

# Publikationsliste von Albrecht Paschke

(Stand: 01.04.2020)

Urik, J, Paschke A, Varna B (2020), Diffusion coefficients of polar organic compounds in agarose hydrogel and water and their use for estimating uptake in passive samplers. *Chemosphere*, 249:126183.

Chepchirchir BS, Zhou X, Paschke A, Schüürmann G (2020). Polyethersulfone as suitable passive sampler for waterborne hydrophobic organic compounds – Laboratory calibration and field test in the Sosiani river, Kenya. *Sci. Total Environ.*, 699, 134056.

Mijangos L, Ziarrusta H, Prieto, A, Zugazua O, Zuloaga O, Olivares M, Usobiaga A, Paschke A, Etxebarria N (2018): Evaluation of polar organic chemical integrative and hollow fibre samplers for the determination of a wide variety of organic polar compounds in seawater. *Talanta* 185: 469-476.

Chepchirchir BS, Paschke A, Schüürmann G (2017): Passive sampling for spatial and temporal monitoring of organic pollutants in surface water of a rural-urban river in Kenya. *Sci. Total Environ.*, 601-602: 453-460.

Münze R, Hannemann C, Orlinskiy P, Gunold R, Paschke A, Foit K, Becker J, Kaske O, Paulsson E, Peterson M, Jernstedt H, Kreuger J, Schüürmann G, Liess M (2017): Pesticides from wastewater treatment plant effluents affect invertebrate communities. *Sci. Total Environ.*, 599-600: 387-399.

Shafique U, Schulze S, Slawik C, Chepchirchir BS, Böhme A, Paschke A, Schüürmann G (2017): Perfluoroalkyl acids in aqueous samples from Germany and Kenya. *Environ. Sci. Pollut. Res.*, 24: 11031-11044.

Posada-Ureta O, Olivares M, Delgado A, Prieto A, Vallejo A, Irazola M, Paschke A, Etxebarria N (2017): Applicability of polydimethylsiloxane (PDMS) and polyethersulfone (PES) as passive samplers of more hydrophobic organic compounds in intertidal estuarine environments. *Sci. Total Environ.*, 578: 392-398.

Shafique U, Dorn V, Paschke A, Schüürmann G (2017): Adsorption of Perfluorocarboxylic Acids at the Silica Surface. *Chem. Comm.*, 53: 589-592.

Iparraguirre A, Prieto A, Vallejo A, Moeder M, Zuloaga O, Etxebarria N, Paschke A (2017): Tetraphasic polar organic chemical integrative sampler for the determination of a wide polarity range organic pollutants in water. The use of performance reference compounds and in-situ calibration. *Talanta*, 164: 314-322.

Shafique U, Schulze S, Slawik C, Kunz S, Paschke A, Schüürmann G (2017): Gas chromatographic analysis of perfluorocarboxylic acids in aqueous samples – A tutorial review. *Anal. Chim. Acta*, 949: 8-22.

Posada-Ureta O, Olivares M, Zatón L, Delgado A, Prieto A, Vallejo A, Paschke A, Etxebarria N (2016): Uptake calibration of different polymer-based passive samplers for the monitoring priority and emerging organic non-polar pollutants in WWTP effluents. *Anal. Bioanal. Chem.*,

408: 3165-3175.

Eremina N, Paschke A, Mazlova EA, Schüürmann G (2016): Distribution of polychlorinated biphenyls, phthalic acid esters, polycyclic aromatic hydrocarbons and organochlorine substances in the Moscow River, Russia. *Environ. Pollut.*, 210: 409-418.

Petersen J, Pröfrock D, Paschke A, Broekaert JAC, Prange A (2016): Development and field testing of a new mobile continuous flow system for the utilization of Chemcatcher® and DGT passive samplers for trace element analysis in marine environments. *Environ. Sci. Water Res. Technol.*, 2: 146-153.

Münze R, Orlinskiy P, Gunold R, Paschke A, Kaske O, Beketov MA, Hundt M, Bauer C, Schüürmann G, Möder M, Liess M, (2015): Pesticide impact on aquatic non-target invertebrates identified with Chemcatcher® passive samplers and the SPEAR<sub>pesticides</sub> index. *Sci. Total Environ.*, 537, 69-80.

Rotter S, Gunold R, Mothes S, Paschke A, Brack W, Altenburger R, Schmitt-Jansen, M (2015): Pollution-induced community tolerance to diagnose chemicals driving biological effects in multiple contaminated aquatic systems. *Environ. Sci., Technol.*, 49, 10048–10056.

Becker B, Duffek A, Lepom P, Paschke A, Möhlenkamp C, Claus E, Schäfer S (2015). Anwendung von Passivsammlern für das Monitoring hydrophober organischer Schadstoffe in Flüssen. *Mitteil. Fachgr. Umweltchemie und Ökotoxikologie der GDCh*. 21 (2), 49-51.

Petersen J, Pröfrock D, Paschke A, Broekaert JAC, Prange A (2015): Laboratory calibration and field testing of the Chemcatcher-Metal for trace levels of rare earth elements in estuarine waters. *Environ. Sci. Pollut. Res.*, 22: 16051-16059.

Schubert M, Paschke A (2015). Radon, CO<sub>2</sub> and CH<sub>4</sub> as environmental tracers in ground-water/surface water interaction studies – comparative theoretical evaluation of the gas specific water/air phase transfer kinetics. *Eur. Phys. J. Special Topics* 224, 709–715.

Klüver N, König M, Ortmann J, Massei R, Paschke A, Kühne R, Scholz S. (2015). A systematic data analysis of fish embryo acute toxicity tests to define and improve the application domain. *Environ. Sci. Technol.*, 49, 7002-7011.

Orlinskiy P, Münze R, Beketov MA, Gunold R, Paschke A, Knillmann S, Liess M (2015): Forested headwaters mitigate pesticide effects on macroinvertebrate communities in streams - mechanisms and quantification. *Sci. Total Environ.*, 524–525, 115–123.

Kraus UR, Theobald N, Gunold R, Paschke A (2015): Prüfung und Validierung der Einsatzmöglichkeiten neuartiger Passivsammler für die Überwachung prioritärer Schadstoffe unter der WRRL, der MSRL und im Rahmen von HELCOM und OSPAR. *Texte 25/2015*, Umweltbundesamt (Hrsg.), Dessau-Roßlau, ISSN 1862-4804.

Petersen J, Paschke A, Gunold R, Schüürmann G (2015): Calibration of Chemcatcher® passive sampler for selected highly hydrophobic organic substances under fresh and sea water conditions. *Environ. Sci. Water Res. Technol.*, 1, 218-226.

Schäfer S, Buchmeier G, Claus E, Duester L, Heininger P, Körner A, Mayer P, Paschke A,

Rauert C, Reifferscheid G, Rüdél H, Schlechtriem C, Schudoma D, Schröter-Kermani C, Smedes F, Steffen D, Vietoris F (2015): Bioaccumulation in aquatic systems: methodological approaches, monitoring and assessment. *Environ. Sci. Eur.*, 27, 5.

Caicedo VP, Rahman KZ, Kusch P, Blumberg M, Paschke A, Janzen W, Schüürmann G. (2014): Comparison of heavy metal content in two sludge drying reed beds of different age. *Ecol. Eng.*, 74, 48-55.

Ren W, Teng Y, Zhou Q, Paschke A, Schüürmann G (2014): Sorption of chlorimuron-ethyl on montmorillonite clays: effects of exchangeable cations, pH, and ionic strength. *Environ. Sci. Pollut. Res.*, 21, 11587–11597.

Vallejo A, Prieto A, Moeder M, Usobiaga A, Zuloaga O, Etxebarria N, Paschke A (2013): Calibration and field test of the Polar Organic Chemical Integrative Samplers for the determination of 15 endocrine disrupting compounds in wastewater and river water with special focus on performance reference compounds. *Water Res.*, 47, 2851–2862.

Blaschke U, Eismann K, Böhme A, Paschke A, Schüürmann G (2012): Structural alerts for the excess toxicity of acrylates, methacrylates and propiolates derived from their short-term and long-term bacterial toxicity. *Chem. Res. Toxicol.*, 25, 170–180.

Artigas J, Arts G, Babut M, Caracciolo AB, Charles S, Chaumot A, Combourieu B, Dahllöf I, Despréaux D, Ferrari B, Friberg F, Garric J, Geffard O, Gourlay-Francé C, Hein M, Hjorth M, Krauss M, De Lange HJ, Lahr J, Lehtonen KK, Lettieri T, Liess M, Lofts S, Mayer P, Morin S, Paschke A, Svendsen C, Usseglio-Polatera P, van den Brink N, Vindimian E, Williams R (2012): Towards a renewed research agenda in ecotoxicology. *Environ. Pollution* 260, 201-206.

Neziri A, Lazo P, Brümmer J, Paschke A (2012): New passive sampling systems for monitoring organic micropollutants and heavy metals in the Shkodra Lake, *J. Environ. Protect. Ecol.*, 12, 2218-2224.

Schubert M, Paschke A, Lieberman E, Burnett W (2012): Air-water partitioning of <sup>222</sup>Rn and its dependence on water temperature and salinity. *Environ. Sci. Technol.* 46, 3905-3911.

Schubert M, Paschke A, Bednorz D, Bürkin W, Stieglitz T (2012): Kinetics of the water/air phase transition of radon and its implication on detection of radon-in-water concentrations: practical assessment of different on-site radon extraction methods. *Environ. Sci. Technol.*, 46, 8945–8951.

Thaens D, Heinzelmann D, Böhme A, Paschke A, Schüürmann G (2012). Chemoassay screening of DNA-reactive mutagenicity with 4-(4-nitrobenzyl)pyridine - Application to epoxides, oxetanes, and sulfur heterocycles. *Chem. Res. Toxicol.* 25, 2092–2102.

Schulze T, Streck G, Paschke A (2011): Sampling and Conservation, in: *Water Chemistry and Microbiology* (ed. by F. Frimmel), Vol. 3 of *Treatise on Water Science* (ed. by P. Wilderer), Academic Press, Oxford, U.K., pp. 132-152.

Schramm F, Müller A, Hammer H, Paschke A, Schüürmann G (2011): Epoxide and thiirane toxicity in vitro with the ciliates *tetrahymena pyriformis*: structural alerts indicating excess

toxicity. *Environ. Sci. Technol.*, 45, 5812-5819.

Caicedo P, Schröder A, Ulrich N, Schröter U, Paschke A, Schüürmann G, Ahumada I, Richter P (2011): Determination of lindane leachability in soil–biosolid systems and its bioavailability in wheat plants. *Chemosphere*, 84, 397-402.

Prieto A, Vallejo A, Zuloaga O, Paschke A, Sellergen B, Schillinger E, Schrader S, Möder M (2011): Selective determination of estrogenic compounds in water by microextraction by packed sorbents an molecularly imprinted polymer coupled with large volume injection-in-port-derivatisation gas chromatography-mass spectrometry. *Anal. Chim. Acta*, 703, 41-45.

Van Pinxteren M, Paschke A, Popp P (2010): Silicone rod and silicone tube sorptive extraction. *J. Chromatogr. A*, 1217, 2589-2598.

Allan IJ, Booij K, Paschke A, Vrana B, Mills GA, Greenwood R (2010): Short-term exposure testing of six different passive samplers for monitoring hydrophobic contaminants in water. *J. Environ. Monitor.*, 12, 696-703.

Gartiser S, Hafner C, Hercher C, Kronenberger-Schäfer K, Paschke A (2010): Whole effluent assessment of industrial wastewater for determination of BAT compliance. Part 1: paper manufacturing industry, *Environ. Sci. Pollut. Res.*, 17, 856-865.

Gartiser S, Hafner C, Hercher C, Kronenberger-Schäfer K, Paschke A (2010): Whole effluent assessment of industrial wastewater for determination of BAT compliance. Part 2: metal surface treatment industry, *Environ. Sci. Pollut. Res.*, 17, 1149-1157.

Dohnal V, Vrbka P, Řehák K, Böhme A, Paschke A (2010): Activity coefficients and partial molar excess enthalpies at infinite dilution for four esters in water. *Fluid Phase Equil.*, 295, 194-200.

Böhme A, Thaens D, Schramm F, Paschke A, Schüürmann G (2010): Thiol reactivity and its impact on the ciliate toxicity of  $\alpha,\beta$ -unsaturated aldehydes, ketones and esters, *Chem. Res. Toxicol.*, 23, 1905–1912.

Blaschke U, Paschke A, Rensch I, Schüürmann G (2010): Acute and chronic toxicity towards the bacteria *Vibrio fischeri* of organic narcotics and epoxides – structural alerts for epoxide excess toxicity. *Chem. Res. Toxicol.*, 23, 1936–1946.

Gartiser S, Hafner C, Oeking S, Paschke A (2009): Results of a “Whole Effluent Assessment” study from different industrial sectors in Germany according to OSPAR’s WEA strategy. *J. Environ. Monitor.*, 11, 359-369.

Bandow N, Altenburger R, Lübcke-vonVarel U, Paschke A, Streck G, Brack W (2009): Partitioning-based dosing - an approach to include bioavailability in the effect-directed analysis of contaminated sediment samples. *Environ. Sci. Technol.*, 43, 3891–3896.

Böhme A, Thaens D, Paschke A, Schüürmann G (2009): Kinetic glutathione chemoassay to quantify thiol reactivity of organic electrophiles – Application to  $\alpha,\beta$ -unsaturated ketones, acrylates, and methacrylates. *Chem. Res. Toxicol.*, 22, 742–750.

Allan IJ, Booij K, Paschke A, Vrana B, Mills GA, Greenwood R (2009): Field performance of seven passive sampling devices for monitoring of hydrophobic substances. *Environ. Sci. Technol.*, 43, 5383-5390.

Schreiber R, Altenburger R, Paschke A, Schüürmann G, Küster E (2009): A novel *in vitro* system for the determination of bioconcentration factors and the internal dose in zebrafish (*Danio rerio*) eggs. *Chemosphere*, 77, 928-933.

Paschke A, Vrana B, Popp P, Wennrich L, Paschke H, Schüürmann G (2009): MESCO – Neue Passivsammler zur zeitintegrierten Erfassung von organischen Gewässerschadstoffen. *Vom Wasser* 107(3), 13-18.

Schubert M, Schmidt A, Paschke A, Lopez A, Balcázar M (2008): *In situ* determination of radon in water by means of a hydrophobic membrane tubing, *Radiat. Meas.*, 43, 111-120.

Schäfer RB, Paschke A, Vrana B, Mueller R, Liess M (2008): Performance of the Chemcatcher® passive sampler when used to monitor 10 polar and semi-polar pesticides in 16 Central European streams, and comparison with two other sampling methods. *Water Res.*, 42, 2707-2717.

Gunold R, Schäfer RB, Paschke A, Schüürmann G, Liess M (2008): Calibration of the Chemcatcher passive sampler for monitoring selected polar and semi-polar pesticides in surface water. *Environ. Pollution*, 155, 52-60.

Schreiber R, Altenburger R, Paschke A, Küster E (2008): How to deal with lipophilic and volatile organic substances in microtiter plate assays? *Environ. Tox. Chem.* 27, 1676–1682.

Schäfer RB, Paschke A, Liess M (2008): Aquatic passive sampling of a short-term thiacloprid pulse with the Chemcatcher: Impact of biofouling and use of a diffusion-limiting membrane on the sampling rate. *J. Chromatogr. A*, 1203, 1-6.

Beketov, MA, Schäfer RB, Marwitz A, Paschke A, Liess M (2008): Long-term stream invertebrate community alternations induced by the insecticide thiacloprid: Effect concentrations and recovery dynamics. *Sci. Total Environ.*, 405, 96-108.

Böhme A, Paschke A, Vrbka P, Dohnal V, Schüürmann G (2008): Determination of temperature-dependent Henry's law constant of four oxygenated solutes in water using headspace solid phases microextraction technique *J. Chem. Eng. Data*, 53, 2873-2877.

Schubert M, Paschke A, Lau S, Geyer W, Knöller K (2007): Radon as a naturally occurring tracer for the assessment of residual NAPL contaminations of aquifers. *Environ. Pollution*, 145, 920-927.

Paschke A, Vrana B, Popp P, Wennrich L, Paschke H, Schüürmann G (2007): Membrane enclosed sorptive coating (MESCO) for monitoring organic compounds in water. Chapter 10 in: *Passive Sampling Techniques in Environmental Monitoring* (ed. by R. Greenwood, G.A. Mills, B. Vrana), Vol. 48 of *Wilson & Wilson's Comprehensive Analytical Chemistry* (ed. by D. Barceló), Elsevier, Amsterdam, The Netherlands, pp. 231-250.

Popp P, Paschke H, Vrana B, Wennrich L, Paschke A (2007): Membrane-enclosed sorptive

coating (MESCO) as integrative sampler for monitoring organic compounds in air. Chapter 5 in: *Passive Sampling Techniques in Environmental Monitoring* (ed. by R. Greenwood, G.A. Mills, B. Vrana), Vol. 48 of *Wilson & Wilson's Comprehensive Analytical Chemistry* (ed. by D. Barceló), Elsevier, Amsterdam, The Netherlands, pp. 107-123.

Paschke A, Brümmer J, Schüürmann G (2007): Silicone rod extraction of pharmaceuticals from water. *Anal. Bioanal. Chem.*, 387, 1417-1421.

Schubert M, Lehmann K, Paschke A (2007): Determination of radon partition coefficients between water and organic liquids and their utilization for the assessment of subsurface NAPL contamination. *Sci. Total Environ.*, 376, 306-316.

Rüdel H, Bester K, Eisenträger A, Franzaring J, Haarich M, Köhler J, Körner W, Oehlmann J, Paschke A, Ricking M, Schröder W, Schröter-Kermani Ch, Schulze T, Schwarzbauer J, Theobald N, von der Trenck Th, Wagner G, Wiesmüller GA (2007): Positionspapier zum stoffbezogenen Umweltmonitoring, Arbeitskreis Umweltmonitoring in der GDCh-Fachgruppe Umweltchemie und Ökotoxikologie. *Mitt. Umweltchem. Ökotox.* 13, 34-41 und 72-79.

Rüdel H, Bester K, Eisenträger A, Franzaring J, Haarich M, Köhler J, Körner W, Oehlmann J, Paschke A, Ricking M, Schröder W, Schröter-Kermani Ch, Schulze T, Schwarzbauer J, Theobald N, von der Trenck Th, Wagner G, Wiesmüller GA (2007): Stoffbezogenes Umweltmonitoring. In: *Handbuch der Umweltmedizin*, Loseblattwerk, 37. Ergänzungslieferung, Oktober 2007, ecomed MEDIZIN, Landsberg, Band 2, Kapitel IV-7.1, S. 1-48.

Schüürmann G, Ebert R-U, Nendza M, Dearden JC, Paschke A, Kühne R (2007): Predicting fate-related physicochemical properties. Chapter 9 in: Van Leeuwen K, Vermeire T (Eds.): *Risk assessment of chemicals. An Introduction*. 2<sup>nd</sup> Ed., Springer, Dordrecht, The Netherlands, pp. 375-426.

Gartiser S, Hafner C, Oeking S, Paschke A, Maue G (2007): Einsatz wirkungsbezogener Methoden zur Bewertung und Kontrolle von Industrieabwässern im Rahmen von OSPAR-Aktivitäten. *KA – Abwasser, Abfall*, 54, 1146-1155.

Paschke A, Vrana B, Popp P, Schüürmann G (2006): Comparative application of solid-phase microextraction fibre assemblies and semipermeable membrane devices as passive air samplers for semivolatile chlorinated organic compounds – A case study on the landfill 'Grube Antonie' in Bitterfeld. *Environ. Pollution*, 144, 414-422.

Vrana B, Paschke A, Popp P (2006): Calibration and field performance of Membrane-Enclosed Sorptive Coating for integrative passive sampling of persistent organic pollutants in Water. *Environ. Pollution*, 144, 296-307.

Wenzel KD, Rehwagen M, Esche S, Wenzel V, Paschke A (2006): Neue sorbent-gefüllte Passivsammler – Alternative zur konventionellen Erfassung organischer Schadstoffe. *GIT – Labor-Fachzeitschrift*, 5/2006, 416-419.

Paschke A, Schwab K, Brümmer J, Schüürmann G, Paschke H, Popp P (2006): Rapid semi-continuous calibration and field test of membrane-enclosed silicone collector as passive water sampler, *J. Chromatogr. A*, 1124, 187-195.

Paschke A, Schröter U, Schüürmann G (2005): Indirect determination of low vapor pressures using solid-phase microextraction – Application to tetrachlorobenzenes and tetrachlorobenzyltoluenes. *J. Chromatogr. A*, 1072, 93-97.

Vrana B, Paschke H, Paschke A, Popp P, Schüürmann G (2005): Performance of semipermeable membrane devices for sampling of organic contaminants in groundwater. *J. Environ. Monitor.*, 7, 500-508.

Pieters B, Paschke A, Reynaldi S, Kraak MHS, Admiraal W, Liess M (2005) Influence of food limitations on the effects of fenvalerate pulse exposure on the life history and population growth rate of *Daphnia Magna*. *Environ. Tox. Chem.* 24, 2254-2259.

Grote M, Altenburger R, Brack W, Moschütz S, Mothes S, Michael C, Narten GB, Paschke A, Schirmer K, Walter H, Wennrich R, Wenzel KD, Schüürmann G (2005): Ecotoxicological profiling of transect river Elbe sediments, *Acta hydrochim. hydrobiol.*, 33, 555-569.

Paschke A, Popp P (2004): Diffusion-based calibration for solid-phase microextraction of BTEX and chlorobenzenes from aqueous samples, *J. Chromatogr. A*, 1025, 11-16.

Montero L, Popp P, Paschke A, Pawliszyn J (2004): Polydimethylsiloxane (PDMS) rod extraction: a novel technique for the determination of organic micropollutants in water samples with thermal desorption-capillary gas chromatography-mass spectrometry. *J. Chromatogr. A*, 1025, 17-26.

Popp P, Bauer C, Paschke A, Montero-Schiemann L (2004): Application of rod extraction combined with column liquid chromatography to determine polycyclic aromatic hydrocarbons in environmental samples. *Anal. Chim. Acta*, 504, 307-312.

Wennrich R, Mattusch J, Morgenstern P, Freyer K, Treutler H-C, Stärk H-J, Brüggemann L, Paschke A, Daus B, Weiss, H (2004): Characterization of sediments in an abandoned mining area; a case study of Mansfeld region, Germany. *Environ. Geol.*, 45, 818-833.

Paschke A (2004): Biomimetika – Aktuelle Trends bei der Abschätzung der passiven Schadstoffaufnahme in Lebewesen, *Mitteil. der Fachgr. Umweltchemie und Ökotoxikologie der GDCh*, 10 (2), 9-10.

Grote M, Altenburger R, Brack W, Möckel C, Moschütz S, Mothes S, Michael C, Narten GB, Paschke A, Schirmer K, Walter H, Wennrich R, Wenzel KD, Schüürmann G (2004): Identifizierung und Analyse des ökotoxischen Potentials von Flußsedimenten als Folge der durch Hochwasser mobilisierten Kontaminationen. In: *Schadstoffbelastung nach dem Elbe-Hochwasser 2002*, (Hrsg.: Geller W, Ockenfeld K, Böhme M, Knöchel A) UFZ-Umweltforschungszentrum Leipzig-Halle, Magdeburg 2004. S. 314-329.

Paschke A, Neitzel PL, Walther W, Schüürmann G (2004): Octanol/water partition coefficient of selected herbicides: Determination using shake-flask method and reversed-phase high-performance liquid chromatography. *J. Chem. Eng. Data*, 45, 1639-1642.

Popp P, Hauser B, Paschke A, Vrana B (2003): Passivsammler zur membrankontrollierten Extraktion gelöster organischer Verbindungen im Wasser. Gebrauchsmuster Nr. 200 23 183.9 (beim Dt. Patent- und Markenamt München).

Paschke A (2003): Consideration of the physicochemical properties of sample matrices – an important step in sampling and sample preparation. *TrAC – Trends in Anal. Chem.*, 22, 78-89.

Paschke A, Popp P, (2003): Solid-phase microextraction fibre-water distribution constants of more hydrophobic organic compounds and their correlations with the octanol-water partition coefficients. *J. Chromatogr. A*, 999, 35-42.

Tolls J, Bodo K, De Felip E, Dujardin R, Kim YH, Moeller-Jensen L, Mullee D, Nakajima A, Paschke A, Pawliczek JB, Schneider J, Tadeo JL, Tognucci AC, Webb J, Zwijzen AC (2003): The slow stirring method for determination of the n-octanol/water partition coefficient (P<sub>ow</sub>) for highly hydrophobic chemicals – performance evaluation in a ring test. *Environ. Tox. Chem.*, 22, 1051-1057.

Schubert, M, Morgenstern, P, Wennrich, R, Freyer, K, Paschke, A, Weiss, H (2003): The weathering behaviour of contaminated industrial sediments after their exposure to atmospheric oxygen. In: *Contaminated Sediments: Characterization, Evaluation, Mitigation/Restoration, and Management Strategy Performance*, ASTM STP 1442 (ed. by J. Locat, R. Galvez-Cloutier, R. Chaney, K. Demars) ASTM International, West Conshohocken, PA/USA, pp. 19-27.

Paschke A, Vrana B, Popp P, Wennrich L, Lorenz W, Schüürmann G (2003): Novel passive samplers for monitoring organic pollutants in surface and ground water based on membrane-enclosed silicone material. Chapter 24 in: *New Horizons and Challenges in Environmental Analysis and Monitoring* (ed. by J Namiesnik, W Chrzanowski, P. Zmijewska), CEEAM, Gdansk, pp.486-492.

Majer B, Tscherko D, Paschke A, Wennrich R, Kundi M, Kandeler E, Knasmüller S (2002): Effects of heavy metal contamination of soils on micronucleus induction in *Tradescantia* and on microbial enzyme activities: a comparative investigation. *Mutat. Res.*, 515, 111-124.

Paschke A, Popp P, Vrana B (2002): Calibration and Field Validation of SPME Fibres as Passive Samplers for Chlorinated Semivolatile Organic Compounds. In: *Field Screening Europe 2001 – Proceedings of the 2<sup>nd</sup> Int. Conf. on Strategies and Techniques for the Investigation and Monitoring of Contaminated Sites* (ed. by Breh W, Gottlieb J, Hötzl H, Kern F, Liesch T, Niessner R), Kluwer, Dordrecht, The Netherlands, 2002, pp. 259-264.

Paschke A (2002): Physicochemical properties of aqueous and solid environmental matrices. Chapter 7 in: *Sampling and Sample Preparation for Field and Laboratory – Fundamentals and New Directions in Sample Preparation* (ed. by J. Pawliszyn), Vol. XXXVII of Wilson & Wilson's Comprehensive Analytical Chemistry (ed. by D. Barceló), Elsevier, Amsterdam, The Netherlands, pp. 219-239.

Popp P, Paschke A, Hauser B (2002): Vorrichtung zur in-vial Extraktion von Inhaltsstoffen aus flüssigen Phasen. Patentschrift DE 100 44 045 C1.

Vrana B, Popp P, Paschke A, Hauser B, Schröter U, Schüürmann G (2002): Vorrichtung zur membrankontrollierten Extraktion gelöster organischer Verbindungen. Patentschrift DE 100 42 073 C 2.



Popp P, Möder M, Bauer C, Paschke A (2002): Verfahren und Aufbereitungsgefäß zum Nachweis organischer Verbindungen in flüssiger Phase. Offenlegungsschrift DE 100 44 044 A1.

Vrana B, Paschke A, Popp P, Schüürmann G (2001): Use of Semipermeable Membrane Devices (SPMDs): Determination of Bioavailable, Organic, Waterborne Contaminants in the Industrial Region of Bitterfeld, Saxony-Anhalt, Germany. *Environ. Sci. & Pollut. Res.*, 8, 27-34.

Paschke A, Manz M, Treutler, H-C, Wennrich R, Morgenstern P, Popp P und Schüürmann G (2001): Schadstoffmobilisierbarkeit, ökotoxisches Gefährdungspotential und Pufferkapazität von potentiellem Baggergut aus der Saale, *Nova Acta Leopoldina* NF Bd. 84, Nr. 319, S. 65-81.

Paschke A, Manz, M, Schüürmann G (2001): Application of different RP-HPLC methods for the determination of the octanol/water partition coefficient of selected tetrachlorobenzyltoluenes. *Chemosphere* 45, 721-728.

Vrana B, Paschke A, Popp P (2001) : Polyaromatic hydrocarbon concentrations and patterns in sediments and surface water of the Mansfeld region, Saxony-Anhalt, Germany. *J. Environ. Monitor.*, 3, 602-609.

Vrana B, Popp P, Paschke A, Schüürmann G (2001): Membrane Enclosed Sorptive Coating – an integrative passive sampler for monitoring organic contaminants in water. *Anal. Chem.*, 73, 5191-5200.

Paschke A, Freyer K, Treutler, H-C, Wennrich R, Popp P, Möder M, Weiß H, Schüürmann G (2001): Assessment of Theisenschlamm Leaching Behavior. In: Daus B, Weiß H (Eds.), *Fine-grained residues from copper smelting and their environmental impacts*. UFZ-Bericht Nr. 22/2001 (ISSN 0948-9452), Leipzig, pp. 71-81.

Wennrich, R, Morgenstern P, Möder M, Popp P, Paschke A, Vrana B (2001): Chemical Characterization of Theisenschlamm. In: Daus B, Weiß H (Eds.), *Fine-grained residues from copper smelting and their environmental impacts*. UFZ-Bericht Nr. 22/2001 (ISSN 0948-9452), Leipzig, pp. 17-24.

Brack W, Paschke A, Segner H, Wennrich R, Schüürmann G (2000): Urease inhibition: a tool for toxicity identification in sediment elutriates. *Chemosphere*, 40, 829-834.

Paschke A, Schüürmann G (2000): Konzentrationsabhängigkeit des Oktanol/Wasser-Verteilungskoeffizienten der Hexachlorcyclohexan-Isomere bei 25°C. *Chem. Ing. Tech.*, 72, 84-88.

Paschke A, Schüürmann G (2000): Concentration dependence of octanol/water partition coefficients of the hexachlorocyclohexane isomers at 25 °C. *Chem. Eng. & Technol.*, 23, 666-670.

Klumpp A, Schneider F, Fomin A, Paschke A. (2000). Ökotoxikologische Untersuchungen an den Halden des Kupferschieferbergbaus im Mansfelder Land, II. Einsatz von *Tradescantia* und

*Salmonella typhimurium* als Biotestorganismen zur Ermittlung des genotoxischen Potentials von Oberflächenwässern und Eluaten. In: Fomin A, Arndt U, Elsner D, Klumpp A (Hrsg.): **Bioindikation – Biologische Testverfahren**, Verlag G. Heimbach, Stuttgart, S. 239-242.

Daus B, Mattusch J, Paschke A, Wennrich R and Weiss H (2000): Kinetics of the AS(III) oxidation in a seepage water of a tin mill tailings pond. **Talanta**, 51, 1087-1095.

Popp P, Bauer C, Möder M, Paschke A (2000): Determination of Polycyclic Aromatic Hydrocarbons in Waste Water by Off-line Coupling of Solid-Phase Microextraction with Column Liquid Chromatography. **J. Chromatography A**, 897, 153-159.

Paschke A, Popp P, Schüürmann G (1999): Solubility and Partitioning Studies with Polycyclic Aromatic Hydrocarbons Using an Optimized SPME Procedure, **Fresenius' J. Anal. Chem.**, 363, 426-428.

Hauser B, Popp P, Paschke A (1999): Membrane Extraction of Volatile Organic compounds (VOCs) in Combination with Mobile Gas Chromatographic Analysis. **Int. J. Environ. Anal. Chem.**, 74, 107-121.

Paschke A, Popp P (1999): Estimation of Hydrophobicity of Organic Compounds. Chap. 10 in: **Applications of SPME** (ed. by J. Pawliszyn), Royal Society of Chemistry, Cambridge/U.K., pp. 140-155.

Paschke A, Wennrich R, Morgenstern P (1999): Comparison of 24 h- and Long-term pH<sub>stat</sub>-Leaching-Tests for Heavy Metal Mobilization from Solid Matrices. **Acta hydrochim. hydrobiol.** 27, 223-229.

Fomin A, Paschke A, Arndt U (1999): Assessment of the genotoxicity of mine-dump material using the *Tradescantia*-stamen hair (Trad-SHM) and the *Tradescantia*-micronucleus (Trad-MCN) bioassays. **Mutat. Res.**, 426, 173-181.

Popp P, Paschke A (1999): Efficiency of direct solid phase microextraction from water - a comparison of different fibre types including a new C8-coating, **Chromatographia**, 49, 686-690.

Paschke A, Popp P, Schüürmann G (1998): Water Solubility and Octanol/Water-Partitioning of Hydrophobic Chlorinated Organic Substances Determined by Using SPME/GC. **Fresenius' J. Anal. Chem.** 360, 52-57.

Paschke A, Schüürmann G (1998): Octanol/Water-Partitioning of Four HCH-Isomeres at 5, 25, and 45°C. **Fresenius' Environ. Bull.** 7, 258-263.

Gabler T, Paschke A, Schüürmann G (1998): Diffusion Coefficients of Substituted Benzenes and Alcohols at High Dilution in Octan-1-ol. **J. Chem. & Eng. Data** 43, 413-416.

Geyer W, Paschke A (1998): Can NIR-absorption spectra explain the different diffusivities of substituted benzenes and alcohols in octan-1-ol ? **J. Near Infrared Spectros.** 6, A227-A230..

Krüger A, Paschke A, Schneider B, Büttner E, Neumeister H (1998): Die Säureneutralisationskapazität zur Bewertung der Schutzfunktion des Bodens – Anwendungsprüfung

am Beispiel eines Bodenprofils in der Bitterfelder Mulde. *Petermanns Geographische Mitteilungen* 142, 375-392.

Paschke A, Wennrich R (1998): Vergleich von 24 h- und Langzeit-pH<sub>stat</sub>-Schütteltests zur Schwermetall-Mobilisierung aus festen Matrices. In: *Fachgruppe Wasserchemie in der Gesell. Dt. Chemiker - Jahrestagung 1998*, S. 251-254. Frankfurt a.M. 1998 (ISBN 3-927463-70-4).

Knasmüller S, Gottmann E, Steinkellner H, Fomin A, Pickl C, Paschke A, Göd R, Kundi M (1998): Detection of genotoxic effects of heavy metal contaminated soils with plant bioassays. *Mutat. Res.*, 420, 37-48.

Ensenbach U, Altenburger R, Brack W, Paschke A, Popp P, Segner H, Wennrich R, Schüürmann, G (1998): Ökotoxikologische Charakterisierung von Sedimenten aus der Saale. In: Geller W et al. (Hrsg.), *Gewässerschutz im Einzugsgebiet der Elbe*, Teubner, Stuttgart, S.151-152.

Popp P, Keil P, Möder M, Paschke A, Thuß U (1997): Application of Accelerated Solvent Extraction (ASE) Followed by GC, HPLC and GC-MS for Determination of PAHs, Chlorinated Pesticides and PCDD/F in Solid Wastes. *J. Chromatography A* 774, 203-211.

Popp P, Paschke A (1997): Solid Phase Microextraction of Volatile Organic Compounds Using Carboxen-Polydimethylsiloxane Fibers. *Chromatographia* 46, 419-424.

Paschke A, Wennrich R, Morgenstern P, Schumann G, Schüürmann G (1997): Modelluntersuchungen zum Auslagverhalten industrieller Reststoffe und Sonderabfälle aus Sachsen-Anhalt. - Teil I: Batchversuche zur Extraktion und Elution von Schwermetallen. *Chem. Technik* 49, 157-168.

Schneider B, Krüger A, Neumeister H, Paschke A (1997): Mobilisierung umweltrelevanter Metalle in Ökosystemen unter Einfluß von DOM, *Mitteil. Dt. Bodenkundl. Gesell.* 85, 337-340.

Gabler T, Paschke A, Schüürmann G (1996): Diffusion Coefficients of Substituted Benzenes at High Dilution in Water. *J. Chem. & Eng. Data* 41: 33-36.

Paschke A, Lazik D, Segner H, Büttner E (1996): *Elutionsverhalten und ökotoxisches Potential von Sonderabfällen*, UFZ-Bericht Nr. 1/1996 (88 S.), Leipzig.

Fomin A, Paschke A, Arndt U (1996): Assessment of genotoxicity of mine-dump material using the *Tradescantia*-Stamen Hair (Trad-SHM) and the *Tradescantia*-Micronucleus (Trad-MCN) Bioassays. In: Ma T H (Ed): *Workshop on plant bioassays for detection of environmental genotoxicity (Final Report UNEP FP-0502-95-08)*.

Gabler T, Paschke A (1996): Schadstoff-Permeation durch künstliche Lipidmembranen. In: Beckmann, D und Meister, M (Hrsg.): *8. Heiligenstädter Kolloquium "Technische Systeme für Biotechnologie und Umwelt"*, Tagungsband, Inst. für Bioprozeß- und Analysenmeßtechnik Heiligenstadt, S. 419-423.

Popp P, Paschke A, Schröter U, Oppermann G (1995): Application of Solid-Phase Micro-extraction (SPME) in Combination with GC/FID to the Determination of Benzene and halogenated Benzenes in Pure and Octanol-Saturated Water. *Chem. Anal. (Warsaw)* 40, 897-904.

Gabler T, Paschke A (1994): Diffusionsmessungen mit einer Fließinjektionsmethode, In: Beckmann, D und Meister, M (Hrsg.): **7. Heiligenstädter Kolloquium "Technische Systeme für Biotechnologie und Umwelt"**, Tagungsband, Inst. für Bioprozeß- und Analysenmeßtechnik Heiligenstadt, S. 383-390.

Paschke A, Bittrich H-J (1993): Zur Modellierung des Flüssig/Flüssig-Gleichgewichtes im System Heptan - Toluol - N,N-Dimethylformamid. *Chem. Technik* 45, 19-24.

Paschke A, Novotna A, Winkelmann J (1993): Viskosität und Dichte im System Heptan - Toluol - N,N-Dimethylformamid zwischen 20 und 35°C. *Chem. Technik* 45, 167-173.

Paschke A (1993): Simultaneous Mass Transfer of Heptane and Toluene into a Selective Solvent. *Chem. Eng. Process.* 32, 201-207.

Paschke A, Thiel P, Winkelmann J (1993): Diffusions-, Viskositäts- und Dichte-Messungen im neuen Testsystem der Flüssigextraktion MIPK - BuAc - H<sub>2</sub>O. *Chem.-Ing.-Tech.* 65, 949-951.

Paschke A (1993): Mass Transfer in a Ternary Model System of Aromatic Extraction. In: Logsdail, D H and Slater M J (Eds): *Solvent Extraction in the Process Industries (Proceedings of ISEC '93)* Vol. 3, Elsevier, London, pp. 1712-1719.

Thiel P, Paschke A, Winkelmann J (1993): Diffusion Coefficients, Viscosities and Densities in the Binary Subsystems of Methyl isopropyl ketone - n-Butyl acetate - Water. *Ber. Bunsenges. Phys. Chem.* 97, 1119-1125.

Thiel P, Paschke A, Winkelmann J (1992): Determination of Binary Diffusion Coefficients in Liquid Nonelectrolyte Mixtures using the Taylor Dispersion Technique. *Ber. Bunsenges. Phys. Chem.* 96: 750-753.

Kreft I, Paschke A, Winkelmann J (1990): Surface Tensions and Interfacial Tensions in Three Ternary Systems. *Z. Phys. Chem.* 271, 695-702.

Paschke A, Bittrich H-J (1989): Zur Untersuchung der Flüssig/Flüssig-Stoffübergangskinetik nach der Einzeltropfenmethode. *Wiss. Zeitschr. TH Leuna-Merseburg* 31, 693 - 702.

Paschke A, Bittrich H-J (1989): Eine Beziehung zwischen thermodynamischen und kinetischen Kenngrößen der Flüssig/Flüssig-Extraktion. *Z. Phys. Chem. Leipzig* 270, 1249- 1250.

Paschke A, Ptáček J, Bittrich H-J (1985): Diffusionskoeffizienten in einigen binären, flüssigen Nichteletrolytmischungen. *Z. Phys. Chem. Leipzig* 266, 844-848.