

Publications of Marcell Nikolausz

Peer Reviewed Scientific Papers

- Cichocka, D., **Nikolausz, M.**, Haest, P.J., Nijenhuis, I. (2010) Tetrachloethene conversion to ethene by a Dehalococcoides-containing enrichment culture from Bitterfeld. *FEMS Microbiol. Ecol.* **72**(2):297-310.
- Imfeld, G., Aragonés, C.E., Fetzer, I., Mészáros, É., Zeiger, S., Nijenhuis, I., **Nikolausz, M.**, Delerce, S., Richnow, H-H. (2010) Characterization of microbial communities in the aqueous phase of a constructed model wetland treating 1,2-dichloroethene-contaminated groundwater. *FEMS Microbiol. Ecol.* **72**(1):74-88.
- Jousset, A., Lara, E., **Nikolausz, M.**, Harms, H. and Chatzinotas, A. (2010) Application of the denaturing gradient gel electrophoresis (DGGE) technique as an efficient diagnostic tool for ciliate communities in soil. *Sci. Total Env.* **408**(5):1221-1225.
- Franchini, A. G., **Nikolausz, M.*** and Kästner, M.(2009) Sequence Specific Primer Extension RNA Analysis (SeSPERA) for the investigation of substrate utilization of microbial communities. *J. Microbiol. Meth.* **79**:111-113.
- Nikolausz, M.***, Chatzinotas, A., Palatinszky, M., Imfeld, G., Táncsics, A. and Kästner, M. (2009) Evaluation of single-nucleotide primer extension for detection and typing of phylogenetic markers used for the investigation of microbial communities. *Appl. Environ. Microbiol.* **75** (9):2850-2860.
- Hall, M. J. R., Adams, Z. J. O., Wyatt, N. P., Testa, J. M., **Nikolausz, M.**, Farkas, R. and Ready, P. D. (2009) Morphological and mitochondrial DNA characters for identification and phylogenetic analysis of the myiasis-causing flesh fly *Wohlfahrtia magnifica* and its relatives, with a description of *Wohlfahrtia monegrosensis* sp. n. Wyatt & Hall. *Med. Vet. Entomol.* **23**: 59-71.
- Nikolausz, M.***, Chatzinotas, A., Palatinszky, M., Imfeld, G., Táncsics, A. and Kästner M. (2009) The single-nucleotide primer extension (SNuPE) method for the multiplex detection of various DNA sequences: from detection of point mutation to microbial ecology. *Biochem. Soc. Trans.* **37**: 454-459.
- Liu, Y., **Nikolausz, M.**, Wang, X. C. (2009) Biodegradation and detoxication of phenol by using free and immobilized cells of *Acinetobacter* sp. XA05 and *Sphingomonas* sp. FG03. *J. Environ. Sci. Health, Part A.* **44** (2): 130-136.
- Bailón, L., **Nikolausz, M.**, Kästner, M., Veiga, M. C. and Kennes C. (2009) Removal of dichloromethane from waste gases in one- and two-liquid-phase stirred tank bioreactors and biotrickling filters. *Water Res.* **43** (1): 11-20.
- Liu, Y., **Nikolausz, M.**, Jin, P. K. (2008) Abundance and diversity of sulphate-reducing bacteria within a crude oil gathering and transferring system in China. *Ann. Microbiol.* **58** (4): 611-615.
- Nikolausz, M.***, Kappelmeyer, U., Székely, A., Rusznyák, A., Márialigeti, K. and Kästner M. (2008) Diurnal redox fluctuation and microbial activity in the rhizosphere of wetland plants. *Eur. J. Soil. Biol.* **44**: 324-333.
- Imfeld, G., Nijenhuis, I., **Nikolausz, M.**, Zeiger, S., Paschke, H., Drangmeister, J., Grossmann, J., Richnow H-H. and Weber S. (2008) Assessment of in situ degradation of chlorinated ethenes and bacterial community structure in a complex contaminated groundwater system. *Water Res.* **42** (4-5): 871-882.
- Nikolausz, M.***, Chatzinotas, A., Palatinszky, M., Imfeld, G., Martinez, P. and Kästner M. (2008) A single-nucleotide primer extension assay for the detection and typing of *Dehalococcoides* sequences. *Appl. Environ. Microbiol.* **74**: 300-304.
- Nikolausz, M.***, Palatinszky, M., Rusznyak, A., Richnow, H-H., Kappelmeyer, U., Kästner, M. (2007) Novel approach using substrate-mediated radiolabelling of RNA to link

- metabolic function with the structure of microbial communities. *FEMS Microb. Lett.* **274**: (1): 154-161.
- Sipos, R., Székely, A. J., Palatinszky, M., Révész, S., Márialigeti, K., **Nikolausz, M.*** (2007) Effect of primer mismatch, annealing temperature and PCR cycle numbers on 16S rRNA gene targeting bacterial community analysis. *FEMS Microbiol. Ecol.* **60**: 341-350.
- Nijenhuis, I., **Nikolausz, M.**, Köth, A., Felföldi, T., Weiss, H., Drangmeister, J., Großmann, J., Kästner, M., Richnow H-H. (2007) Assessment of the natural attenuation of chlorinated ethenes in an anaerobic contaminated aquifer in the Bitterfeld/Wolfen area using stable isotope techniques, microcosm studies and molecular biomarkers. *Chemosphere.* **67**: 300-311.
- Nikolausz, M.**, Nijenhuis, I., Ziller, K., Richnow, H-H., Kästner, M. (2006) Stable carbon isotope fractionation during degradation of dichloromethane by methylotrophic bacteria. *Environ. Microbiol.* **8**(1):156-164.
- Nikolausz, M.***, Kappelmeyer, U., Nijenhuis, I., Ziller, K., Kästner, M. (2005) Molecular characterization of dichloromethane-degrading *Hyphomicrobium* strains using 16S rDNA and DCM dehalogenase sequences. *Syst. Appl. Microbiol.* **28**:582-587.
- Vacca, G., Wand, H., **Nikolausz, M.**, Kuschik, P., Kästner, M. (2005) Effect of plants and filter materials on microbial communities in pilot-scale constructed wetlands. *Water Res.* **39** (7): 1361-1373.
- Nikolausz, M.***, Sipos, R., Révész, S., Székely, A., Márialigeti, K. (2005) Observation of bias associated with re-amplification of DNA isolated from denaturing gradient gels. *FEMS Microbiol. Lett.* **244** (2): 385-390.
- Nikolausz, M.**, Kovács, G., Márialigeti, K. (2004) Comparison of RNA- and DNA-based species diversity investigations in rhizoplane bacteriology with respect to chloroplast sequence exclusion. *J. Microbiol. Meth.* **56**:365-373.
- Micsinai, A., Borsodi, A., Csengeri, V., Oravecz, O., **Nikolausz, M.**, Reskóné, M. N., Márialigeti, K. (2003) Seasonal differences in the rhizome-associated bacterial community structure of healthy and declining reed stands in Lake Velencei, Hungary. *Hydrobiologia* **506-509**: 707-713.
- Sréter, T., Egyed, Zs., Széll, G., Kovács, G., **Nikolausz, M.**, Márialigeti K., and Varga, I. (2000) Morphologic, host specificity and generic characterization of a european *Cryptosporidium andersoni* isolate. *J. Parasitol.* **86**:1244-1249.

* Marcell Nikolausz was correspondent author of these articles