Publications:

Exploring the chemistry of complex samples by tentative identification and semi-quantification: a food contact material case
Pieke, E. N., Smedsgaard, J. & Granby, K. 2018 In : Journal of Mass Spectrometry. 53, 4, p. 323-335
Publication: Research - peer-review › Journal article – Annual report year: 2018

A framework to estimate concentrations of potentially unknown substances by semi-quantification in liquid chromatography electrospray ionization mass spectrometry
Publication: Research - peer-review › Journal article – Annual report year: 2017

Big Data fra jord til bord
Publication: Communication › Report – Annual report year: 2015

Exposure to perfluorononanoic acid combined with a low-dose mixture of 14 human-relevant compounds disturbs energy/lipid homeostasis in rats
Publication: Research - peer-review › Journal article – Annual report year: 2015

LC-MS analysis of the plasma metabolome–a novel sample preparation strategy
Publication: Research - peer-review › Journal article – Annual report year: 2014

Metabolomics – an analytical strategy for identification of toxic mechanism of action
Publication: Research › Ph.D. thesis – Annual report year: 2016

A combined metabolomic and phylogenetic study reveals putatively prebiotic effects of high molecular weight arabino-oligosaccharides when assessed by in vitro fermentation in bacterial communities derived from humans
Publication: Research - peer-review › Journal article – Annual report year: 2014

Dynamic Metabolic Footprinting Reveals the Key Components of Metabolic Network in Yeast Saccharomyces cerevisiae
Publication: Research - peer-review › Journal article – Annual report year: 2014

Lactobacillus acidophilus NCFM affects vitamin E acetate metabolism and intestinal bile acid signature in monocolonized mice
Effects of perfluorononanoic acid (PFNA) on the metabolic profiling of rat serum by UHPLC-ESI-Q-TOF MSMS
Skov, K., Hadrup, N., Vestergaard, A. M., Smedsgaard, J. & Frandsen, H. L. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

Mono-colonization with Lactobacillus acidophilus NCFM affects the intestinal metabolome as compared to germ-free mice
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Quantification of vitamin D3 and its hydroxylated metabolites in waxy leaf nightshade (Solanum glaucophyllum Desf.), tomato (Solanum lycopersicum L.) and bell pepper (Capsicum annuum L.)
Publication: Research - peer-review › Journal article – Annual report year: 2013

Bacterial Impact on the Gut Metabolome
Publication: Research › Ph.D. thesis – Annual report year: 2013

Design and Fabrication of Polymer-based Lab-on-a-Chip Devices Towards Applications in Food and Environmental Analysis
Publication: Research › Ph.D. thesis – Annual report year: 2013

Metabolic footprint of Lactobacillus acidophilus NCFM at different pH
Publication: Research - peer-review › Journal article – Annual report year: 2011

Metabolic footprint of Lactobacillus acidophilus NCFM at different pH
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Metabolomics of UC bacterial ecosystem compared to the healthy donors
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Vitamin D3 in plants: effect of UVB exposure
Publication: Research - peer-review › Poster – Annual report year: 2012

LC–MS/MS with atmospheric pressure chemical ionisation to study the effect of UV treatment on the formation of vitamin D3 and sterols in plants
Publication: Research - peer-review › Journal article – Annual report year: 2011

Seasonal Variation of Provitamin D2 and Vitamin D2 in Perennial Ryegrass (Lolium perenne L.)
Vitamin D in plants: Occurrence, analysis and biosynthesis
Publication: Research › Journal article – Annual report year: 2011

Analysis of vitamin D and sterols related to the lanosterol biosynthesis in plant material by using LC-MS/MS with atmospheric pressure chemical ionisation
Publication: Research › Ph.D. thesis – Annual report year: 2012

Bacterial Impact on the Gut Metabolome
Publication: Research › Journal article – Annual report year: 2010

Dynamics in the microbiology of maize silage during whole-season storage
Publication: Research › Journal article – Annual report year: 2010

Multi-mycotoxin analysis of maize silage by LC-MS/MS
Publication: Research › Journal article – Annual report year: 2010

Metabolome analysis - mass spectrometry and microbial primary metabolites
Publication: Research › Book – Annual report year: 2008

The yeast metabolome addressed by electrospray ionization mass spectrometry: Initiation of a mass spectral library and its applications for metabolic footprinting by direct infusion mass spectrometry
Højer-Pedersen, J. J., Smedsgaard, J. & Nielsen, J. 2008 In : Metabolomics. 4, 4, p. 393-405
Publication: Research › Journal article – Annual report year: 2008

Automated work-flow for processing high-resolution direct infusion electrospray ionization mass spectral fingerprints
Hansen, M. A. E. & Smedsgaard, J. 2007 In : Metabolomics. 3, 1, p. 41-54
Publication: Research › Journal article – Annual report year: 2007

Fumonisin B2 production by Aspergillus niger
Publication: Research › Journal article – Annual report year: 2007

Metabolome Analysis: An Introduction
Publication: Education › Book – Annual report year: 2007
Production of mycotoxins by Aspergillus lentulus and other medically important and closely related species in section Fumigati
Publication: Research - peer-review › Journal article – Annual report year: 2007

Standard reporting requirements for biological samples in metabolomics experiments: Microbial and in vitro biology experiments
Publication: Research - peer-review › Journal article – Annual report year: 2007

The exo-metabolome in filamentous fungi
Publication: Research - peer-review › Book chapter – Annual report year: 2007

Elucidating the mode-of-action of compounds from metabolite profiling studies
Publication: Research - peer-review › Book chapter – Annual report year: 2006

Host-derived media used as a predictor for low abundant, in planta metabolites production by necrotrophic fungi.
Publication: Research - peer-review › Journal article – Annual report year: 2006

Identification of an Abscisic Acid Gene Cluster in the Grey Mold Botrytis cinerea
Siewers, V., Kekkelink, L., Småsgaard, J. & Tudzynski, P. 2006 In : Applied and Environmental Microbiology. 72, 7, p. 4619-4626
Publication: Research - peer-review › Journal article – Annual report year: 2006

Real-time PCR quantification of the AM-toxin gene and HPLC quantification of toxigenic metabolites from Alternaria species from apples
Publication: Research - peer-review › Journal article – Annual report year: 2006

Soyasapinos resist extrusion cooking and are not degraded during gut passage in Atlantic salmon (Salmo salar L.)
Publication: Research - peer-review › Journal article – Annual report year: 2006

Andрастин A-D, Penicillium roqueforti metabolites consistently produced in blue mold fermented cheese
Publication: Research - peer-review › Journal article – Annual report year: 2005

A new algorithm for novelty detection and de-replication of spectroscopic analysis of complex mixtures of natural products
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2005

Automated and unbiased classification of chemical profiles from fungi using high performance liquid chromatography
Publication: Research - peer-review › Journal article – Annual report year: 2005
Automated and unbiased image analyses as tools in phenotypic classification of small-spored Alternaria species.
Andersen, B., Hansen, M. E. & Smedsgaard, J. 2005 In : Phytopathology. 95, 9, p. 1021-1029
Publication: Research - peer-review › Journal article – Annual report year: 2005

Global metabolite analysis of yeast: evaluation of sample preparation methods
Publication: Research - peer-review › Journal article – Annual report year: 2005

LC-MS contra direct infusion-MS for profiling of secondary metabolites in fungi
Smedsgaard, J. 2005 In : Journal of Biotechnology. 118, p. S159-S159
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2005

Metabolite profiling of fungi of yeast: From phenotype to metabolome by MS and informatics
Publication: Research - peer-review › Journal article – Annual report year: 2005

Metabolome analysis by mass spectrometry
Publication: Research - peer-review › Journal article – Annual report year: 2005

Phenotypic taxonomy and metabolite profiling in microbial drug discovery
Publication: Research - peer-review › Journal article – Annual report year: 2005

Roquefortine/Oxaline biosynthesis pathway metabolites in Penicillium SER. Corymbifera: IN PLANTA production and implication for competitive fitness
Publication: Research - peer-review › Journal article – Annual report year: 2005

X-hitting: A new algorithm for novelty detection and dereplication by UV spectra of complex mixtures of natural products
Publication: Research - peer-review › Journal article – Annual report year: 2005

A new matching algorithm for high resolution mass spectra
Publication: Research - peer-review › Journal article – Annual report year: 2004

Analysis of amino acid isotopomers by ion trap LC-MS
Højger-Pedersen, J., Smedsgaard, J., Åkesson, M. & Nielsen, J. 2004
Publication: Research › Poster – Annual report year: 2004

An integrated approach for the detection and analysis of mycotoxins
Publication: Research › Article in proceedings – Annual report year: 2004

A proposed framework for the description of plant metabolomics experiments and their results
Automatic In-Vial MCF Derivatization Coupled to GC-MS for Simultaneous Determination of Amino and non-Amino Organic Acids
Hansen, K. K., Villas-Bôas, S. G., Smedsgaard, J. & Nielsen, J. 2004
Publication: Research › Poster – Annual report year: 2004

Chemical diversity of fungi - metabolite profiling and metabolomics
Publication: Research - peer-review › Book chapter – Annual report year: 2004

Classification of terverticillate Penicillia by electrospray mass spectrometric profiling
Publication: Research - peer-review › Journal article – Annual report year: 2004

Emericella astellata, a new producer of aflatoxin B-1, B-2 and sterigmatocystin
Publication: Research - peer-review › Journal article – Annual report year: 2004

Identification of novel natural products using intelligent screening based on mass and UV spectrometric methods
Publication: Research › Poster – Annual report year: 2004

Mass spectrometry for metabolite fingerprinting
Hejrer-Pedersen, J., Hansen, M. E., Smedsgaard, J. & Nielsen, J. 2004
Publication: Research › Poster – Annual report year: 2004

Mycotoxins, drugs and other extrolites produced by species in Penicillium subgenus Penicillium
Publication: Research - peer-review › Journal article – Annual report year: 2004

Penicillium expansum: Consistent production of patulin, chaetoglobosins, and other secondary metabolites in culture and their natural occurrence in fruit products
Andersen, B., Smedsgaard, J. & Frisvad, J. C. 2004 In : Journal of Agricultural and Food Chemistry. 52, 8, p. 2421-2428
Publication: Research - peer-review › Journal article – Annual report year: 2004

The p450 monooxygenase BcABA1 is essential for abscisic acid biosynthesis in Botrytis cinerea
Siewers, V., Smedsgaard, J. & Tudzynski, P. 2004 In : Applied and Environmental Microbiology. 70, 7, p. 3868-3876
Publication: Research - peer-review › Journal article – Annual report year: 2004

Automated data processing of high-resolution mass spectra
Hansen, M. A. E. & Smedsgaard, J. 2003
Publication: Research › Poster – Annual report year: 2003

Flavor release measurement by atmospheric pressure chemical ionization ion trap mass spectrometry, construction of interface and mathematical modeling of release profiles
Publication: Research - peer-review › Journal article – Annual report year: 2003

From Fungal Biodiversity to Novel Natural Products - using intelligent screening based on mass and UV spectrometric methods
Publication: Research › Paper – Annual report year: 2003
Fungal metabolite screening: database of 474 mycotoxins and fungal metabolites for dereplication by standardised liquid chromatography-UV-mass spectrometry methodology
Publication: Research - peer-review › Journal article – Annual report year: 2003

Use of intelligent screening and biocombinatorial libraries in fungal metabolite discovery
Publication: Research › Poster – Annual report year: 2003

Chemical Image Analysis (CIA): Distance based identification
Publication: Research › Poster – Annual report year: 2002

Mikrosvampe leverer ny kemi
Publication: Research › Journal article – Annual report year: 2002

Skimmelsvampe leverer ny kemi
Publication: Communication › Journal article – Annual report year: 2002

Biochemical characterization of ochratoxin A-producing strains of the genus Penicillium
Publication: Research - peer-review › Journal article – Annual report year: 2001

Consistent production of penigequinolone A and B by Penicillium scabrosum
Publication: Research - peer-review › Journal article – Annual report year: 1999

Full second order chromatographic/spectrometric data matrices for automated sample identification and component analysis by non-data-reducing image analysis
Publication: Research - peer-review › Journal article – Annual report year: 1999

Aligning of single and multiple wavelength chromatographic
Publication: Research - peer-review › Journal article – Annual report year: 1998

Aligning on single and multiple wavelength chromatographic profiles for chemometric data analysis using correlation optimised warping
Publication: Research - peer-review › Journal article – Annual report year: 1998

Fungal metabolites in chemotaxonomy
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

A chemosystematic study of the terverticillate Penicillia using electrospray mass spectrometry
Smedsgaard, J. 1997 Lyngby: Dept. of Biotechnology, DTU.
Publication: Research - peer-review › Book – Annual report year: 1997
Micro-scale extraction procedure for standardized screening of fungal metabolite production in cultures
Smedsgaard, J. 1997 In : Journal of Chromatography A. 760, p. 264-270
Publication: Research - peer-review › Journal article – Annual report year: 1997

Terverticillate Penicillia studied by direct electrospray mass spectrometric profiling of crude extracts: I. Chemosystematics
Smedsgaard, J. & Frisvad, J. C. 1997 In : Biochemical Systematics and Ecology. 25, 1, p. 51-64
Publication: Research - peer-review › Journal article – Annual report year: 1997

Terverticillate penicillia studied by direct electrospray mass spectrometric profiling of crude extracts II. Database and identification
Smedsgaard, J. 1997 In : Biochemical Systematics and Ecology. 25, p. 65-71
Publication: Research - peer-review › Journal article – Annual report year: 1997

Using direct electrospray mass spectrometry in taxonomy and secondary metabolite profiling of crude fungal extract
Smedsgaard, J. & Frisvad, J. C. 1996 In : Journal of Microbiological Methods. 25, p. 5-17
Publication: Research - peer-review › Journal article – Annual report year: 1996

Projects:

Sample preparation for screening analyses by high resolution mass spectrometry
Eyring, P., Frandsen, H. L. & Smedsgaard, J.
01/06/2016 → 31/05/2019
Project: PhD

Screening of unknown compounds for food monitoring by high resolution mass spectrometry
Wang, T., Smedsgaard, J. & Frandsen, H. L.
01/06/2016 → 31/05/2019
Project: PhD

Proof of food authenticity by chemical methods
Wilde, A. S., Smedsgaard, J. & Fromberg, A.
01/05/2016 → 30/04/2019
Project: PhD

Miniaturization of food safety analysis
Zhai, D. S., Smedsgaard, J. & Boisen, A.
15/03/2016 → 14/03/2019
Project: PhD

Predictive food microbiology - new models for safety and quality assessment of a broad range of dairy products
Martinez Rios, V., Daigaard, P. & Smedsgaard, J.
01/08/2015 → 18/03/2019
Project: PhD

SERS based Sensing and Centrifugal Microfluidics
Durucan, O., Boisen, A., Matteucci, M., Rindzevicius, T., Schmidt, M. S., Smedsgaard, J., Golcuk, K. & Hakonen, A.
15/01/2015 → 03/05/2018
Project: PhD

Identification and risk assessment of unknown contaminants migrating from Food Contact Materials
01/12/2014 → 16/05/2018
Project: PhD
The presence of spores, micro-particles and metabolites in the indoor environment
Dosen, I., Andersen, B., Clausen, G., Nielsen, K. F., Smedsgaard, J., Miller, J. D. & Stadler, M.
01/03/2013 → 26/05/2016
Project: PhD

Intestinal Microbial Metabolomics
15/12/2012 → 21/04/2016
Project: PhD

Metabolomics study of endocrine disrupting chemicals
Skov, K., Frandsen, H. L., Hadrup, N., Smedsgaard, J., Harrison, S. J., Christensen, L. P. & Dunn, W.
15/12/2011 → 29/02/2016
Project: PhD

Multivariate and multi-target analysis of UHPLC-TOFMS data for linking of fungal metabolites to their biosynthetic genes and for revealing of cross talk between pathways
Klitgaard, A., Nielsen, K. F., Andersen, M. R., Frisvad, J. C., Smedsgaard, J., Sørensen, J. L. & Wolfender, J.
01/12/2011 → 25/03/2015
Project: PhD

Tackling challenges in food safety with lab-on-chip technologies
01/10/2009 → 04/04/2013
Project: PhD

Bacterial Impact on Gut Metabolomics
Wilcks, A., Sulek, K., Licht, T. R. & Smedsgaard, J.
01/08/2009 → 31/07/2011
Project

Bacterial Impact on Gut Metabolomics
Sulek, K., Licht, T. R., Smedsgaard, J. & Wilcks, A.
01/08/2009 → 31/07/2011
Project

Bacterial Impact on the Gut Metabolome
01/08/2009 → 06/02/2013
Project: PhD

Vitamin D in plants
01/09/2008 → 29/02/2012
Project: PhD

Biosynthesis of cancer-preventive organoselenium compounds by metabolically engineered yeast (YESSEL)
01/01/2007 → 31/12/2009
Project

Carry-Over of Mycotoxins from Cattle Feed into Dairy Products
Storm, I. M. L. D., Thrane, U., Smedsgaard, J., O’Kiely, P. & Schnürer, J.
Project: PhD
Metabolomanalyse
Højer-Pedersen, J. J., Nielsen, J., Smedsgaard, J., Larsen, T. O., Arneborg, N. & Heinemann, M.
01/03/2003 → 07/11/2008
Project: PhD

Multivariate Statistics in Predictive Biotechnology
Larsen, R., Carstensen, J. M., Frisvad, J. C. & Smedsgaard, J.
01/01/2000 → 31/12/2003
Project

Use of secondary metabolites and volatiles from filamentous fungi in quality assessment of foods
Frisvad, J. C. & Smedsgaard, J.
01/01/1996 → …
Project

Anvendelse af LC-MS til specifik Bestemmelse af skimmelsvampe metabolitter i cerealier
Smedsgaard, J. & Frisvad, J. C.
01/04/1992 → 14/01/1996
Project: PhD

Activities:

32 nd Mycotoxin Workshop: Mycotoxins and other secondary metabolites in maize silage
Smedsgaard, J. (Speaker)
14 Jun 2010
Activity: Talks and presentations › Conference presentations

Press clippings:

Fremtidige kompetencebehov for laboranter
Jørn Smedsgaard
05/05/2017
1 item of media coverage
Press / Media

Meget høje indhold af PCB fundet i hvaler.
Jørn Smedsgaard
12/01/2016
1 media contribution
Press / Media

DTUs sektorudviklingsrapport for Big Data der kommer den 29/10 2015
Jørn Smedsgaard
28/10/2015
1 media contribution
Press / Media

Test på æg
Jørn Smedsgaard
07/06/2013
1 media contribution
Press / Media