

# **13<sup>th</sup> Wartburg Symposium** **on Flavor Chemistry & Biology**

**Hotel on the Wartburg, Eisenach, Germany**  
**October 03 - 06, 2023**

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## **Technical Program & Posters**



### **Organizers**

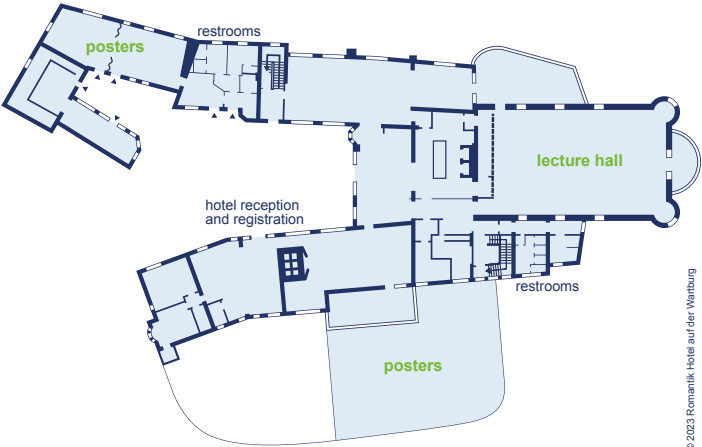
**Prof. Dr. T. Hofmann**  
**Prof. Dr. H. Zorn**  
**Prof. Dr. C. Dawid**  
**Prof. Dr. V. Somoza**

**[www.wartburg-symposium.de](http://www.wartburg-symposium.de)**

# City Map of Eisenach



# Site Map Wartburg Hotel



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# Bus Transfers

## Tuesday, October 03, 2023

- 10:00-11:30 Registration at the Vienna House Thüringer Hof, the Hotel Glockenhof and the Wartburg Hotel (Depending on the hotel accommodation. Those who are staying in the Hotel Kaiserhof can pick up their conference bag in the lobby of the Wartburg Hotel)
- 11:30 Bus departs from downtown hotels to Wartburg Hotel
- 21:45 Bus to downtown hotels after Barbecue

## Wednesday, October 04, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 18:05 Bus departs to downtown – Free evening

## Thursday, October 05, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 23:00 Bus departs to downtown hotels after Symposium dinner

## Friday, October 06, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 13:45 Bus transfer to downtown hotels

## Organizers

Prof. Dr. T. Hofmann  
Prof. Dr. H. Zorn  
Prof. Dr. C. Dawid  
Prof. Dr. V. Somoza

## Correspondence

13th Wartburg Flavor Symposium

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**[www.wartburg-symposium.de](http://www.wartburg-symposium.de)**

# 13<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology

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## Technical Program



# Tuesday, October 03, 2023

- 10:00-11:30 Registration at the Vienna House Thüringer Hof, the Hotel Glockenhof and the Wartburg Hotel (depending on the hotel accommodation)
- 11:30 Bus departs from downtown hotels to Wartburg Hotel
- 12:00-13:15 Lunch break**
- 13:15-15:20 Tuesday, October 03 – Session 1**  
**CHEMOSENSORY PERCEPTION AND SIGNAL PROCESSING**  
*Chair: W. Langhans*
- 13:15-13:30 Welcome and Introduction, *T. Hofmann*
- 13:30-14:00 *H. Matsunami*; Duke University, North Carolina, USA  
How do odorant receptors recognize odorants?
- 14:00-14:25 *D. Krautwurst*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Off-flavors and their specific odorant receptor activation patterns
- 14:25-14:50 *N. Zhang*; Department of Food Science & Technology, Shanghai Jiao Tong University, China  
Typical umami ligand-induced binding interaction and conformational change of T1R1-VFT
- 14:50-15:15 *M. Koehler*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Mouthfeel – how texture makes flavor studied by nano-biophysical approaches
- 15:15-16:00 Coffee break**

- 16:00-16:55 Tuesday, October 03 – Session 2**  
**CHEMOSENSORY PERCEPTION, SIGNAL PROCESSING AND NEW COMPUTATIONAL APPROACHES**  
*Chair: B. Lieder*
- 16:00-16:30 *M. Niv*; The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel  
 Bitter and sweet taste receptors and their ligands
- 16:30-16:55 *M. Behrens*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
 The extraordinary complexity of human bitter taste perception
- 17:00-18:30 Opportunity to visit the Wartburg castle
- 18:30-19:25 Concert at the Wartburg castle
- 19:25-19:30 Group photo in the courtyard of the Wartburg Hotel
- 19:30-21:30 Barbecue and finger food
- 21:45 Bus to downtown hotels

# Wednesday, October 04, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 8:30-10:20** **Wednesday, October 04 – Session 3**  
**FUNCTIONAL FLAVOR GENOMICS & BIOTECHNOLOGY**  
*Chair: H. Jelen*
- 8:30-9:00 *U. Fischer*; Dienstleistungszentrum Ländlicher Raum Rheinpfalz, Institute for Viticulture and Oenology, Germany  
Predictive breeding for wine quality: From sensory traits to grapevine genome
- 9:00-9:30 *J. Bohlmann*; Michael Smith Laboratories, University of British Columbia, Canada  
Beyond flavor biochemistry: discovery of the novel anti-diabetic compound “Montbretin A”
- 9:30-9:55 *J.-P. Kanter*; Justus Liebig University Giessen, Germany  
Biotransformation of flavonoids by fungal mycelium from edible *Lentinus* spp. to produce taste-active flavonoids with isovanilloid moiety
- 9:55-10:20 *F. F. Brescia*; Justus Liebig University Giessen, Germany  
Combining aroma- and transcriptomic analyses for the identification of a novel O(S)-methyltransferase from *Pleurotus sapidus*
- 10:20-11:00** **Coffee break**
- 11:00-12:15** **Wednesday, October 04 – Session 4**  
**CHEMOSENSORY PERCEPTION, SIGNAL PROCESSING AND NEW COMPUTATIONAL APPROACHES**  
*Chair: C. De Jong*
- 11:00-11:25 *Y. Liu*; Department of Food Science & Technology, Shanghai Jiao Tong University, Shanghai, China  
Remodeling of the ryanodine receptor isoform 1 channel regulates the sweet and umami taste perception of *Rattus norvegicus*
- 11:25-11:50 *A. Di Pizio*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Unraveling the molecular mechanisms of flavor perception in the era of AI



- 11:50-12:15 *J. K. Parker*; Department of Food and Nutritional Sciences, University of Reading, UK  
Triggers of distortion and disgust in parosmia
- 12:15-13:45 Lunch break**
- 13:45-14:25 Flash Poster Presentations**  
*Chair: M. Herderich*
- 13:45-13:50 *N. Pontesegger*; Institute of Analytical Chemistry and Food Chemistry, Graz University of Technology, Austria  
Flavor Analysis and sensory properties of crimson crisp apples: On-tree ripening and long-term storage
- 13:50-13:55 *Y. Zhang*; University of Hohenheim, Germany  
Basidiomycetes bioprocess: generation of meat flavors from *Allium* species
- 13:55-14:00 *A. Pons*; Œnologie, Université de Bordeaux, France  
Identification of non-phenolic volatiles and semi-volatiles compounds involved in the astringency of wines
- 14:00-14:05 *N. Cleve*; Department of Sensory Analytics and Technologies, Fraunhofer Institute for Process Engineering and Packaging IVV, Germany  
Influence of adding plant-based or conventional bovine milk on the retronasal aroma release and perception of coffees (with different roasting degrees)
- 14:05-14:10 *S. Holt*; Section for Food Design and Consumer Behavior, Department of Food Science, University of Copenhagen, Denmark  
Development of a model system for monitoring savory flavor from 2-methyl-3-furanthiol (MFT) in yellow peas
- 14:10-14:15 *M. Holzer*; Chair of Food Chemistry and Molecular Sensory Science, Technical University of Munich, Germany  
Sensopeptidomic discovery of DPP-IV inhibitory peptides in quinoa with reduced bitter notes

**14:25-15:20 Wednesday, October 04 – Session 5**

**FLAVOR SYSTEMS: MOLECULAR  
DECODING, INTERACTIONS AND  
PERCEPTION**

*Chair: D. Krautwurst*

14:30-14:55 *M. Stieger*; Food Quality and Design,  
Wageningen University, The Netherlands  
*In vivo* aroma release and perception of  
composite foods using nose space  
PTR–ToF–MS analysis with  
temporal-check-all-that-apply

14:55-15:20 *M. Gigl*; Chair of Food Chemistry and Molecular  
Sensory Science, Technical University of Munich,  
Germany  
Molecular sensory studies on the impact of  
food-born high molecular weight polymers on  
the aroma perception of food

**15:20-17:00 Coffee break and Poster session**

**17:00-17:50 Wednesday, October 04 – Session 6**

**FLAVOR SYSTEMS: MOLECULAR  
DECODING, INTERACTIONS AND  
PERCEPTION**

*Chair: M. Steinhaus*

17:00-17:25 *Y. Ping Chen*; Department of Food Science &  
Technology, Shanghai Jiao Tong University,  
China  
Strategies to increase salty sensation using  
multisensory perception

17:25-17:50 *B. Siegmund*; Graz University of Technology,  
Austria  
'Lupin-Coffee' – a comprehensive investigation  
of a sustainable coffee substitute

18:05 Bus to downtown hotels and free evening

# Thursday, October 05, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 8:30-9:50** **Thursday, October 05 – Session 7**  
**NEXT-GENERATION TECHNOLOGIES IN FLAVOR MOLECULE AND ANALYTICS**  
*Chair: J. Ley*
- 8:30-9:00 *R. Heeren*; M4I, Maastricht University, The Netherlands  
Imaging mass spectrometry in food and flavor
- 9:00-9:25 *M. Steinhaus*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
New results on dos and don'ts in key food odorant analysis
- 9:25-9:50 *Y. Fan*; Department of Food Science & Technology, Shanghai Jiao Tong University, China  
Biosensors for umami: Better understanding of umami perception and evaluation
- 9:50-10:20** **Coffee break**
- 10:20-12:25** **Thursday, October 05 – Session 8**  
**FOOD-BORN BIOACTIVES AND CHEMORECEPTOR-MEDIATED HEALTH PREVENTION**  
*Chair: M. Behrens*
- 10:20-10:50 *R. Dando*; Department of Food Science, Cornell University, USA  
Obesity-driven inflammation alters taste morphology and taste-driven food response
- 10:50-11:15 *W. Langhans*; Physiology and Behavior Laboratory, Department of Health Sciences and Technology, ETH Zurich, Switzerland  
The cephalic phase insulin response, triggers, mechanisms, and functions
- 11:15-11:40 *B. Liedler*; Christian Doppler Laboratory for Taste Research, Department of Physiological Chemistry, Faculty of Chemistry, University of Vienna, Austria  
Exploring the sweet spot: Sensorial and metabolic properties of sweet-tasting compounds

**11:40-12:25 Flash Poster Presentations**

*Chair: B. Siegmund*

- 11:40-11:45 *V. Mall*; Leibniz-Institute for Food Systems  
Biology at the Technical University of Munich,  
Germany  
The Leibniz-LSB@TUM odorant database:  
a valuable tool for the unequivocal identification  
of key food odorants
- 11:45-11:50 *T. Acree*; Cornell University, USA  
Stochastic modeling of olfactory perception in  
humans
- 11:50-11:55 *A. R. Monforte*; AFB International,  
The Netherlands  
Diving in the world of palatants: better  
understanding of composition & process  
conditions impact on flavor generation driving  
palatability performance
- 11:55-12:00 *A. Dunkel*; Leibniz-Institute for Food Systems  
Biology at the Technical University of Munich,  
Germany  
Comprehensive metabolome and lipidome  
profiling of cocoa beans reveals systemic  
responses under climate change conditions
- 12:00-12:05 *C. Barallat Pérez*; Department of  
Agrotechnology and Food Science,  
Wageningen, The Netherlands  
I want to break free! Flavor and protein  
molecule's structure effect on *in-vivo* release  
and dynamic sensory perception from  
plant-based beverages
- 12:05-12:10 *J. Zyzak*; Eastern Kentucky University, USA  
New approach to field sampling of flavors and  
fragrances
- 12:10-12:15 *M. Roelsen*; Wageningen University and  
Research, Bioscience, The Netherlands  
A Smartphone sensor for detection of  
bioluminescence signals of receptor activation
- 12:15-14:00 Lunch break**

**14:00-14:55 Thursday, October 05 – Session 9**  
**FOOD-BORN BIOACTIVES AND**  
**CHEMORECEPTOR-MEDIATED HEALTH**  
**PREVENTION**

*Chair: T. Acree*

14:00-14:30 *M. Arnoldini; ETH Zürich, Switzerland*  
Metabolism of food components by the gut  
microbiota and its consequences for the host

14:30-14:55 *A. Wunder; Friedrich-Alexander-Universität*  
*Erlangen, Germany*  
I can smell your stress

**14:55-16:30 Coffee break and Poster session**

**16:30-17:20 Thursday, October 05 – Session 10**  
**FLAVOR SYSTEMS: MOLECULAR**  
**DECODING, INTERACTIONS AND**  
**PERCEPTION**

*Chair: Y. Zhang*

16:30-16:55 *A. Spaccasassi; Chair of Food Chemistry and*  
*Molecular Sensory Science,*  
*Technical University of Munich, Germany*  
Metabolomics-based holistic analysis of  
microbial cultures fermenting pea protein-based  
beverages for enhanced flavor profiles

16:55-17:20 *M. Herderich; The Australian Wine Research*  
*Institute, Australia*  
Distinctive flavour or taint? The case of smoky  
characters in wine

17:20 -19:15 Social time: Get connected!

19:15-19:30 Champagne reception

19:30-22:45 Symposium Dinner

23:00 Bus departs to downtown hotels

# Friday, October 06, 2023

- 7:45 Bus transfer from downtown hotels to Wartburg Hotel
- 8:30-10:10 Friday, October 06 – Session 11**  
**FLAVOR SYSTEMS: MOLECULAR DECODING, INTERACTIONS AND PERCEPTION**  
*Chair: P. Fuchsmann*
- 8:30-8:55 *J. Ley*; Symrise AG, Germany  
Identification of taste actives from cultural food heritage via combined text-mining and senso-analytical approach
- 8:55-9:20 *D. Petersen*; The Ohio State University, USA  
Identification of compounds that impact consumer liking of hybrid American hazelnuts using flavoromics approach
- 9:20-9:45 *I. Chetschik*; Zurich University of Applied Sciences, Switzerland  
The plant of many scents: decoding the odor of selected cannabis strains
- 9:45-10:10 *R. Brouwer*; Food Quality and Design, Wageningen University, The Netherlands  
The influence of serum release and juiciness on *in vivo* aroma release and perception of plant-based meat analogues
- 10:10-10:50 Coffee break**
- 10:50-12:00 Friday, October 06 – Session 12**  
**FLAVOR SYSTEMS: MOLECULAR DECODING, INTERACTIONS AND PERCEPTION**  
*Chair: M. Jongsmaa*
- 10:50-11:20 *S. Urlass*; ARC Industrial Transformation Training Centre for Uniquely Australian Foods, The University of Queensland, Australia  
Optimising aroma and flavor of algae for food applications
- 11:20-11:45 *H. Jeleń*; Food Volatilomics and Sensomics Group, Poznań University of Life Sciences, Poland  
Tracking changes in metabolome that affect the aroma of sprouted false flax (*Camelina sativa*) cold-pressed oil

11:45-12:00 Closing Remarks, H. Zorn  
12:00-13:30 Farewell lunch  
13:45 Bus transfer to downtown hotels

***END OF THE SYMPOSIUM – SEEING YOU IN 2026!***





# 13<sup>th</sup> Wartburg Symposium on Flavor Chemistry & Biology

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## List of Posters



## CHEMOSENSORY PERCEPTION, SIGNAL PROSESSING AND COMPUTATIONAL APPROACHES

- 1 *T. Acree*; Cornell University, USA  
Stochastic modelling of olfactory perception in humans
- 2 *S. Schäfer*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
*Elucidation of amino acid and peptide bitterness*
- 3 *P. Kumar*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Influence of sodium chloride on human bitter taste receptor responses
- 4 *E. Gabetti*; Soremartec Italia srl, Italia  
Artificial intelligence smelling based on sensomics: an effective tool to accurately quantify and monitor the most odor-active compounds in premium hazelnut (*Corylus avellana* L.) biscuits
- 5 *R. Hopf*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Correlating odorant receptor genotypes with specific anosmia phenotypes for key food odorants
- 6 *P. Richter*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Human gastric parietal tumor cells (HGT-1) and play a critical role in modulating the cellular response to bitter tasting food constituents

## FLAVOR SYSTEMS: MOLECULAR DECODING, INTERACTIONS AND PERCEPTION

- 7 *N. Pontesegger*; Institute of Analytical Chemistry and Food Chemistry, Graz University of Technology, Austria  
Flavor analysis and sensory properties of Crimson Crisp apples: On-tree ripening and long-term storage
- 8 *A. Pons*; UMR 1366 Œnologie, Université de Bordeaux, France  
Identification of non-phenolic volatiles and semi-volatiles compounds involved in the astringency of wines
- 9 *N. Cleve*; Department of Sensory Analytics and Technologies, Fraunhofer Institute for Process Engineering and Packaging, Germany  
Influence of adding plant-based or conventional bovine milk on the retronasal aroma release and perception of coffees (with different roasting degrees)

- 10 *S. Holt*; Section for Food Design and Consumer Behavior, Department of Food Science, University of Copenhagen, Denmark  
Development of a model system for monitoring savory flavor from 2-methyl-3-furanthiol (MFT) in yellow peas
- 11 *C. Barallat Pérez*; Department of Agrotechnology and Food Science, Wageningen, The Netherlands  
I want to break free! Flavor and protein molecule's structure effect on *in-vivo* release and dynamic sensory perception from plant-based beverages
- 12 *A.R. Monforte*; AFB International, The Netherlands  
Diving in the world of palatants: better understanding of composition & process conditions impact on flavour generation driving palatability performance
- 13 *M. Flaig*; Nestlé S.A.; Switzerland  
Biotechnological formation of dairy flavor inducing  $\delta$ -lactones from vegetable oil
- 14 *V. Mall*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
The Leibniz-LSB@TUM odorant database: a valuable tool for the unequivocal identification of key food odorants
- 15 *L. Lopez*; MANE, France  
Flavour-protein interactions in plant-based dairy alternatives
- 16 *L. J. Schulze*; Institute of Nutritional and Food Sciences, Food Chemistry, University of Bonn, Germany  
Molecular-sensory decoding of the Citrus latifolia aroma
- 17 *P. Röhrli*; Elite Network of Bavaria, Chair of Food Chemistry and Molecular Sensory Science, TUM School of Life Sciences, Technical University of Munich, Germany  
The proteomes that feed the world
- 18 *M. Flores*; Institute of Agrochemistry and Food Technology, Spain  
Aroma potential of fermented texturized pea proteins in comparison to pork myofibrillar proteins
- 19 *T. Yoshida*; R&D Center, T. Hasegawa, Japan  
Identification of 2-methoxy-5-vinylphenol in peppermint and spearmint essential oils and its effect on flavor of food products
- 20 *C. De Jong*; Wageningen Food & Biobased Research, The Netherlands  
Improving flavour quality of a Kenyan SL 28 specialty coffee by varying fermentation conditions in the primary processing of pulped coffee cherries

- 21 *J. Looft*; TAKASAGO Europe GmbH, Germany  
Modified soy based food to moderate menopausal discomfort – new concepts and suitable flavoring systems
- 22 *A. Glabasnia*; Nestlé Research, Switzerland  
Identification of key aroma compounds in yellow chlorella (Chlorella Prothothecoides)
- 23 *N. Tanaka*; R&D Center, T. Hasegawa, Japan  
Identification of novel woody aroma compound in hop-derived beers
- 24 *C. Vermeulen*; Puratos NV; Belgium  
Comparison of three SAFE-GC-MS/O(AEDA) analyses done by different institutions on a same rye sourdough: the commonalities, the discrepancies among the obtained results and our overall learnings
- 25 *A. Dunkel*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
Comprehensive metabolome and lipidome profiling of cocoa beans reveals systemic responses under climate change conditions
- 26 *Y. He*; College of Enology, Northwest A&F University; China  
The cross-modal influence of organic acids on the dynamic perception of trigeminal pungency sensation in aqueous ethanol solutions
- 27 *K. Hayashi*; Institute of Food Sciences & Technologies, Ajinomoto Co., Japan  
Retronasal aroma of beef pate analysed by a chewing simulator
- 28 *L. Huseynli*; Institute of Chemistry and Biotechnology, Tallinn University of Technology, Estonia  
Clarification of the reasons for bitter off-flavors in sunflower press cake
- 29 *P. Martinez Noguera*; Department of Food Science, University of Copenhagen, Denmark  
Rapid quantification of geosmin and 2-methylisoborneol in water samples using PTR-ToF-MS. An analytical comparison with established GC-MS methods
- 30 *R. Monod*; Centre des Sciences du Goût et de l'Alimentation, INRAE, France  
In vitro monitoring of sodium release during carrots chewing: influence of salting practices

- 31 *S. Fröhlich*; Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany  
High-throughput toolbox for taste compound mapping in cheese
- 32 *S. Baldermann*; Plant Quality and Food Security, Leibniz-Institute of Vegetable and Ornamental Crops, Germany  
Identification and characterization of CCD1 in two white grape varieties
- 33 *B. Ammerlaan*; DSM Center of Biodata & Translation, The Netherlands  
Flavor mapping: Approach in connecting flavor molecular information to sensory data to understand flavor formation
- 34 *J. Pet'ka*; Austria Juice GmbH, Austria  
Flavour wheel of natural extracts
- 35 *S. Chen*; State Key Laboratory of Food Science & Technology, Jiangnan University, China  
Identification of compounds contributing to trigeminal pungency of Chinese Baijiu by sensory evaluation, quantitative measurements, correlation analysis, and sensory verification testing
- 36 *D. Cicha-Wojciechowicz*; Poznan University of Life Sciences, Poland  
Characterization of the aroma active compounds in polish traditional mead
- 37 *V. Galindo-Cuspinera*; DSM Food & beverage, The Netherlands  
Off-flavor mitigation of pea protein
- 38 *T. Thomas-Danguin*; Centre des Sciences du Goût et de l'Alimentation, INRAE, France  
A multidisciplinary approach to highlight the mechanisms supporting perceptual interactions in odor mixture
- 39 *H. Yeo*; TUMCREATE, Singapore  
Proteins4Singapore – urban innovations for food security and sustainability
- 40 *H. Yeo*; Department of Food and Nutritional Sciences, University of Reading, UK  
Towards animal fat substitution: Effect of lipid class and source on chicken aroma
- 41 *M. J. Thomas*; Waltham Petcare Science Institute, Mars Petcare, UK  
Chemical mapping of pet food – fingerprinting flavour at the molecular level

- 42 *A. Zhogoleva*; Center of Food and Fermentation Technologies, Estonia  
Decoding the aroma of cooked salmon
- 43 *A. Raffo*; CREA-Research Centre for Food and Nutrition, Italy  
Effect of plant rennet from different thistle species on the flavour of PDO Torta del Casar cheese
- 44 *A. Raffo*; CREA-Research Centre for Food and Nutrition, Italy  
Characterization of the aroma of essential oils from sea fennel (*Crithmum maritimum* L.) leaves and crop by-products
- 45 *J. A. Piornos*; Centre des Sciences du Goût et de l'Alimentation, INRAE, France  
Understanding odour thresholds: A Quantitative structure-property relationship study of the role of the molecular structure
- 46 *L. L. Jones*; Sensient Flavors & Extracts, UK  
Characterisation of vanilla extract odour by chemical and sensory analyses
- 47 *J. Garbay*; Univ. Bordeaux, France  
Contribution of non-fruity compounds to fruity aromatic expression of red wine model solution
- 48 *Y. Tao*; College of Enology, Northwest A&F University, China  
The impact of protein part of yeast mannoproteins on wine fruity esters stability and volatility
- 49 *P. Stamatopoulos*; Hennessy, France  
Are lactones considered “key” aromatic compounds in Cognac wine distillates?
- 50 *N. Kfoury*; GERSTEL, USA  
Identification of key sensory-active flavor compounds in plant-based Tuna fish using sensory directed analysis
- 51 *P. Fuchsmann*; Agroscope, Switzerland  
Bacteria inoculation on sheep wool to improve vegetative growth, yield, taste and aroma in soilless strawberry production
- 52 *J. Barz*; Chair of Food Chemistry and Molecular Sensory Science, Technical University of Munich, Germany  
Bitter off-taste in hazelnuts induced by *Cimiciato* infections

- 53 *D. Qin*; Key Laboratory of Brewing Molecular Engineering of China Light Industry, Beijing Technology and Business University, China  
Characterization of the key aroma compounds in empty cup aroma of soy sauce aroma type Baijiu
- 54 *A. Kirkwood*; Division of Food, Nutrition and Dietetics, University of Nottingham, UK  
Uncovering the aroma profile of high-value Chinese Herb ,Shihu': How post-harvest processing affects aroma compound content
- 55 *F. Kulapichitr*; USDA-ARS San Joaquin Valley Agricultural Science Center, USA  
Effect of storage under controlled atmospheres on flavor of Muscat grapes
- 56 *A. Phewpan*; Program in Biotechnology, Faculty of Science, Chulalongkorn University, Thailand  
Exploring the relationships between bacterial community, taste-enhancing peptides and good aroma in Thai fermented fish (Pla-ra)
- 57 *A. Phewpan*; Program in Biotechnology, Faculty of Science, Chulalongkorn University, Thailand  
Elucidation of some crucial terpene molecules in white holy basil (*Ocimum sanctum* Linn.) by using GCxGC-ToF/MS technique
- 58 *T. Kobayashi*; Suntory Global Innovation Center Ltd., Japan  
Interactions between odor-active compounds and nonvolatiles in beer
- 59 *J. Sun*; Key Laboratory of Brewing Molecular Engineering of China Light Industry, Beijing Technology and Business University, China  
Explore the retronasal aroma release and sensory perception of baijiu and the role of saliva in it
- 60 *I. Chetschik*; Zurich University of Applied Sciences (ZHAW), Molecular aroma composition of vanilla – a criterion for quality and authenticity?

## FUNCTIONAL FLAVOR GENOMICS & BIOTECHNOLOGY

- 61 *Y. Zhang*; Department of Flavor Chemistry, University of Hohenheim, Germany  
Basidiomycetes bioprocess: generation of meat flavors from *Allium* species

- 62 *F. Stöppelmann*; Department of Flavor Chemistry,  
University of Hohenheim, Germany  
Decoding of a meaty and fatty flavor generated via  
*Laetiporus sulphureus*-mediated fermentation of onions
- 63 *F. Tuccillo*; Department of Food and Nutrition Sciences,  
University of Helsinki, Finland  
Fermentation induced changes for the flavor improvement  
of Faba bean
- 64 *V. V. Babkina*; Institute of Food Chemistry and Food  
Biotechnology, Justus Liebig University Giessen,  
Germany  
Preparative oxidation of primary alcohols by lyophilisates  
of the white-rot fungus *Bjerkandera adusta*
- 65 *T. Wagner*; University of Hohenheim, Germany  
Formation of vegan cheese flavors from plant proteins  
and fats by fermentation with *Aegrocybe aegerita* and  
*Trametes versicolor*: Fermentation process and aroma  
decoding

## **NEXT-GENERATION TECHNOLOGIES IN FLAVOR MOLE- CULE DISCOVERY AND ANALYTICS**

- 66 *J. Zyzak*; Eastern Kentucky University, USA  
New approach to field sampling of flavors and fragrances
- 67 *M. Roelse*; Wageningen University and Research,  
Bioscience, The Netherlands  
A smartphone sensor for detection of bioluminescence  
signals of receptor activation
- 68 *P. Schmidt-Kopplin*; Chair of Analytical Food Chemistry,  
Technische Universität München, Germany  
Comprehensive approach for a chemical profiling of  
Maillard chemistry in foods
- 69 *Y. Ma*; Lab of Brewing Microbiology and Applied  
Enzymology, Jiangnan University, China  
Olfactometer-based strategy to evaluate olfactory  
perceptual interactions in alcoholic beverage
- 70 *M. A. Petersen*; Department of Food Science, University  
of Copenhagen, Denmark  
Creating in-column aroma models by cryo-trapping



## FOOD-BORN BIOACTIVES: MOLECULAR DECODING, INTERACTIONS AND PERCEPTION

- 71 *M. Holzer*; Chair of Food Chemistry and Molecular Sensory Science, Technical University of Munich, Germany  
Sensopeptidomic discovery of DPP-IV inhibitory peptides in quinoa with reduced bitter notes
- 72 *K. Tang*; School of Biotechnology, Jiangnan University, China  
Study on the influence of the interaction between tannins and saliva on retronasal aroma release of wine

## Notes

A faint, light blue background illustration of a castle or fortress with multiple towers and battlements, set against a white background with horizontal blue lines. The castle features a central square tower and several smaller towers with conical roofs. The entire image is overlaid on a series of horizontal blue lines, typical of a notebook page.



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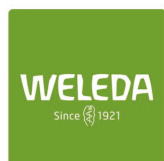
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