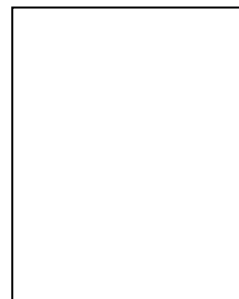


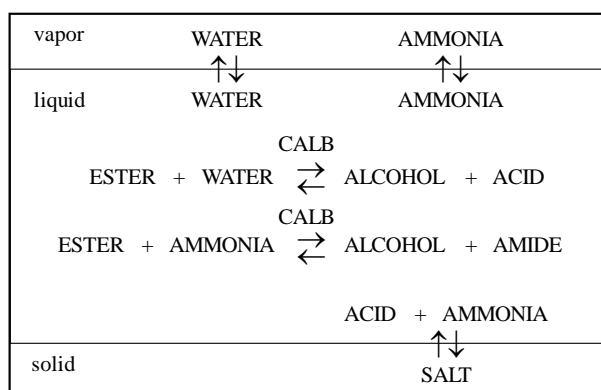
Engineering of lipase-catalysed conversions in organic solvents containing ammonium salts

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Description

This work aimed to contribute to a quantitative understanding of lipase-catalyzed reactions in organic solvents containing amines or ammonia. The main focus was on the thermodynamic possibilities, using Novozym 435, an immobilized preparation of *Candida antarctica* lipase B (CALB).



Dissertation

M.J.J. Litjens, Engineering of lipase-catalysed conversions in organic solvents containing ammonium salts. PhD thesis, Delft University of Technology, 2000.

<http://resolver.tudelft.nl/uuid:4aba43e5-2f0f-45e8-98a7-a130952843ad>

Publications from the dissertation

1. M.J.J. Litjens, A.J.J. Straathof, J.A. Jongejan and J.J. Heijnen. Synthesis of primary amides by lipase-catalyzed amidation of carboxylic acids with ammonium salts in an organic solvent. [Chem. Commun. \(1999\) 1255-1256](#).
2. M.J.J. Litjens, A.J.J. Straathof, J.A. Jongejan and J.J. Heijnen. Exploration of lipase-catalyzed amidation of free carboxylic acids with ammonia in organic solvents. [Tetrahedron, 55 \(1999\) 12411-12418](#).
3. M.J.J. Litjens, A.J.J. Straathof, J.A. Jongejan and J.J. Heijnen, Competitive lipase-catalyzed ester hydrolysis and ammoniolysis in organic solvents; equilibrium model of solid-liquid-vapor system, [Biotechnol. Bioeng., 65 \(1999\) 347-356](#).
4. M.J.J. Litjens, A.J.J. Straathof, J.A. Jongejan and J.J. Heijnen, Diffusion limitation causes decreased enantioselectivity of esterification of 2-butanol by immobilized *Candida antarctica* lipase B, [Biocatal. Biotransform. 19 \(2001\) 1-19](#).
5. M.J.J. Litjens, A.J.J. Straathof, J.A. Jongejan and J.J. Heijnen, Primary amide synthesis from carboxylic acids with a lipase, [WO 00585490](#)