Q&T news
Issue 10, Jan-Mar 2007

Rasmus Bro appointed professor in Process Analytical Technology as of May 1, 2007, is to coordinate a new Metabonomic Cancer Diagnostics project sponsored by Villum Kann Rasmussen (7M. DKK for Q&T)

Publications with peer review:

M. Bahram, R. Bro, C. Stedman and A. Afkhami. Handling of Rayleigh and Raman scatter for PARAFAC modeling of fluorescence data using interpolation. J. Chemometrics **20**:99-105, 2006.

F.H. Larsen, F.vd Berg and S.B. Engelsen. An exploratory chemometric study of 1H NMR spectra of table wines. J. Chemometrics **20**:198-208, 2006.

L. Nørgaard, R. Bro, F. Westad and S.B. Engelsen. A modification of canonical variates analysis to handle highly collinear multivariate data. J. Chemometrics **20**:425-435, 2006.

M. Bahram and R. Bro. A novel strategy for solving matrix effet in three-way data using parallel profiles with linear dependencies. Analytica Chimica Acta **584**:397-402, 2007.

H.F. Seefeldt, F.v.d. Berg, W. Köckenberger, S.B. Engelsen, B. Wollenweber. Water mobility in the endosperm of high beta-glucan barley mutants as studied by nuclear resonance imaging. Magnetic Resonance Imaging 25:425-432, 2007.

T. Salomonsen, M.T. Sejersen, N. Viereck, R. Ipsen and S.B. Engelsen. Water mobility in acidified milk drinks studied by low-field ^{1}H NMR. International Dairy Journal **17**:294-301, 2007.

M.T. Sejersen, T. Salomonsen, R. Ipsen, R. Clark, C. Rolin and S.B. Engelsen. Zeta potential of pectin-stabilised casein aggregates in acidified milk drinks. International Dairy Journal **17**:302-307, 2007.

E. Alm, R. Bro, S.B. Engelsen, B. Karlberg and R.J.O. Torgrip. Vibrational overtone combination spectroscopy (VOCSY) – a new way of using IR and NIR data. Anal. Bioanal. Chem. **388**:179-188, 2007

M. Bassompierre, G. Tomasi, L. Munck, R. Bro and S.B. Engelsen. Dioxin screening in fish product by pattern recognition of biomarkers. Chemosphere **67**:S28-S35, 2007.

R. Bro. Review on multiway analysis in chemistry – 2000-2005. Critical Reviews in Analytical Chemistry **36**:279-293, 2006.

Other Publications:

F.H. Larsen, S.B. Engelsen and A. Blennow. Starch granule hydration as investigated by ^{1}H HR-MAS NMR. In: Starch. Progress in Basic and Applied Science. P. Tomasik et al. (eds.), 133-146, 2007

J.H. Christensen and G. Tomasi. A multivariate approach to oil hydrocarbon fingerprinting and spill source identification. In: Oil Spill Environmental Forensics, Z. Wang and S.A. Stout (eds.), Elsevier, Amsterdam, 2007

Media and Press:

K.A.Toplianaki Fife. Teksturanalyser: Sådan kommer du i gang. Plus Proces, 1:6-8, 2007.

R. Bro & C.M. Andersen. Lys på osten og se dens tilstand. Ingeniøren, 9:10, 2007.

B. Rasmussen, D. Stærk, R. Bro and J.W. Jaroszewski. Plantemetabalomer in action. Lægemiddelforskning – 2006, 6-7.

Birthe Møller Jespersen og Helene Fast Seefeldt, "Funktionelle Fødevarer", Kronik i Fyens Stiftstidende, 13. marts 2007

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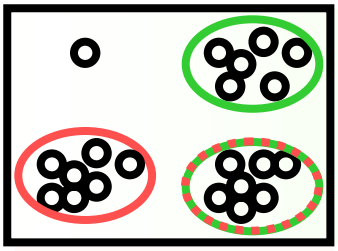

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Rasmus Bro og Birthe Møller Jespersen, "PAT - bedre mad med matematisk magi". I Det Biovidenskabelige Fakultet's Temahæfte 2007: Fremtidens Fødevarer - sikrere, sundere, sjovere, 12-13.

Mette Christensen, Lars Kristensen, Anders H. Karlsson og Birthe Møller Jespersen, "Slagtekvalitet og Kødkvalitet". I Smagen af Godt Oksekød, Smagen af Nordjylland, Rådet for Agroindustri, Brønderslev.

Effektiv fedt-detektiv på vej til forbrugerne. Børsen,1.3.2007. S.B. Engelsen and the group's collaboration with SFK Technology on the NITFOM project sponsored by Højteknologifonden are described. Also mentioned on Danish Radio P1, same day.

Ph.D. defence

Johannes Ravn Jørgensen. Site-specific harvest of cereals with quality graduation. An interdisciplinary research approach - 27.2.07

Staff:

Anders Juul Lawaetz – Feb 07 – Feb 10 – Ph.D student. Fluorescence-based metabonomics in cancer diagnostics. Supervisor: R. Bro.

Asta Venskaityte from University of Kaunas, Lithuania – Feb 07 – Feb 08

Giorgio Tomasi – post doc in collaboration with Dept. of Natural Sciences (LIFE)

Thomas Skov is working at the University of Washington in Seattle from February to May.

Master Students:

Mette Svendgaard Mortensen and **Mette Holse** (CP Kelco) - Use of LF-NMR and ultrasound spectroscopy for determination of gelling kinetics of pectins. Supervisor: S.B.Engelsen

Morten Arendt Rasmussen – Differences in milk with chemometrics. Supervisor: R. Bro

Kristoffer Laursen (Novo Nordisk) – Development of process-chemometrics and spectroscopic monitoring of insulin fermentation. Supervisor: R. Bro

Visiting Students:

Makrina Koraka from Greece (Feb – July 07) - studying -glucans. Supervisors: SB Engelsen & BM Jespersen

Aikaterini Valtara from Greece (Feb – July 07) - studying active substances in fenugreek seeds. Supervisors: SB Engelsen & BM Jespersen

Susana Leitäo from Portugal (Mar – Aug 07) - studying flavour release of β-glucan matrices. Supervisors: SB Engelsen, BM Jespersen & MA Petersen

New Projects:

Metabonomic Cancer Diagnostics – a 3-year project sponsored by Villum Kann Rasmussen. Partners: Hvidovre Hospital, The Danish Cancer Society, Dept. of Human Nutrition and Stanford University. Headed by R. Bro. 7 M. DKK

DFFE, NUBI - a 4-year project involving advanced nutrigenomics and data analysis in relation to metabolic syndrome. R. Bro and S.B. Engelsen. 1 M. DKK. Five partners headed by Lars Dragsted (Dept. of Human Nutrition)

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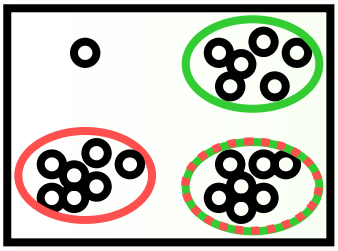

Q&T news

Courses:

Food Quality and Processing Technologies – Block 2 – 15 participants – L. Poll
Advanced Chemometrics: Multi-way Analysis – January 8-26: 21 participants – R. Bro
Quantitative Food Spectroscopy – Block 2 - 9 participants – S.B. Engelsen
Plant Food Products and Confectionary - Block 3 – 14 participants – M.A. Petersen
Quality of Raw Food Materials – Block 3 – 46 participants – Å. Hansen
ODIN - Basic Chemometrics - January 3-5: 10 participants
ODIN - Multivariate Calibration Model Maintenance - March 7: 15 participants
ODIN - Design of Experiments and Optimization - March 8-9: 16 participants

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