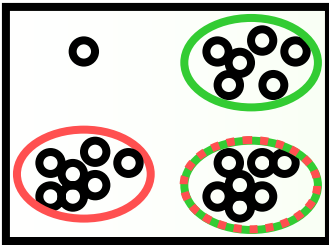


At the 9th Scandinavian Symposium on Chemometrics in Reykjavik, August 2005, Erik Tønning was awarded the Sampling Prize from Q-Interline for his oral presentation and Hanne Winning Iepsen won the prize for the best poster.

New publications:

- S.B. Engelsen, P.S. Belton and H.J. Jacobsen (Eds.) *Magnetic Resonance in Food Science: The multivariate challenge*, The Royal Society of Chemistry, Cambridge, UK (2005), ISBN 0-85404-648-8.
- R. Bro, Hansen, P.I., Viereck, N., Dyrby, M., Pedersen, H.T. and S.B. Engelsen, A new principle for unique spectral decomposition of 2D NMR data. In *Magnetic Resonance in Food Science: The multivariate challenge* (Eds. Engelsen, S.B., Belton, P.S. and Jacobsen, H.J.), The Royal Society of Chemistry, UK (2005), 195-203.
- F.v.d.Berg, G. Tomasi and N. Viereck. Warping: Investigation of NMR pre-processing and correction. In *Magnetic Resonance in Food Science: The multivariate challenge* (Eds. Engelsen, S.B., Belton, P.S. and Jacobsen, H.J.), The Royal Society of Chemistry, UK (2005), 131-138.
- J. Christensen, E. Miquel Becker and C.S. Frederiksen. Fluorescence Spectroscopy and PARAFAC in analysis of yogurt. *Chemom.Intell.Lab.Syst.* **75** (2), 201-208, 2005.
- Å. Hansen. & P. Schieberle. (2005). Generation of aroma compounds during sourdough fermentation - applied and fundamental aspects. *Trends in Food Science and Technology.* **16**, 85-94.
- R. Bro, A. Rinnan, and N. M. Faber. Standard error of prediction for multilinear PLS - 2. Practical implementation in fluorescence spectroscopy. *Chemom.Intell.Lab.Syst.* **75** (1):69-76, 2005.
- S. Gourvéneq, G. Tomasi, C Durville, E. Di Crescenzo, C. A. Saby, D. L. Massart, R. Bro, and G. Oppenheim. CuBatch, a MATLAB interface for n-mode data analysis. *Chemom.Intell.Lab.Syst.* **77**:122-130, 2005.
- A. Rinnan, K. Booksh, and R. Bro. First order Rayleigh as a separate component in the decomposition of fluorescence landscapes. *Anal.Chim.Acta* **537**:349-358, 2005.
- T. Skov and R. Bro. A new approach for modelling sensor based data. *Sensors and Actuators B Chemical* **106** (2):719-729, 2005.
- J. Christensen, AM Ladefoged, L Nørgaard. Rapid determination of bitterness in beer using fluorescence spectroscopy and chemometrics - autofluorescence and europium-induced delayed fluorescence, *Journal of the Institute of Brewing*, **111**(1): 3-10, 2005.
- R Leardi, L Nørgaard. Sequential application of backward interval PLS and Genetic Algorithms for the selection of relevant spectral regions, *Journal of Chemometrics*, **18**(11): 486-497, 2004.
- M. Petersen, M. Dyrby, S. Toubro, S.B. Engelsen, L Nørgaard, H.T. Pedersen and J. Dyerberg. Quantification of lipoprotein subclasses by proton nuclear magnetic resonance-based partial least-squares regression models. *Clinical Chemistry* **51**:8, 1457-1461, 2005.
- M. Mortensen, A.K. Thybo, H.C. Bertram, H.J. Andersen and S.B. Engelsen, Cooking effects on water distribution and mobility in potatoes using NMR relaxation, *Journal of Agricultural and Food Chemistry* (2005), **53**(15), 5976-5981.
- A. Blennow, B. Wischmann, K. Houborg, T. Ahmt, K. Jørgensen, S.B. Engelsen, O. Bandsholm and P. Poulsen, Structure function relationships of starch with engineered phosphate substitution and starch branching, *International Journal of Biological Macromolecules* (2005), **36**(3), 159-168.
- N. Viereck, M. Dyrby and S.B. Engelsen, Monitoring Thermal Processes by NMR Technology in *Emerging Technologies for Food Processing*, Academic Press, Elsevier, London (2005), ISBN 0-12-676757-2, pp. 553-575.



- GS Nielsen; L Poll. Influence of slice thickness and blanching on formation of aroma compounds during frozen storage of leek (*Allium ampeloprasum* Var. *Bulga*) slices. In: *State-of-the-art in flavour chemistry and biology. Proceedings of the 7th Wartburg Symposium*; Eds.: Hofmann T.; Rothe M.; Schieberle P. Kempten, Germany: AZ Druckerei und Datentechnik GmbH., 2005, 513-517.
- S. Casani, T.B. Hansen, J. Christensen and S. Knøchel. Comparison of methods for assessing reverse osmosis membrane treatment of shrimp process water. *J. Food Protection*, **68** (4), 801-807, 2005.
- H.C. Bertram, N.B. Kristensen, A. Malmendal, N.C. Nielsen, R. Bro, H.J. Andersen and D.L. Harmon. A metabolomic investigation of splanchnic metabolism using ¹H NMR spectroscopy of bovine blood plasma. *Anal.Chim.Acta* **536**, 1-6, 2005.
- S. Jacobsen, I. Søndergaard, B. Møller, T. Desler and L. Munck. A chemometric evaluation of the physical and chemical patterns that support near infrared spectroscopy of barley seeds as a tool for explorative classification of endosperm genes and gene combinations. *J. Cereal Sci.*, **42**(3), 281-299, 2005.
- C. Warming, M.L. Andersen and L. Poll. Comparison of Tenax TA and Tenax GR as adsorbent materials for headspace sampling of black currant juice aroma. In: *State-of-the-art in flavour chemistry and biology. Proceedings of the 7th Wartburg Symposium*; Eds.: Hofmann T.; Rothe M.; Schieberle P. Kempten, Germany: AZ Druckerei und Datentechnik GmbH., 2005, 373-377.

New projects:

BEST (KVL Biomedicine strategy) (Local coordinator: Søren B. Engelsen, KVL) sponsored by The Royal Veterinary and Agricultural University (Q&T: 1.5 MKr. 2005-2008)

Media and press:

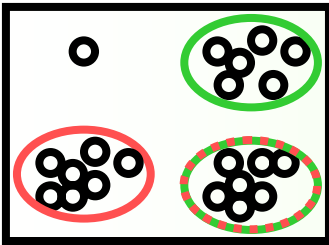
Populærvideenskabelig artikel publiceret på internettet i forbindelse med et stormøde "Oprør fra maven" d. 8. marts 2005
http://www.oproerframaven.dk/download/Om_mel_og_hvordan.pdf
"Bagere i åben strid om melmix" i JP København d. 12. maj 2005.
"125 år – men rågrødet består". Artikel i *Idétidskriften C* (2) 8-9, 2005.
"At riste brød". *Dansk Kemi*, 86 (6/7), 38-39, 2005.
TV2 Bornholm – 4.8.05 – Om Q&T's kursus om madkultur for internationale studerende. Diskussion af HVID HVEDE. Børsens fødevaretillæg den 1. september 2005.
L.Munck. Levnedsmiddelteknologi som forskningskatalysator. *Plus Proces*, 9, 2, 2005.
V.T. Svensson, R. Bro, H.H. Nielsen and S. Volmer. NIR: Optimerer produktionen af gammeldags modnede sild. *Plus Proces*, 9, 8, 2005.
B. Rasmussen and R. Bro. Ny matematik, gamle præparater – nye muligheder i data mining. *Medicinsk Teknologi*, 3, 26, 2005.
TV -DR1-"Kontant" - 27.9.05 – om vildledende anprisning af hvid hvede

Scientific equipment:

VideoMeterLab 2 (1600x1200x18 VIS/NIR channels)
A ultra rapid DSC instrument is ordered together with IFG (Christian Bender Koch)

Staff & Students:

Jacob Christensen - left our group at the end of July to seek new challenges
Elisabeth Micklander - left our group at the end of September to take up employment down under in New Zealand.
Marie Tholstrup Sejersen - employed for 1½ months during September-October.
Tina Salomonsen - employed for 1½ months during September-October



Q&T NEWS

Guests:

Morteza Bahram from Iran - June-November (Host: Rasmus Bro)

Leticia Andrade from Portugal – August 05-December 06 (Host: Søren B. Engelsen)

Mariona Vinaixa Crevillent from Tarragona, Spain - September-December (Host: Rasmus Bro)

Jurgita Milasauskaite from Lithuania: - October 05-April 06 (Host: Åse Hansen)

Recent events:

Symposium: The 11th Weurman Flavour Research Symposium was held at Comwell Roskilde Conference Center, Denmark, from 21-24 June 2005 (Organizers: Wender Bredie and Mikael Agerlin Petersen)

Symposium: Engineering dietary glucan fibres with nutritional benefits, October 14, 2005, The Royal Veterinary and Agricultural University, Auditorium 1-01, Bülowsvej 17, 9.00-16.30. (Organizers: Birthe Møller Jespersen & Søren B. Engelsen)

Meeting of the Aroma Group on September 21 10.00-12.00 at Årslev (Stine Kreutzmann)
Den 29. september blev afholdt "Kemometri i bredden og dybden" i IDA. Arrangør: Dansk Selskab for Kemometri

Miscellaneous:

Under the auspices of Øresund Summer University Q&T held a 3-week international course in Food Culture in August. 20 participants from 13 countries passed the course.

Rene Christensen defended his master thesis (Exploratory spectroscopic characterisation of milk – NMR, NIR and VIS) 2/5-05. Supervisors: Søren B. Engelsen and Nanna Viereck.

Niels Sommer defended his master thesis (Optimization of PLSR modelling by systematically combining pretreatment methods emphasizing the dependence on replicate type and number applied to diffuse reflectance NIR-spectra of pectins and the degree of esterification) 7&-05. Supervisor: Lars Nørgaard.

Tina Salomonsen and Marie Tholstrup Sejersen defended their master thesis (The mechanisms behind the stability of acidified milk products with pectin) 5/7-05. Supervisors: Søren B. Engelsen, Nanna Viereck & Richard Ipsen.

Karen Reng Thomsen defended her master thesis (Spektroskopi som hurtigmetode til kulhydratbestemmelse i græs) 7/05. Supervisors: Elisabeth Micklander and Lars Nørgaard.