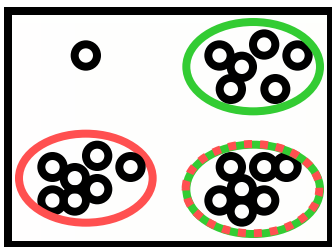


**Q&T in charge of a new strategic research center  
CHANCE (CHEMOMETRIC ANALYSIS CENTRE)  
with the aim of disseminating chemometric and multivariate  
statistical tools to the entire faculty**

**Publications with peer review:**

- E Tønning, AK Thybo, L Pedersen, L Munck, Å Hansen, FA Tøgersen, SB Engelsen and L Nørgaard. Bulk Functionality Diversification by Unsupervised Single-Kernel Near-Infrared (SKNIR) Sorting of Wheat. *Cereal Chemistry* **86**(6):706–713, 2009.
- Å Rinnan, Fvd Berg and SB Engelsen. Review of the most common pre-processing techniques for near-infrared spectra. *Trends in Analytical Chemistry* **28**(10): 1201-1222, 2009.
- H Winning, E Roldán-Marín, LO Dragsted, N Viereck, M Poulsen, C Sánchez-Moreno, MP Cano and SB Engelsen. An exploratory NMR nutri-metabonomic investigation reveals dimethyl sulfone as a dietary biomarker for onion intake. *Analyst* **13**: 2344–2351, 2009.
- J Cruz, M Bautista, JM Amigo and M Blanco. Nir-chemical imaging study of acetylsalicylic acid in commercial tablets. *Talanta* **80**: 473–478, 2009.
- NH Andersen, NJ Christensen, PR Lassen, TB Freedman, LA Nafie, K Strømgård and LBS Hemmingsen. Structure and Absolute Configuration of Ginkgolide B Characterized by IR- and VCD Spectroscopy. *Chirality* 1-7, 2009.
- JA Andersson, CA Andersson and RJN Frandsen. Applying Parallel Factor Analysis models to HPLC diode array detector datasets reveals strain dependent regulation of polyketide biosynthesis in *Fusarium graminearum*, *Fusarium culmorum* and *Fusarium pseudograminearum*. *Analytica Chimica Acta* **647**: 243-248, 2009.
- BK Ko, HJ Ahn, Fvd Berg, CH Lee and YS Hong. Metabolomic Insight into Soy Sauce through 1H NMR Spectroscopy. *Journal of Agricultural and Food Chemistry* **57**: 6862–6870, 2009.
- JE Lee, GS Hwang, Fvd Berg, CH Lee and YS Hong. Evidence of vintage effects on grape wines using 1H NMR-based metabolomic study. *Analytica Chimica Acta* **648**: 71–76, 2009.
- HS Son, GS Hwang, KM Kim, EY Kim, Fvd Berg, WM Park, CH Lee and YS Hong. 1H NMR-Based Metabolomic Approach for Understanding the Fermentation Behaviors of Wine Yeast Strains. *Analytical Chemistry* **81**(3): 1137–1145, 2009.
- HS Son, GS Hwang, KM Kim, HJ Ahn, WM Park, Fvd Berg, YS Hong and CH Lee. Metabolomic Studies on Geographical Grapes and Their Wines Using 1H NMR Analysis Coupled with Multivariate Statistics. *Journal of Agricultural and Food Chemistry* **57**: 1481–1490, 2009.
- MW Nørager, R Bro, F Marini, EV Høgdall, CK Høgdall, L Nedergaard and NHH Heegaard. Feasibility of Serodiagnosis of Ovarian Cancer by Mass Spectrometry. *Analytical Chemistry* **81**(5): 1907–1913, 2009.
- R Bro, RA Harshman, ND Sidiropoulos and ME Lundy. Modeling multi-way data with linearly dependent loadings. *Journal of Chemometrics* **23**: 324–340, 2009.
- SW Bruun, J Holm, SI Hansen, CM Andersen and L Nørgaard. A chemometric Analysis of Ligand-Induced Changes in Intrinsic Fluorescence of Folate Binding Protein Indicates a Link Between Altered Conformational Structure and Physico-Chemical Characteristics. *Applied Spectroscopy* **63**(12): 1315-1322, 2009
- NPK Nielsen, L Nørgaard, BW Strobel and C Felby. Effect of storage on extractives from particle surfaces of softwood and hardwood raw materials for wood pellets. *European Journal of Wood Production* **67**: 19–26, 2009.



## Other publications:

- L Munck and BM Jespersen. *The Multiple uses of Barley Endosperm Mutants in Plant Breeding for Quality and for revealing Functionality in Nutrition and Food Technology*. In: Induced Plant Mutations in the Genomics Area, QY Sun (Ed.). Food and Agriculture Organisation of the United Nations, Rome, Italy, 182-186, 2009.
- L Munck and BM Jespersen. *From discovery of High Lysine Barley Endosperm Mutants in the 1960-70s to new Holistic Spectral Models of the Phenome and of Pleiotropy in 2008*. In: Induced Plant Mutations in the Genomics Area, QY Sun (Ed.) Food and Agriculture Organisation of the United Nations, Rome, Italy, 419-422, 2009.
- L Nørgaard, SB Engelsen and R Bro. Klassifikation med Partial Least Squares-Diskriminant Analyse. *Dansk Kemi* **90**(10):31-32, 2009.

## Media

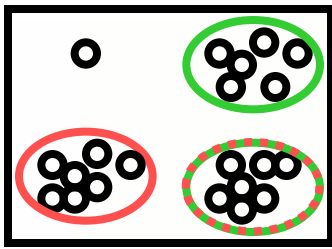
- L S Jensen. Fedmeforskning i verdensklasse. *FoodCulture* 26:09:15, 2009.
- Å Rinnan. Modellering af molekyler kan hjælpe ved transplantationer. LIFE-Klumme, September 2009 [http://www.foodoflife.dk/Projects/foodoflife/Artikler/Klumme\\_14](http://www.foodoflife.dk/Projects/foodoflife/Artikler/Klumme_14)

## Staff:

- Signe Hoff** (Nov 09 – Oct 12) PhD student - The influence of kilning on malt aroma and beer stability. Supervisors: BM Jespersen, MA Petersen and M Lametch
- Lotte Bøge Sørensen** (Dec 09 – Nov 12) PhD student - Process Analytical Technology – Development of Novel Monitoring Systems for Food Fermentation Processes. Supervisors: Fvd Berg and R Bro
- Åsmund Rinnan** is on paternity leave
- Karin Kjeldahl** is on maternity leave.
- Mette Skau Nielsen** is on maternity leave.
- Anja Niehues** is on maternity leave.

## PhD defence:

- Niels Johan Christensen** - Molecular Structure and Functionality of Health Promoting Molecules in Food - with emphasis on  $\beta$ -glucan. Supervisors: SB Engelsen and L Hemmingsen – 23.11.09



## MSc defences:

**Eva Wegscheider** – Identification and assessment of antifungal activity and metabolites of HOLDBAC™ YM". Supervisors: S Knøchel and N Viereck – 23.10.09

**Kristian Jørgensen** - NIR inline monitoring of a medical device manufacturing process. Supervisors: R Bro and C Thirstrup – 04.11.09

**Gülsüm Mutaf** - Microparticulated whey protein for yoghurt. Supervisors: FH Larsen and RH Ipsen – 27.05.09

**Signe Hoff** - Influence of alpha-amylases on the staling process in wheat bread and in a wheat starch model system. Supervisors: SB Engelsen, BM Jespersen, MM Engelsen, K Olsen and H Østdal – 26.08.09

## Courses:

**Fødevarergrundkursus** – Blocks 1 & 2. 64 participants. SB Engelsen, MA Petersen & BP Møller

**Mad og Samfund** – Blocks 1 & 2. 48 participants. Å Hansen & G Lerche

**Quantitative Food Spectroscopy** – Block 2. 13 Participants. FH Larsen, SB Engelsen & N Viereck

**ODIN – Introduction to Data Fusion** – Oct. 26-27 2009. 8 participants. Jv Frese

**ODIN – NIR spectroscopy** – Oct. 22 2009. 11 participants. SB Engelsen & Fvd Berg

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