

ISSUE 26 (JANUARY-MARCH 2011)



MIKAEL AGERLIN PEDERSEN AWARDED THE LIFE INNOVATION PRIZE

Together with three colleagues from Food Microbiology (Mogens Jakobsen, Lene Jespersen and Dennis S. Nielsen), Mikael was awarded the LIFE innovation prize for the development of a new fermentation method of cocoa beans that leads to a new and improved chocolate taste and which increases the profit for the Ghanaian chocolate farmers.

NEW ADVANCED TECHNOLOGY FOUNDATION PROJECT TO Q&T

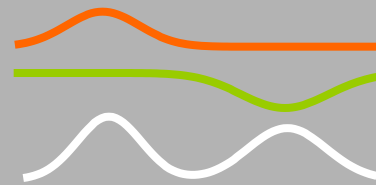
In collaboration with Carometec A/S (Klavs Martin Sørensen), Q&T (Søren Balling Engelsen) are going to develop an on-line method for reliable detection of boar taint in slaughter carcasses which in the long run will eliminate the need for castration of male piglets.



Peer reviewed publications (left-overs from 2010):

E Zamora-Rojas, A Garrido-Varo, F van den Berg, JE Guerrero-Ginel, DC Pérez-Marín. Evaluation of a new local modelling approach for large and heterogeneous NIRS data sets. *Chemometrics and Intelligent Laboratory Systems*. 101 (2), 87-94, 2010.

M Kompany-Zareh, F van den Berg. Determination of an acceptable level of spectral data compression by discrete wavelet transforms. *Analytica Chimica Acta*. 668 (2), 137-142, 2010.



M Kompany-Zareh, F van den Berg. Multi-way based calibration transfer between two Raman spectrometers. *Analyst*. 135 (6), 1382-1388, 2010.

N Møbjerg, FK Vogensen, F van den Berg, DS Nielsen, AS Andreasen, BK Pedersen, WMAF Abu Al-Soud, SJ Sørensen, LH Hansen, M Jakobsen. Gut microbiota in human adults with type 2 diabetes differs from non-diabetic adults. *PLoS ONE*. 5 (2), e9085, 2010.

CM Andersen, R Bro. Variable selection in regression - a tutorial. *Journal of Chemometrics*. 24 (11-12), 728-737, 2010.

S Sæbø, M Martens, HA Martens, VE Vinzi, WW Chin, J Henseler, H Wang. Three-block data modeling by endo- and exo-LPLS regression. Handbook of partial least squares: concepts, methods and applications. In: *Springer Handbooks of Computational Statistics*. 359-379, 2010.

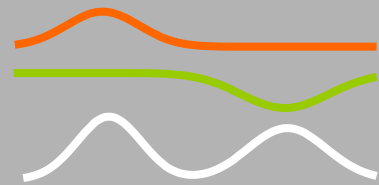
CM Andersen, MB Frøst, N Viereck. Spectroscopic characterization of low- and non-fat cream cheeses. *International Dairy Journal*. 20 (1), 32-39, 2010.

D Dahm, CL Hansen, D Hopkins, K Norris. NIR discussion forum: analysis of coagulating milk. *NIR News*. 21 (5), 16-17, 2010.

N Ratola, JM Amigo, A Alves. Comprehensive assessment of pine needles as bioindicators of PAHs using multivariate analysis: the importance of temporal trends. *Chemosphere*. 81 (11), 1517-1525, 2010.

YM Ardö, C Varming. Bacterial influence on characteristic flavour of cheeses made with mesophilic DL-starter. *Australian Journal of Dairy Technology*. 65 (3), 153-158, 2010.

M Martens, SR Veflingstad, E Plahte, D Bertrand, HA Martens. A sensory scientific approach to visual pattern recognition of complex biological systems. *Food Quality and Preference*. 21 (8), 977-986, 2010.



Peer reviewed publications:

JM Amigo, NG Bastús, R Hoen, S Vázquez-Campos, M Varón, M Royo, V Puentes. Analysis of time-dependent conjugation of gold nanoparticles with an antiparkinsonian molecule by using curve resolution methods. *Analytica Chimica Acta*. 683, 170–177, 2011.

AB Hougaard, JS Vestergaard, C Varming, WLP Bredie, RH Ipsen. Composition of volatile compounds in bovine milk heat treated by instant infusion pasteurisation and their correlation to sensory analysis. *International Journal of Dairy Technology*. 64 (1), 34-44, 2011.

M Hølse, FH Larsen, Å Hansen, SB Engelsen. Characterization of maramba bean (*Tylosema esculentum*) by comparative spectroscopy: NMR, FT-Raman, FT-IR and NIR. *Food Research International*. 44, 373-384, 2011.

JL Pérez-Bernal, JM Amigo, R Fernández-Torres, MA Bello, M Callejón-Mochón. Trace-metal distribution of cigarette ashes as marker of tobacco brands. *Forensic Science International*. 204, 119–125, 2011.

O Marconi, V Sileoni, M Sensidoni, JM Amigo, G Perretti, P Fantozzi. Influence of barley variety, timing of nitrogen fertilisation and sunn pest infestation on malting and brewing. *Journal of the Science of Food Agriculture*. 91, 820–830, 2011.

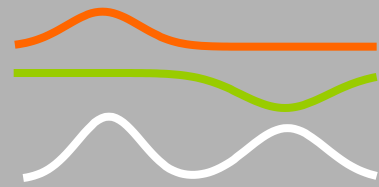
C Durante, R Bro, M Cocchi. A classification tool for N-way array based on SIMCA methodology. *Chemometrics and Intelligent Laboratory Systems*. 106, 73–85, 2011.

R Bro, M Vidal. EEMizer: Automated modeling of fluorescence EEM data. *Chemometrics and Intelligent Laboratory Systems*. 106, 86–92, 2011.

G Picone, SB Engelsen, F Savorani, S Testi, A Badiani, F Capozzi. Metabolomics as a powerful tool for molecular quality assessment of the fish *sparus aurata*. *Nutrients*. 3, 212-227, 2011.

MM Mosele, Å Hansen, M Hansen, A Schulz, HJ Martens. Proximate composition, histochemical analysis and microstructural localization of nutrients in immature and mature seeds of maramba bean (*Tylosema esculentum*) – An underutilised food legume. *Food Chemistry*. 127, 1555–1561, 2011.

S Kreuzmann, M Bassompierre, AK Thybo, L Buch, SB Engelsen. Exploratory Study of Potato Cultivar Differences in Sensory and Hedonistic Applicability Tests. *Potato Research*. 54, 13–28, 2011.



Peer reviewed publications:

LG Rasmussen, F Savorani, TM Larsen, LO Dragsted, A Astrup, SB Engelsen. Standardization of factors that influence human urine metabolomics. *Metabolomics*. 7, 71-83, 2011.

J Wikmana, FH Larsen, MS Motawia, A Blennow, E Bertoft. Phosphate esters in amylopectin clusters of potato tuber starch. *International Journal of Biological Macromolecules*. 48, 639–649, 2011.

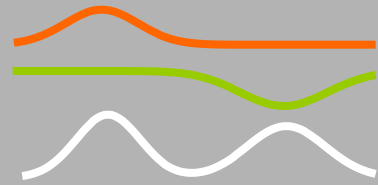
Other publications:

JX Wu, F van den Berg, JM Amigo, J Rantanen. Image analysis as tool in fast stability screening of solid dispersions. *The Electronic Conference on Pharmaceutical Sciences ECPS2011*.

Å Rinnan, SB Engelsen, R Bro. Intervalbaseret klassifikation med iECVA. Det Kemometriske Rum. *Dansk Kemi*, 92 (1-2), 2011.

J Amigo, SB Engelsen, R Bro. Analyse af blandinger med MCR. Det Kemometriske Rum. *Dansk Kemi*. 92 (3), 2011.

J Wikman, A Blennow, FH Larsen, and E Bertoft. The phosphorylation pattern of potato amylopectin clusters. In: Starch. *Recent advances in biopolymer science and technology*. Chapter 6, 83-92, 2010.



Media:

Berlingske, Søren 50 år. 29-01 2011.
JyllandsPosten, Søren 50 år. 30-01 2011
Midtjyllands avis Søren 50 år. 29-01 2011.
Politiken, Søren 50 år. 29-01 2011.

Staff:

Espen Skibsted (PhD with Rasmus – to 31/12-14)
Maider Vidal (Rasmus – 1/1-11 to 31/12-12)
Peter Ibsen Hansen (to 1/6-12)
Christian Bøge Lyndgaard (1/3-11 to 1/3-13)
Evrin Acar (Rasmus – 1/3-11 to 29/2-12)
Rasmus Emil Pedersen (lab trainee 1/2-11 to 31/1-12)
Anna Petersen (lab trainee 1/2-11 to 31/1-12)

Guest Researchers:

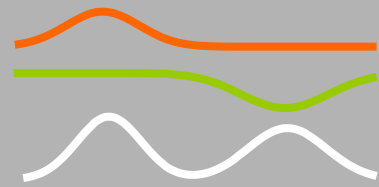
Tina Bosch (Frans – 1/2 to 31/5)
Andrea Elia (Rasmus – 1/3 to July).

MSc defences:

Ausra Saviscaite (Åse) – January
Morten Eriksen (Mikael) – March

BSc defences:

Cecilie Hasselbach Volke Hougaard (Mikael) – February
Sofie Cramer (Åse) – February
Janne Christensen (Åse) – February



Courses (block 2&3):

- Food Quality and Processing Techn, block 2 (25 participants, Åse)
- Quantitative Bio-spectroscopy, block 2 (18 participants, Nanna, Flemming, Søren)
- Råvarekvalitet, block 3 (36 participants, Åse, Mikael)
- Process Analytical Technology, block 3, (2 participants, Thomas)
- Plant Polysaccharides: Biology, Structure and Applications, block 3 (Søren, Flemming)
- Lectures in Analytical Chemistry, block 3 (Thomas)
- Lectures in Advanced Sensory Methods and Sensometrics, block 3 (Thomas)
- One week course at Århus University in Chemometrics, January (25 participants, Thomas)
- PhD: Quantitative Food Spectroscopy, block 2 (14 participants, Nanna, Flemming, Søren)
- PhD: Sensory Science, January (6 participants, Thomas)
- ODIN Basic Chemometrics, February (Thomas)
- ODIN Design of Experiments, March (Birger)

