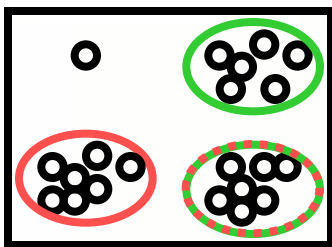


Q&T research group nominated
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Publications with peer review:

- A. Conesa, R. Bro, F. García-García, J.M. Prats, S. Götz, K. Kjeldahl, D. Montaner and J. Dopazo. Direct functional assessment of the composite phenotype through multivariate projection strategies. *Genomics* **92**:373–383, 2008.
- J.M. Amigo, C. Ravn, N.B. Gallagher and R. Bro. A comparison of a common approach to partial least squares-discriminant analysis and classical least squares in hyperspectral imaging. *International Journal of Pharmaceutics* **373**:179–182, 2009.
- H. Hausner, M. Philipsen, T. Skov, M.A. Petersen and W.L.P. Bredie. Characterization of the volatile composition and variations between infant formulas and mother's milk. *Chemosensory Perception* **2**(2):79–93, 2009.
- T. Skov, J.C. Hoggard, R. Bro and R.E. Synovec. Handling within run retention time shifts in two-dimensional chromatography data using shift correction and modeling. *Journal of Chromatography A* **1216**(18):4020–4029, 2009.
- M.J. Sánchez-Martín, J.M. Amigo, M. Pujol, I. Haro, M.A. Alsina and M.A. Busquets. Fluorescence study of the dynamic interaction between E1 (145–162) sequence of hepatitis GB virus C and liposomes. *Anal Bioanal Chem* **394**:1003–1010, 2009.
- M.R. Hansen, A. Blennow, S. Pedersen and S.B. Engelsen. Enzyme modification of starch with amyloamylase results in increasing gel melting point. *Carbohydrate Polymers* **78**:72–79, 2009.
- M.T. Osorio, J.M. Zumalacárregui, R. Alaiz-Rodríguez, R. Guzman-Martínez, S.B. Engelsen and J. Mateo. Differentiation of perirenal and omental fat quality of suckling lambs according to the rearing system from Fourier transforms mid-infrared spectra using partial least squares and artificial neural networks analysis. *Meat Science* **83**:140–147, 2009.
- N.J. Christensen, S.M.T. Leitão, M.A. Petersen, B.M. Jespersen and S.B. Engelsen. A quantitative structure-property relationship study of the release of some esters and alcohols from barley and oat β -glucan matrices. *J. Agric. Food Chem* **57**:4924–4930, 2009.
- C. Cairós, J.M. Amigo, R. Watt, J. Coello and S. MasPOCH. Implementation of enhanced correlation maps in near infrared chemical images: Application in pharmaceutical research. *Talanta* **79**:657–664, 2009.
- K. Naelapää, M. Allesø, H.G. Kristensen, R. Bro, J. Rantanen and P. Bertelsen. Increasing process understanding by analyzing complex interactions in experimental data. *Journal of Pharmaceutical Sciences* **98**(5):1852–1861, 2009.



Other publications:

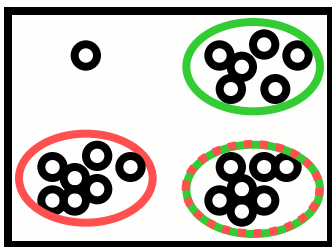
- P.I. Hansen, J-L. Putaux, A. Blennow and S.B. Engelsen. Ch. 5: Nano-crystal platelets of A- and B-type starches - a preliminary study. In: *Selected investigations in the field of starch science*. V.P. Yuryev, P. Tomasik, A. Blennow, L. Wasserman and G.E. Zaikov (Eds.) Nova Science Publishers, NY, ISBN 978-1-60456-950-6, 41-50, 2008.
- G. Tomasi and R. Bro. Multilinear Models: Iterative Methods. In: *Comprehensive Chemometrics*. S. Brown, R. Tauler, R. Walczak (Eds.) Elsevier, Oxford, Vol. 2, 411-451, 2009.
- L Munck. Breeding for quality traits in cereals: A revised outlook on old and new tools for integrated breeding. In: *Cereals (Handbook of Plant Breeding)*. M.J. Carena (Ed.) Springer Science + Business Media, 333-367, 2009.
- N. Viereck, T. Salomonsen T, F. vd. Berg and S.B. Engelsen. Ch. 8: Raman applications in food analysis. In: *Raman Spectroscopy for Soft Matter Applications*, M.S. Amer (Ed.) John Wiley & Sons Inc., USA, 199-223, 2009.
- F. Savorani, F. Capozzi, S.B. Engelsen, M.T. Dell'Abate and P. Sequi. Pomodoro di Pachino: An authentication study using ¹H NMR and chemometrics - Protecting its P.G.I. European certification. In: *Magnetic Resonance in Food Science: Challenges in a Changing World*. M. Guðjónsdóttir, P.S. Belton and G.A. Webb (Eds.) The Royal Society of Chemistry, UK, ISBN 9780854041176, 158-166, 2009.
- T. Salomonsen, H.M. Jensen, F.H. Larsen and S.B. Engelsen. The quantitative impact of water suppression on NMR spectra for compositional analysis of alginates. In: *Magnetic Resonance in Food Science: Challenges in a Changing World*. M. Guðjónsdóttir, P.S. Belton and G.A. Webb (Eds.) The Royal Society of Chemistry, UK, ISBN 9780854041176, 12-19, 2009.
- N. Viereck, H. Winning, H.F. Seefeldt and S.B. Engelsen. ¹H HR MAS NMR: Profiling metabolites in single cereal kernels (of wheat and barley). In: *Magnetic Resonance in Food Science: Challenges in a Changing World*. M. Guðjónsdóttir, P.S. Belton and G.A. Webb (Eds.) The Royal Society of Chemistry, UK, ISBN 9780854041176, 29-36, 2009.
- T. Salomonsen, S.B. Engelsen, L. Nørgaard and R. Bro, Det Kemometriske Rum – Kemometrisk kvalitetskontrol af alginat – et eksempel fra den virkelige verden, *Dansk Kemi* (2009), **90**(4), 28-29.
- T. Skov, K. Kjeldahl, S.B. Engelsen, R. Bro and L. Nørgaard, Det Kemometriske Rum – Eksplorativ evaluering af samspillet mellem dioxin og fede syrer i fiskemel, *Dansk Kemi* (2009), **90**(5), 40-41.

PhD defence:

Tina Salomonsen (Industrial PhD in collaboration with Danisco) – Alginate Composition by Solid-State Spectroscopy and Chemometrics. Supervisors: SB Engelsen & FH Larsen – 19.6.09

MSc defence:

Eva Marie Lange – Spectroscopic Analysis of Complex Mixtures of Hydrocolloids. Supervisor: N Viereck – 25.5.09



Q&T NEWS

Staff:

Solveig Warnecke (Apr 09 – Mar 12) PhD student - Introduction of new fluorescence and Raman spectroscopy based PAT tools. Supervisors: Å Rinnan & SB Engelsen

Lek-Heng Lim (Jun – Sept 09) – post doc - Mathematical models and numerical algorithms for cancer metabonomics

Klavs Sørensen – from June 09 – part-time consultant

Hanne Winning - on maternity leave since the beginning of April

Anja Niehues Birch - on maternity leave since the end of June

Guest Researchers:

Juan Fernandez-Novales (Feb – May) - PhD student from the University of Cordoba, Spain - The feasibility of using UV-VIS-NIR spectroscopy to predict quality parameters during grape ripening, wine making and aging of wine – working with F vd Berg

Raquel Callejon (Mar) – Post doc from University of Seville, Spain – aroma analysis – working with MA Petersen, J Amigo & M Popielarz

Courses:

Beer Production – blocks 3 & 4 - 20 participants. BM Jespersen

Aroma and Instrumental Quality Analysis of Processed Plant Foods – blocks 3 & 4 – 32 participants. MA Petersen

Process Analytical Technology – blocks 3 & 4 – 9 participants. F vd Berg

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