

BIOGRAPHY

10 February 2013.



Title and name

Prof. Dr. Karl-Heinz Engel

Nationality

German

Panel

CEF - Food contact materials, enzymes, flavourings and processing aids.

Education

Food Chemistry, Technische Universität Karlsruhe (1979)

Dr. rer. nat., Technische Universität Berlin (1984)

Scientific and risk assessment experience

- Food chemistry; Food technology; Food analysis
 - Analysis of food volatiles; Separation and sensory assessment of stereoisomers
 - Metabolite profiling of crops; Analysis of phytosterols/phytosteryl esters
 - Enzyme-catalyzed biotransformations
 - Extensive experience in risk assessment, particularly in the field of flavourings and novel foods/
novel food ingredients
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Main scientific publications

More than 250 scientific papers in international Journals and Books. Examples of papers are:

H. Wakabayashi, M. Wakabayashi, W. Eisenreich, K.-H. Engel

Stereoselectivity of the generation of 3-mercaptohexanal and 3-mercaptohexanol by lipase-catalyzed hydrolysis of 3-acetylthioesters.

J. Agric. Food Chem. 51, 4349-4355 (2003)

E. Takahisa, K.-H. Engel 2,3-Di-*O*-methoxymethyl-6-*O*-*tert*-butyldimethylsilyl- β -cyclodextrin, a useful stationary phase for gas chromatographic separation of enantiomers.

J. Chromatogr. A 1076, 148-154 (2005)

H. Strohalm, M. Dregus, A. Wahl, K.-H. Engel Enantioselective analysis of secondary alcohols and their esters in purple and yellow passion fruits.

J. Agric. Food Chem. 55, 10339-10344 (2007)

H. Strohalm, S. Dold, K. Pendzialek, M. Weiher, K.-H. Engel Preparation of Passion Fruit-Typical 2-Alkyl Ester Enantiomers via Lipase-Catalyzed Kinetic Resolution.

J. Agric. Food Chem. 58, 6328-6333 (2010)

- M. Wakabayashi, H. Wakabayashi, W. Eisenreich, Y. Morimitsu, K. Kubota, K.-H. Engel** Determination of the absolute configurations of 4-mercapto-2-alkanones using the ^1H NMR anisotropy method and enzyme-catalyzed kinetic resolution of the corresponding 4-acetylthio-2-alkanones.
Eur. Food Res. Technol. 232, 753-760 (2011)
- A. Barnsteiner, T. Lubinus, A. di Gianvito, W. Schmid, K.-H. Engel** GC-Based Analysis of Plant Stanol Fatty Acid Esters in Enriched Foods.
J. Agric. Food Chem. 59, 5204-5214 (2011)
- A. Barnsteiner, R. Esche, A. di Gianvito, E. Chiavaro, W. Schmid, K.-H. Engel** Capillary gas chromatographic analysis of complex phytosteryl/-stanol ester mixtures in enriched skimmed milk-drinking yoghurts.
Food Control 27, 275-283 (2012)
- R. Esche, A. Barnsteiner, B. Scholz, K.-H. Engel** Simultaneous analysis of free phytosterols/-stanols and intact phytosteryl/-stanol fatty acid and phenolic acid esters in cereals.
J. Agric. Food Chem. (2012)
- Lubinus T., Barnsteiner A., Skurk T., Hauner H., Engel K.-H.** Fate of dietary phytosteryl/-stanol esters: analysis of individual intact esters in human feces.
Eur. J. Nutr., published online (2012)
- Schmarr H.G., K.-H. Engel** Analysis and stereodifferentiation of linalool in *Theobroma cacao* and cocoa products using enantioselective multidimensional gas chromatography.
Eur. Food Res. Technol. 235: 827-834 (2012)
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