of the project GAČR 15-07117S (Czech Science Foundation) “Modeling the competitive adsorption of metals and As onto Fe nano-oxides: Implication for soil remediation”; 2015–2017; 195,000 €

Co-investigator on the H2020 Marie Skłodowska-Curie Action, BASE-LiNE Earth: “Brachiopods as sensitive tracers of global marine environment: Insights from alkaline, alkaline Earth metal, and metalloid trace element ratios and isotope systems”; 2015–2017; 3,750,000 €

Principal investigator of the Norway Grant no. 7F14330 “A new methodological approach for identification of industrial pollution: Isotope fingerprinting and bacterial community changes”; 2014–2017; 670,000 €

Principal investigator of the project GAČR P503/11/0840 (Czech Science Foundation) “Stabilization of metals/metalloids in contaminated soils using a novel synthetic manganese oxide: A comparison with other stabilization amendments”; 2011–2014; 175,000 €

Co-investigator of the project TAČR TA01021055 (Technology Agency of the Czech Republic) “Chromium isotopes as indicators of natural cleaning processes in contaminated waters”; 2011–2014; 960,000 €

Principal investigator of the post-doc project GAČR 526/08/P042 (Czech Science Foundation) “Chemically enhanced phytoextraction of copper from contaminated vineyard and hop field soils”; 2008–2010; 42,000 €

Principal investigator of the project FRVŠ 450/2007 (Ministry of Education, Youth and Sports of the Czech Republic) “The influence of chelating agents on the mobility and phytoextraction of lead from contaminated soils”; 2007; 4000 €

Principal investigator of the project CIGA 1313/3136 (Czech University of Life Sciences Prague) “Phytoextraction of heavy metals from contaminated soils: enhanced phytoextraction vs. natural hyperaccumulation”; 2006–2007; 8000 €

Principal investigator of 4 internal grants of the Faculty of Agrobiological Sciences, Food and Natural Resources (Czech University of Life Sciences Prague); 2005–2008

Co-worker of the principal investigator of the project GAČR 14-01866S (Czech Science Foundation) “Thallium isotope systematics in anthropogenically-affected geosystems – A biogeochemical approach”; 2014–2016; 165,000 €

Co-worker of the principal investigator of the project COST CZ LD13068 (Ministry of Education, Youth and Sports of the Czech Republic) “Development and application of hydrogeochemical models in metal contaminated soils treated with Biochar”; 2013–2016; 68,000 €

Co-worker of the principal investigator of the project GAČR P210/11/1597 (Czech Science Foundation) “Revision of extraction methods determining metal/metalloid mobility and bioavailability using defined synthetic mixtures – a model approach”; 2011–2013; 94,000 €

Co-worker of the principal investigator of the project NAZV QH81167 (Ministry of Agriculture of the Czech Republic) “Optimization of the phytoremediation technology during induced phytoextraction of heavy metals under sustainable biological stability of soils”; 2008–2011; 210,000 €

Co-worker of the principal investigator of the project KONTAKT (Czech-Slovenian cooperation; Ministry of Education of the Czech Republic) “Remediation of soils contaminated with heavy metals and polychlorinated biphenyls”; 2006–2007

Co-worker of the principal investigator of the project FRVŠ 2271/2002 (Ministry of Education, Youth and Sports of the Czech Republic) “Forms and isotopic composition of lead in soils strongly contaminated by metallurgy”; 2002

SERVICE TO THE SCIENTIFIC COMMUNITY

External Reviewer for: Applied Geochemistry; Applied Soil Ecology; Archives of Environmental Contamination and Toxicology; Archives of Industrial Hygiene and Toxicology; Atmospheric Pollution Research; Biotechnology Progress; Chemical Engineering Journal; Chemical Papers; Chemical Speciation and Bioavailability; Chemistry and Ecology; Chemosphere; Colloids and Surfaces; Ecological Engineering; Ecotoxicology; Ecotoxicology and Environmental Safety; Environmental Chemistry Letters; Environmental Engineering and Management Journal; Environmental Engineering Science; Environmental Geochemistry and Health; Environmental Pollution; Environmental Research; Environmental Science and Pollution Research; Environmental Science & Technology; Environmental Technology; European Journal of Soil Science; Food Additives and Contaminants; Geochimica et Cosmochimica Acta; Geoderma; International Journal of Environmental Research and Public Health; International Journal of Phytoremediation; Journal of Agricultural and Food Chemistry; Journal of Colloid and Interface Science; Journal of Environmental Chemical Engineering; Journal of Environmental Management; Journal of Environmental Quality; Journal of Environmental Science and Health, Part B; Journal of Geochemical Exploration; Journal of Hazardous Materials; Journal of Industrial and Engineering Chemistry; Journal of Mountain Science; Journal of Soils and Sediments; Land Degradation & Development; Plant, Soil and Environment; Polish Journal of Environmental Studies; Science of the Total Environment; Soil and Sediment Contamination; Toxicological & Environmental Chemistry; Waste Management; Water, Air, and Soil Pollution; Water Research; Water Science and Technology

National Science Foundation (USA); Agence Nationale de la Recherche (France); Czech Science Foundation; Grant Agency of the Czech Ministry of the Environment; COST CZ; Research, Development and Innovation Funding (Romania); National Center of Science and Technology Evaluation (Kazakhstan)

Session Convener at:

Scientific Committee member at The 15th European Meeting on Environmental Chemistry (EMEC 15), Brno, Czech Republic, 2014; Goldschmidt 2011, Prague, Czech Republic, 2011: Dynamics, Mobility and Bioavailability of Trace Elements in Contaminated Environments; The 10th European Meeting on Environmental Chemistry (EMEC 10), Limoges, France, 2009: Soil Chemistry

PUBLICATIONS

Total number of publications in peer-reviewed journals with IF: 79
h-index: 20

List of Publications in Peer-Reviewed Journals with IF

(supervised postdocs *, Ph.D. students **, Master students ***)

1. Michálková, Z.*, **Komárek, M.**, Vítková, M.**, Řečínská, M., Ettler, V., 2016. Stability, transformations and stabilizing potential of an amorphous manganese oxide and its surface-modified form in contaminated soils. *Applied Geochemistry*, in press.
2. Pardo, T., Martínez-Fernández, D., de la Fuente, C., Clemente, R., **Komárek, M.**, Pilar Bernal, M., 2016. Maghemite nanoparticles and ferrous sulfate for the stimulation of iron plaque formation and arsenic immobilization in *Phragmites australis*. *Environmental Pollution*, 219, 296-304.
3. Francová, A., Chrastný, V., Šillerová, H., Vítková, M., Kocourková, J., **Komárek, M.**, 2016. Evaluating the suitability of different environmental samples for tracing atmospheric pollution in industrial areas. *Environmental Pollution*, in press.
4. Martínez-Fernández, D.*, **Komárek, M.**, 2016. Comparative effects of nanoscale zero-valent iron (nZVI) and Fe₂O₃ nanoparticles on root hydraulic conductivity of *Solanum lycopersicum* L. *Environmental and Experimental Botany* 131, 128-136.

5. Veselská, V.*, Fajgar, R., Číhalová, S., Bolanz, R.M., Göttlicher, J., Steininger, R., Siddique, J.A., **Komárek, M.**, 2016. Chromate adsorption on selected soil minerals: Surface complexation modeling coupled with spectroscopic investigation. *Journal of Hazardous Materials* 318, 433-442.
6. Vítková, M.*, Rákosová, S., Michálková, Z.** , **Komárek, M.**, 2016. Metal(loid)s behaviour in soils amended with nano zero-valent iron as a function of pH and time. *Journal of Environmental Management*, in press.
7. Zuverza-Mena, N., Martínez-Fernández, D.*, Du, W., Hernandez-Viezcas, J.A., Bonilla-Bird, N., López-Moreno, M.L., **Komárek, M.**, Peralta-Videa, J.R., Gardea-Torresdey, J.L., 2016. Exposure of engineered nanomaterials to plants: Insights into the physiological and biochemical responses-A review. *Plant Physiology and Biochemistry*, in press.
8. Michálková, Z.** , **Komárek, M.**, Veselská, V.*, Číhalová, S., 2016. Selected Fe and Mn (nano)oxides as perspective amendments for the stabilization of As in contaminated soils. *Environmental Science and Pollution Research* 23, 10841-10854.
9. Kelepertzis, E., **Komárek, M.**, Argyraki, A., Šillerová, H., 2016. Metal(loid) distribution and Pb isotopic signatures in the urban environment of Athens, Greece. *Environmental Pollution* 213, 420-431.
10. Trakal, L.*, Veselská, V.*, Šafařík, I., Vítková, M.*, Číhalová, S., **Komárek, M.**, 2016. Lead and cadmium sorption mechanisms on magnetically modified biochars. *Bioresource Technology* 203, 318-324.
11. Martínez-Fernández, D.*, Barroso, D., **Komárek, M.**, 2016. Root water transport of *Helianthus annuus* L. under iron oxide nanoparticle exposure. *Environmental Science and Pollution Research* 23, 1732-1741.
12. **Komárek, M.**, Koretsky, C.M., Stephen, K.J., Alessi, D.S., Chrastný, V. 2015. Competitive adsorption of Cd(II), Cr(VI) and Pb(II) onto nano-maghemite: A spectroscopic and modeling approach. *Environmental Science & Technology* 49, 12851-12859.
13. Grösslová, Z., Vaněk, A., Mihaljevič, M., Ettler, V., Hojdová, M., Zádorová, T., Pavlů, L., Penížek, V., Vaněčková, B., **Komárek, M.**, Chrastný, V., Ash, C., 2015. Bioaccumulation of thallium in a neutral soil as affected by solid-phase association. *Journal of Geochemical Exploration* 159, 208-212.
14. Šillerová, H.** , **Komárek, M.**, Liu, C., Poch, J., Villaescusa, I., 2015. Biosorbent encapsulation in calcium alginate: Effects of process variables on Cr(VI) removal from solutions. *International Journal of Biological Macromolecules* 80, 260-270.
15. Chrastný, V., Čadková, E., Vaněk, A., Teper, L., Cabala, J., **Komárek, M.**, 2015. Cadmium isotope fractionation within the soil profile complicates source identification in relation to Pb-Zn mining and smelting processes. *Chemical Geology* 405, 1-9.
16. Šillerová, H.** , Vaněk, A., **Komárek, M.**, 2015. Biosorption of Cr(VI) from natural groundwater and effect of DOC-rich treated water on Cr dissolving from contaminated soil. *Soil & Water Research* 10, 236-243.
17. Drábek, O., Kipkoech Kiplagat, I., **Komárek, M.**, Tejnecký, V., Borůvka, L., 2015. Study of interactions between relevant organic acids and aluminium in model solutions using HPLC and IC. *Soil & Water Research* 10, 172-180.
18. Vítková, M.*, **Komárek, M.**, Tejnecký, V., Šillerová, H.*, 2015. Interactions of nano-oxides with low-molecular-weight organic acids in a contaminated soil. *Journal of Hazardous Materials* 293, 7-14.
19. Martínez-Fernández, D.*, Vítková, M.*, Pilar Bernal, M., **Komárek, M.**, 2015. Effects of nano-maghemite on trace elements accumulation and drought response of *Helianthus annuus* L. in a contaminated mine soil. *Water, Air, & Soil Pollution* 226, 101-109.
20. Ettler, V., Tomášová, Z., **Komárek, M.**, Mihaljevič, M., Šebek, O., Michálková, Z.** , 2015. The pH-dependent long-term stability of an amorphous manganese oxide in smelter-polluted soils:

implication for chemical stabilization of metals and metalloids. *Journal of Hazardous Materials* 286, 386-394.

21. Vaněk, A., Grösslová, Z., Mihaljevič, M., Ettler, V., Chrastný, V., **Komárek, M.**, Tejnecký, V., Drábek, O., Penížek, V., Galušková, I., Vaněčková, B., Pavlů, L., Ash, C., 2015. Thallium contamination of soils/vegetation as affected by sphalerite weathering: A model rhizospheric experiment. *Journal of Hazardous Materials* 283, 148-156.
22. Száková, J., Zimmermannová, D., **Komárek, M.**, Sysalová, J., Tlustoš, P., 2015. Metal sorption onto soils loaded with urban particulate matter. *Chemie der Erde-Geochemistry* 75, 29-33.
23. Trakal, L.*, Bingöl, D., Pohořelý, M., Hruška, M.** , **Komárek, M.**, 2014. Geochemical and spectroscopic investigations of Cd and Pb sorption mechanisms on contrasting biochars: Engineering implications. *Bioresource Technology* 171, 442-451.
24. Michálková, Z.** , **Komárek, M.**, Šillerová, H.** , Della Puppa, L.** , Joussein, E., Bordas, F., Vaněk, A., Vaněk, O., Ettler, V., 2014. Evaluating the potential of three Fe- and Mn-(nano)oxides for the stabilization of Cd, Cu and Pb in contaminated soils. *Journal of Environmental Management* 46, 226-234.
25. Chrastný, V., Vaněk, A., Čadková, E., Růžicková, A., Galušková, I., Faturíková, D., **Komárek, M.**, 2014. Lead migration in smelter-impacted deciduous and coniferous organic soil horizons based on a long-term in-situ implantation and laboratory column experiments. *Applied Geochemistry* 48, 168-175.
26. Martínez-Fernández, D.*, Bingöl, D., **Komárek, M.**, 2014. Trace elements and nutrients adsorption onto nano-maghemite in a contaminated-soil solution: a geochemical/statistical approach. *Journal of Hazardous Materials* 276, 271-277.
27. Neugschwandtner, R., Tlustoš, P., Száková, J., **Komárek, M.**, Jakoubková, L., 2014. Monitoring of mobilization and uptake of nutrients in response to EDTA additions to a contaminated agricultural soil. *Environmental Engineering and Management Journal*, in press.
28. Ettler, V., Knytl, V., **Komárek, M.**, Della Puppa, L.** , Bordas, F., Mihaljevič, M., Klementová, M., Šebek, O., 2014. Stability of a novel synthetic amorphous manganese oxide in contrasting soils. *Geoderma* 214-215, 2-9.
29. Šillerová, H.** , Chrastný, V., Čadková, E., **Komárek, M.**, 2014. Isotope fractionation and spectroscopic analysis as an evidence of Cr(VI) reduction during biosorption. *Chemosphere* 95, 402-407.
30. Trakal, L.*, Šigut, R., Šillerová, H.** , Faturíková, D., **Komárek, M.**, 2014. Copper removal from aqueous solution using biochar: Effect of chemical activation. *Arabian Journal of Chemistry* 7, 43-52.
31. Della Puppa, L.** , **Komárek, M.**, Bordas, F., Bollinger, J.C., Joussein, E., 2013. Adsorption of copper, cadmium, lead and zinc onto a synthetic manganese oxide. *Journal of Colloid and Interface Science* 399, 99-106.
32. Vaněk, A., Mihaljevič, M., Galušková, I., Chrastný, V., **Komárek, M.**, Penížek, V., Zádorová, T., Drábek, O., 2013. Phase-dependent phytoavailability of thallium – A synthetic soil experiment. *Journal of Hazardous Materials* 250-251, 265-271.
33. Šillerová, H.** , **Komárek, M.**, Chrastný, V., Novák, M., Vaněk, A., Drábek, O., 2013. Brewers draff as a new low-cost sorbent for chromium (VI): comparison with other biosorbents. *Journal of Colloid and Interface Science* 396, 227-233.
34. Čadková, E.** , **Komárek, M.**, Della-Puppa, L.* , Bordas, F., Debord, J., Bollinger, J.C., 2013. pKa constant determination of two triazole pesticides: tebuconazole and penconazole. *Journal of Solution Chemistry* 42, 1075-1082.
35. Čadková, E.** , **Komárek, M.**, Kaliszová, R., Száková, J., Vaněk, A., Bordas, F., Bollinger, J.C., 2013. The influence of copper on tebuconazole sorption onto soils, humic substances and ferrihydrite. *Environmental Science and Pollution Research* 20, 4205-4215.

36. Vaněk, A., Chrastný, V., **Komárek, M.**, Penížek, V., Teper, L., Cabala, J., Drábek, O., 2013. Geochemical position of thallium in soils from a smelter-impacted area. *Journal of Geochemical Exploration* 124, 176-182.
37. Trakal, L.*, Kodešová, R., **Komárek, M.**, 2013. Modelling of Cd, Cu, Pb and Zn transport in metal contaminated soil and their uptake by willow (*Salix × smithiana*) using HYDRUS-2D program. *Plant and Soil* 366, 433-451.
38. **Komárek, M.**, Vaněk, A., Ettler, V., 2013. Chemical stabilization of metals and arsenic in contaminated soils using oxides - A review. *Environmental Pollution* 172, 9-22.
39. Čadková, E.** , **Komárek, M.**, Kaliszová, R., Vaněk, A., Balíková, M., 2013. Tebuconazole sorption in contrasting soil types. *Soil and Sediment Contamination: An International Journal* 22, 404-414.
40. Chrastný, V., **Komárek, M.**, Procházka, J., Pechar, L., Vaněk, A., Penížek, V., Farkaš, J., 2012. 50 years of different landscape management influencing retention of metals in soils. *Journal of Geochemical Exploration* 115, 59-68.
41. Chrastný, V., Vaněk, A., **Komárek, M.**, Farkaš, J., Drábek, O., Vokurková, P., Němcová, J., 2012. Incubation of air-pollution-control residues from secondary Pb smelter in deciduous and coniferous organic soil horizons: Leachability of lead, cadmium and zinc. *Journal of Hazardous Materials* 209-210, 40-47.
42. Trakal, L.*, **Komárek, M.**, Száková, J., Tlustoš, P., Tejnecký, V., Drábek, O., 2012. Sorption behavior of Cd, Cu, Pb and Zn and their interactions in phytoremediated soil. *International Journal of Phytoremediation* 14, 806-819.
43. Neugschwandtner, R., Tlustoš, P., **Komárek, M.**, Száková, J., Jakoubková, L., 2012. Chemically enhanced phytoextraction of risk elements from a contaminated agricultural soil using *Zea mays* and *Triticum aestivum*: Performance and metal mobilization over a three years period. *International Journal of Phytoremediation* 14, 754-771.
44. Vaněk, A., **Komárek, M.**, Chrastný, V., Galušková, I., Mihaljevič, M., Šebek, O., Drahota, P., Tejnecký, V., Vokurková, P., 2012. Effect of low-molecular-weight organic acids on the leaching of thallium and accompanying cations from soil - A model rhizosphere solution approach. *Journal of Geochemical Exploration* 112, 212-217.
45. Čadková, E.** , **Komárek, M.**, Kaliszová, R., Koudelková, V., Dvořák, J., Vaněk, A., 2012. Sorption of tebuconazole onto selected soil minerals and humic acids. *Journal of Environmental Science and Health, Part B* 47, 336-342.
46. Chrastný, V., Vaněk, A., Teper, L., Cabala, J., Procházka, J., Pechar, L., Drahota, P., Penížek, V., **Komárek, M.**, Novák, M., 2012. Geochemical position of Pb, Zn and Cd in soils near the Olkusz mine/smelter, South Poland: effects of land use, type of contamination and distance from pollution source. *Environmental Monitoring and Assessment* 184, 2517-2536.
47. Trakal, L., **Komárek, M.**, Száková, J., Zemanová, V., Tlustoš, P., 2011. Biochar application to metal-contaminated soil: Evaluating of Cd, Cu, Pb and Zn sorption behavior using single- and multi-element sorption experiment. *Plant, Soil and Environment* 57, 372-380.
48. Vaněk, A., **Komárek, M.**, Vokurková, P., Mihaljevič, M., Šebek, O., Panušková, G., Chrastný, V., Drábek, O., 2011. Effect of illite and birnessite on thallium retention and bioavailability in contaminated soils. *Journal of Hazardous Materials* 191, 170-176.
49. **Komárek, M.**, Michálková, Z.***, Száková, J., Vaněk, A., Grygar, T., 2011. Evolution of bioavailable copper and major soil cations in contaminated soils treated with ethylenediaminedisuccinate: A two-year experiment. *Bulletin of Environmental Contamination and Toxicology* 86, 525-530.
50. Jaklová Dytrtová, J., Jakl, M., Schröder, D., Čadková, E.** , **Komárek, M.**, 2011. Complexation between the fungicide tebuconazole and copper(II) probed by electrospray ionization mass spectrometry. *Rapid Communications in Mass Spectrometry* 25, 1037-1042.

51. Vaněk, A., Chrastný, V., Teper, L., Cabala, J., Penížek, V., **Komárek, M.**, 2011. Distribution of thallium and accompanying metals in tree rings of Scots pine (*Pinus sylvestris* L.) from a smelter-affected area. *Journal of Geochemical Exploration* 108, 73-80.
52. Vaněk, A., **Komárek, M.**, Chrastný, V., Bečka, D., Mihaljevič, M., Šebek, O., Panušková, G., Schusterová, Z., 2010. Thallium uptake by white mustard (*Sinapis alba* L.) grown on moderately contaminated soils—agro-environmental implications. *Journal of Hazardous Materials* 182, 303-308.
53. **Komárek, M.**, Vaněk, A., Mrnka, L., Sudová, R., Száková, J., Tejnecký, V., Chrastný, V., 2010. Potential and drawbacks of EDDS-enhanced phytoextraction of copper from contaminated soils. *Environmental Pollution* 158, 2428-2438.
54. Vaněk, A., Grygar, T., Chrastný, V., Tejnecký, V., Drahota, P., **Komárek, M.**, 2010. Assessment of the BCR sequential extraction procedure for thallium fractionation using synthetic mineral mixtures. *Journal of Hazardous Materials* 176, 913-918.
55. Chrastný, V., **Komárek, M.**, Hájek, T., 2010. Lead contamination of an agricultural soil in the vicinity of a shooting range. *Environmental Monitoring and Assessment* 162, 37-46.
56. **Komárek, M.**, Čadková, E.**, Chrastný, V., Bordas, F., Bollinger, J.C., 2010. Contamination of vineyard soils with fungicides: A review of environmental and toxicological aspects. *Environment International* 36, 138-151.
57. Vaněk, A., Chrastný, V., **Komárek, M.**, Galušková, I., Drahota, P., Grygar, T., Tejnecký, V., Drábek, O., 2010. Thallium dynamics in contrasting light sandy soils – soil vulnerability assessment to anthropogenic contamination. *Journal of Hazardous Materials* 173, 717-723.
58. **Komárek, M.**, Vaněk, A., Száková, J., Balík, J., Chrastný, V., 2009. Interactions of EDDS with Fe- and Al-(hydr)oxides. *Chemosphere* 77, 87-93.
59. **Komárek, M.**, Vaněk, A., Chrastný, V., Száková, J., Kubová, K.***, Drahota, P., Balík, J., 2009. Retention of copper originating from different fungicides in contrasting soil types. *Journal of Hazardous Materials* 166, 1395-1402.
60. **Komárek, M.**, Ettler, V., Száková, J., Šebek, O., Tlustoš, P., 2009. Bioavailability of lead and cadmium in soils artificially contaminated with smelter fly ash. *Bulletin of Environmental Contamination and Toxicology* 83, 286-290.
61. **Komárek, M.**, Balík, J., Chrastný, V., Száková, J., 2009. Distribution and fractionation of copper in contaminated hop field soils. *Fresenius Environmental Bulletin* 18, 1319-1323.
62. Chrastný, V., **Komárek, M.**, 2009. Copper determination using ICP-MS with hexapole collision cell. *Chemical Papers* 63, 512-519.
63. Vaněk, A., Chrastný, V., Mihaljevič, M., Drahota, P., Grygar, T., **Komárek, M.**, 2009. Lithogenic thallium behavior in soils with different land use. *Journal of Geochemical Exploration* 102, 7-12.
64. Javorská, H., Tlustoš, P., **Komárek, M.**, Leštan, D., Kaliszová, R., Száková, J., 2009. Effect of ozonation on polychlorinated biphenyl degradation and on soil physico-chemical properties. *Journal of Hazardous Materials* 161, 1202-1207.
65. Neugschwandtner, R., Tlustoš, P., **Komárek, M.**, Száková, J., 2009. Nutrient mobilization and nutrient contents of *Zea mays* in response to EDTA additions to heavy metal contaminated agricultural soil. *Journal of Plant Nutrition and Soil Science* 172, 520-527.
66. **Komárek, M.**, Száková, J., Rohošková, M., Javorská, H., Chrastný, V., Balík, J., 2008. Copper contamination of vineyard soils from small wine producers: A case study from the Czech Republic. *Geoderma* 147, 16-22.
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