

ISI-listed Publications and Book Chapters

2008

- Heine, F., F. Stahl, H. Sträuber, C. Wiacek, D. Benndorf, C. Repenning, F. Schmidt, T. Scheper, M. von Bergen, H. Harms, S. Müller.** Prediction of flocculation ability of brewing yeast inoculates by flow cytometry, proteome analysis and mRNA profiling. *Cytometry A*, accepted.
- Kohlmeier, S., M. Mancuso, U. Deepthike, R. Tecon, J. R. van der Meer, H. Harms, and M. Wells.** Comparison of naphthalene bioavailability determined by whole-cell biosensing and availability determined by extraction with Tenax. *Environ. Poll.* available online.
- Solé, M. A. Chatzinotas, K. R. Sridhar, H. Harms, and G. Krauss.** Improved coverage of fungal diversity in polluted groundwaters by semi-nested PCR. *Sci. Tot. Environ.* 406:324-330.
- Shi, L., S. Müller, H. Harms and L. Y. Wick.** 2008. Factors influencing the electrokinetic dispersion of PAH-degrading bacteria in a model aquifer. *Appl. Microbiol. Biotechnol.* 80: 507-515.
- Solé, M. A. Chatzinotas, K. R. Sridhar, H. Harms, and G. Krauss.** 2008. Improved coverage of fungal diversity in polluted groundwaters by semi-nested PCR. *Sci. Tot. Environ.* 406:324-330.
- Kleinsteuber, S., J. Breitfeld, K. Schleinitz, H. Harms, H.H. Richnow, and C. Vogt.** 2008. Molecular characterization of bacterial communities mineralizing benzene under sulfate-reducing conditions. *FEMS Microbiol. Ecol.* 66: 143-157.
- Günther, S., T. Hübschmann, M. Rudolf, M. Eschenhagen, I. Röske, H. Harms, S. Müller.** 2008. Fixation procedures for flow cytometric analysis of environmental bacteria *J. Microbiol. Meth.* 75: 127-134..
- Pawelczyk, S., W. R. Abraham, H. Harms, and S. Müller.** 2008. Community-based degradation of 4-chlorosalicylate tracked on the single cell level. *J. Microbiol. Meth.* 75: 117-126.
- Maskow, T., A. Röllich, I. Fetzer, J. Yao, and H. Harms.** 2008. Observation of non-linear biomass – capacitance correlations: Reasons and implications for bioprocess control. *Biosensors Bioelectronics* 24: 123-128.
- Thullner, M. M. Kampara, H.-H. Richnow, H. Harms, and L. Y. Wick.** 2008. Impact of bioavailability restrictions on microbially induced apparent stable isotope fractionation: 1. Theoretical calculation. *Environ. Sci. Technol.* 42: 6544-6551.
- Kampara, M., M. Thullner, H.-H. Richnow, H. Harms, and L. Y. Wick.** 2008. Impact of bioavailability restrictions on microbially induced apparent stable isotope fractionation: 2. Experimental evidence. *Environ. Sci. Technol.* 42: 6552-6558.
- Maskow, T., A. Röllich, I. Fetzer, J.-U. Ackermann, and H. Harms.** 2008. On-line monitoring of lipid storage in yeasts using impedance spectroscopy. *J. Biotechnol.* 133: 64-70.
- Lerchner, J., A. Wolf, F. Buchholz, F. Mertens, H. Harms, T. R. Neu, and T. Maskow.** 2008. Miniaturized calometry – A new method for real-time biofilm activity analysis. *J. Microbiol. Meth.* 74: 74-83.

- Shi, L., H. Harms, and L. Y. Wick.** 2008. Electroosmotic flow stimulates the release of matrix-bound phenanthrene. *Environ. Sci. Technol.* 42: 2105-2110.
- Peitzsch, M., B. Kiesel, H. Harms, and T. Maskow,.** 2008. Real time analysis of *Escherichia coli* biofilms using calorimetry. *Chem. Eng. Process* 47: 1000-1006.
- Müller, R. H., T. Rohwerder, and H. Harms.** 2008. Degradation of fuel oxygenates and their main intermediates by *Aquincola tertiaricarbonis* L108. *Microbiology-SGM* 154: 1414-1421.
- Shi, L., S. Müller, H. Harms, and L. Y. Wick.** 2008. Effect of electrokinetic transport on the vulnerability of PAH-degrading bacteria in a model aquifer. *Environ. Geochem. Health* 30: 177-182.
- Wackwitz, A., H. Harms, A. Chatzinotas, U. Breuer, C. Vogne, J. R. van der Meer.** 2008. Internal arsenite bioassay calibration using multiple bioreporter cell lines. *Microb. Biotechnol.* 1: 149-157.
- Shi, L., S. Müller, N. Loffhagen, H. Harms, and L. Y. Wick.** 2008. Activity and viability of PAH-degrading *Sphingomonas* sp. LB126 in a DC-electrical field typical for electro-bioremediation measures. *Microb. Biotechnol.* 1: 53-61.
- Solé, M., I. Fetzer, R. Wennrich, K. R. Sridhar, H. Harms and G. Krauss.** 2008. Aquatic hyphomycete communities as potential bioindicators for assessing anthropogenic stress. *Sci. Tot. Environ.* 389: 557-565.
- Kleinsteuber, S., F.-D. Müller, K. Wendt-Potthoff, H. Harms, and A. Chatzinotas.** 2008. Diversity and in situ quantification of *Acidobacteria* subdivision 1 in an acidic mining lake. *FEMS Microbiol. Ecol.* 63: 107-117.
- Wick, L. Y. , S. Furuno, and H. Harms.** Fungal mycelia as vectors for dispersal of contaminant degrading bacteria In K. Timmis et al. (eds.) *Handbook of Hydrocarbon Microbiology*. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo. Invited Chapter.
- Harms H., K. E. C. Smith, and L. Y. Wick.** Cellular ecophysiology: accessing and exploiting the resources. Introduction In: K. Timmis et al. (eds.) *Handbook of Hydrocarbon Microbiology*. Springer-Verlag, Berlin, Heidelberg, New York. Accepted.
- Harms H., L. Y. Wick and K. E. C. Smith.** Cellular ecophysiology: accessing and exploiting the resources. Matrix.:Hydrophobic Compound Interactions. In: K. Timmis et al. (eds.) *Handbook of Hydrocarbon Microbiology*. Springer-Verlag, Berlin, Heidelberg, New York. Accepted.
- Harms H., K. E. C. Smith, and L. Y. Wick.** Cellular ecophysiology: accessing and exploiting the resources. Microorganism:Hydrophic Compound Interactions In: K. Timmis et al. (eds.) *Handbook of Hydrocarbon Microbiology*. Springer-Verlag, Berlin, Heidelberg, New York. Accepted.
- Harms H., and L. Y. Wick.** Determining the tendency of microorganisms to interact with hydrocarbon phases. In: K. Timmis et al. (eds.) *Handbook of Hydrocarbon Microbiology*. Springer-Verlag, Berlin, Heidelberg, New York. Accepted.

- Busam, S., M. McNabb, A. Wackwitz, W. Senevirathna, S. Beggah, J. R. van der Meer, M. Wells, U. Breuer, and H. Harms.** 2007. Artificial neural network study of whole-cell bioreporter response determined using fluorescence flow cytometry. *Anal. Chem.* 79: 9107-9114.
- Lara, E., C. Berney, H. Harms, and A. Chatzinotas.** 2007. Cultivation-independent analysis reveals a shift in ciliate 18S rRNA gene diversity in a polycyclic aromatic hydrocarbon-polluted soil. *FEMS Microbiol. Ecol.* 62: 365-373.
- Simple, K. T., K. J. Doick, L. Y. Wick, and H. Harms.** 2007. Microbe-contaminant interactions in soil: definitions, processes and measurements. *Environ. Poll.* 150: 166-176.
- Schäfer F., U. Breuer, D. Benndorf, M. von Bergen, H. Harms, and R. H. Müller.** 2007. Growth of *Aquicola tertiaricarbonis* L108 on *tert*-butyl alcohol results in the induction of a phthalate dioxygenase-related protein and its associated oxidoreductase subunit. *Eng. Life Sci.* 7: 512 – 519.
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- Achilles, J., C. Repenning, H. Harms, F. Stahl, and S. Müller.** 2007. Physiology of living individual *Saccharomyces cerevisiae* cells - Investigation on cellular and molecular level. *Cytometry A* 71A:760.
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- Shi, L., S. Günther, T. Hübschmann, L. Y. Wick, H. Harms, and S. Müller.** 2007. Limits of propidium iodide (PI) as a cell viability indicator for environmental bacteria. *Cytometry A* 71: 592 – 598.
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- Schubert, T., T. Maskow, D. Benndorf, H. Harms, and U. Breuer.** 2007. Continuous synthesis and excretion of the compatible solute ectoine by a transgenic non-halophilic bacterium. *Appl. Environ. Microbiol.* 73: 3343-3347.
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