

# Oral Programme & Poster Programme

Aug 31<sup>st</sup> to Sep 2<sup>nd</sup>, 2009

Potsdam, Germany

<b><u>Sunday, August 30</u></b>		<b>Room</b>
16:00 – 18:00	Registration	<b>Mercure</b> <i>Rezeption</i> <i>Atelier</i>
09:00 – 14:00	Presidium Meeting	
15:00 – 17:00	Executive Board Meeting	<i>Loge</i>
18:00 – 20:00	Get-together	<b>Mercure</b> <i>Bankettfoyer</i>
19:30 – 21:30	CIGR Section VI Board Meeting	<i>Regie 3</i> <i>(Floor 17)</i>
<b><u>Monday, August 31</u></b>		
08:30 – 09:30	Registration	<b>Mercure</b>
09:30 – 10:00	Opening Ceremony	<b>IHK</b>
<b>10:00 – 12:00</b>	<b>Plenary Lectures</b>	<b>IHK</b>
<i>Chair: Linus U. Opara, South Africa</i>		
10:00 – 10:30	Nanotechnology in food industry <i>Suresh Neethirajan, Digvir S. Jayas, Canada</i>	
10:30 – 11:00	Drying technology: trends and applications in postharvest processing <i>Arun Sadashiv Mujumdar, Chung Lim Law, Singapore</i>	
11:00 – 11:30	Emerging Technologies in Food Processing <i>Dietrich Knorr, Germany</i>	
11:30 – 12:00	Hyperspectral imaging for food quality evaluation <i>Da-Wen Sun, Ireland</i>	
<b>12:00 – 13:00</b>	<b>Lunch</b>	<b>Mercure</b> <i>Restaurant</i>
<b>13:00 – 14:00</b>	<b>Poster Session I</b>	<i>Regie 1 + 2</i> <i>(Floor 17)</i>

**Mon 14:00 – 17:40      Session 1: Spectroscopy**

*Saal 2 + 3*

*Chair: András Fekete, Hungary*

- 14:00 – 14:20      Non-invasive analyses of anthocyanins and carotenoids in cherry by means of continuous wave and time-resolved spectroscopy  
*Manuela Zude, Michael Pflanz, Carsten Dosche, Lorenzo Spinelli, Alessandro Torricelli*
- 14:20 – 14:40      Application of near infrared spectroscopy for monitoring osmo-air dehydration processes of blueberries  
*Nicoletta Sinelli, Gabriella Giovanelli, Ada Brambilla, Stefania Barzaghi, Ernestina Casiraghi*
- 14:40 – 15:00      Monitoring of the moisture content during dehydration of parsley with near infrared spectroscopy  
*Giuseppe Romano, Martin Böhner, Albert Heindl, Joachim Müller*
- 15:00 – 15:20      Determine pH and soluble solids content of morus juice using Vis-NIR spectroscopy with interval partial least squares and successive projections algorithm  
*Fang Cao, Di Wu, Yong He*
- 15:20 – 15:40      Classification of bee pollen using visible near infrared spectroscopy based on genetic algorithm  
*Ping Lin, Yongming Chen, Yong He*
- 15:40 – 16:00      *Coffee Break*
- 16:00 – 16:20      *In-situ* analysis of meat by applying Raman diode-laser spectroscopy  
*Heinar Schmidt, Martin Maiwald, Kay Sowoidnich, Bernd Sumpf, Heinz-Detlef Kronfeldt*
- 16:20 – 16:40      Evaluation of fatty acid profile of Wagyu beef by ATR-FTIR spectroscopy  
*Kiyohiko Toyoda, Minoru Yamanoue, Ikko Ihara, Xiaopin Hu, Kazumi Yoshida, Kaori Nakai*
- 16:40 – 17:00      Discrimination of time effect of high voltage electric field to oilseed using near infrared spectroscopy  
*Fei Liu, Yong He*
- 17:00 – 17:20      Quality assessment of Turkish butter using FTIR spectroscopy and chemometrics  
*Ramazan Kizil, Omer Gulyurt, Ilknur Sener,*
- 17:20 – 17:40      Fast determination of melamine content in milk powder base on NIR /MIR spectroscopy method  
*Yuan Shilin, Yong He*

**Mon 14:00 – 17:40      Session 2: Food Safety**

**Saal 1**

*Chair: Dietrich Knorr, Germany*

- 14:00 – 14:20      Acrylamide mitigation in potato chips by using NaCl  
*Franco Pedreschi, Kit Granby, Jørn Risum*
- 14:20 – 14:40      Wheat bread with hull-less barley grain additive: its quality and microbiological safety  
*Tatjana Rakcejeva, Lija Dukalska, Ruta Galoburda, Liga Skudra, Loveta Robezniece, Linda Legzdina*
- 14:40 – 15:00      Effect of hypolipidemic on extracellular polysaccharide from the submerged fermentation of *Agaricus brasiliensis*  
*Pomin Li, I-Ping Su, Yun-Rong Li*
- 15:00 – 15:20      The effect of penetration depth and UV dose on the performance of UV-C disinfection process of white grape juice inoculated with *Escherichia coli* K-12  
*Bengi Hakguder, Sevcan Unluturk*
- 15:20 – 15:40      Product quality and safety in HoReCa sector  
*E. Czarniecka-Skubina, Józef Grochowicz, Dorota Nowak*
- 15:40 – 16:00      *Coffee Break*
- 16:00 – 16:20      Use of an *in-situ* tamperproof sampling device for enhanced feed chain security  
*Barry Mc Inerney*
- 16:20 – 16:40      Production of pesticide-free dry fish through box and ring tunnel dryer: an innovation to improve product quality & safety and reduce risks for the consumers  
*Nowsad Akm Alam, Reazul Md Islam*
- 16:40 – 17:00      Improving the antibacterial activity of lysozyme by conjugation with polysaccharides  
*Mahmoud Aminlari, Roghayeh Ramezani Ali Abadi*
- 17:00 – 17:20      Development of bacteriocin based biopreservative for preservation of paneer (an Indian soft cheese)  
*Ravinder Malik, K.N. Rao, Ulrich Schillinger, Arun Bhardwaj, Naresh Kumar*

**Mon 14:00 – 17:40**

**Session 3: Emerging Technologies and Sensors**

*Bühne 1 + 2*

*Chair: Oliver Schlüter, Germany*

- 14:00 – 14:20 The impact of high pressure on the antioxidant activity of yellow mombin pulp  
*Julia Hauck Tiburski, Amauri Rosenthal, Rosires Deliza, Fernanda Branco Shinagawa*
- 14:20 – 14:40 Combination of high pressure and temperature as an alternative sterilization process  
*Kai Reineke, Alexander Mathys, Volker Heinz, Dietrich Knorr*
- 14:40 – 15:00 Impregnation techniques for aroma enrichment of apples: a preliminary study  
*Patrizia Comandini, Giampaolo Blanda, Hugo Mújica Paz, Aurora Valdez Fragoso, Tullia Gallina Toschi*
- 15:00 – 15:20 Processing to control plant dispersion particle morphologies and their rheological properties  
*Li Day, Sofia Oiseth, Leif Lundin*
- 15:20 – 15:40 Online-Monitoring of physiological fitness of *Lb. plantarum* during fermentation and identification of optimal harvest points  
*Antje Schulz*
- 15:40 – 16:00 *Coffee Break*
- 16:00 – 16:20 Sensor technology for the identification of mycotoxine producing fungi in the processing of wheat grain  
*Claudia Rasch, Michael Kumke, Hans-Gerd Löhmannsröben*
- 16:20 – 16:40 Monitoring of food freezing process by using ultrasonic method  
*Takahiro Sugiyama, Takahisa Nishizu, Kiyokazu Goto, Jile Xin, Naoshi Kondo, Hiroshi Shimizu*
- 16:40 – 17:00 Microwave sensor response in relation to durian fruit maturity  
*Saisunee Suttapa, Jatuphong Varith, Chanisara Noochuay, Jakraphong Phimpimol, Monai Krairiksh*
- 17:00 – 17:20 Characterizing the product quality attributes of extrudates of selected crops from a locally developed extruder  
*Agboola Simeon Ogunlowo, Folasayo Fayose*
- 17:20 – 17:40 Extrusion characteristics of cassava and defatted soyflour blended extrudates  
*Jaffar Thajudhin Sheriff, Moothandassery Sankarakutty Sajeev, G. Padmaja, Subramony Narayana Moorthy*

**Mon 14:00 – 17:40      Session 4: Modelling I**

*Parkett 1 + 2*

*Chair: László Baranyai, Hungary*

- 14:00 – 14:20      Approaches to modelling packaging ventilation performance in fresh food handling: a comparative review  
*Umezuruike Linus Opara*
- 14:20 – 14:40      Modelling post-harvest colour development in limes and tomatoes  
*Richard Love, Charles Jenkins, John Mawson*
- 14:40 – 15:00      Strange attractor in the chlorophyll difference model of Longjing tea  
*Yongming Chen, Ping Lin, Yong He*
- 15:00 – 15:20      Numerical simulations of pulsed electric field processing for chamber design and optimisation  
*Roman Buckow, Stefanie Schroeder, Kai Knoerzer, Kees Versteeg*
- 15:20 – 15:40      Combined mathematical and finite element modeling to simulate firmness of linearly solid potatoes  
*Hoseyn Ashrafi, Mahdi Kasraei*
- 15:40 – 16:00      *Coffee Break*
- 16:00 – 16:20      Computational methods and experimental measurements  
*Nicolas Meneses, Henry Jaeger, Jeldrik Moritz, Dietrich Knorr*
- 16:20 – 16:40      Steam deacidification of model fatty systems: experimental and simulation  
*Thiago Taham, Simone Silva, Klicia Araújo Sampaio, Roberta Ceriani, Antonio J.A. Meirelles*
- 16:40 – 17:00      Mathematical modeling of lipid peroxidation reaction of vegetable oil with phytochemical antioxidant treatment during frying  
*Irwandi Jaswir*
- 17:00 – 17:20      Modeling techniques for the control of thermal exchanges in mixed continuous-discontinuous flow food plants  
*Gustavo Belforte, Lorenzo Comba, Paolo Gay, Davide Ricauda Aimonino*

**18:00 – 21:00      CIGR Technical Board Meeting**

*Regie 3  
(Floor 17)*

## **Tuesday, September 01**

**Tue 09:00 – 12:40**

**Session 5: Bioprocessing**

**Saal 2 + 3**

*Chair: Venkatesh Meda, Canada*

- 09:00 – 09:20      Wireless magnetoelastic biosensors for the simultaneous detection of *Salmonella typhimurium* and *Bacillus anthracis*  
*Shichu Huang, Suiqiong Li, Howard C. Wikle, Zhongyang Cheng, Bryan A. Chin*
- 09:20 – 09:40      Online, rapid and portable microcantilever biosensors for food safety monitoring  
*Carlo Ricciardi, Giancarlo Canavese, Riccardo Castagna, Gabriella Digregorio, Ivan Ferrante, Francesco Geobaldo, Alessandro Ricci*
- 09:40 – 10:00      The acoustic impedance – an indicator for concentrations in alcoholic fermentation and cleaning progress of fouled tube heat exchangers  
*Thomas Becker, Mohamed Hussein, Eva Wallhäußer*
- 10:00 – 10:20      The impact of bioprocessing on rice nutritional quality  
*Anca Nicolau, Luminita Anca Georgescu, Rodica Segal*
- 10:20 – 10:40      Detection of deoxynivalenol using excitation-emission matrix  
*Junichi Sugiyama, Kaori Fujita, Mizuki Tsuta, Mito Kokawa*
- 10:40 – 11:00      *Coffee Break*
- 11:00 – 11:20      Monitoring of CO<sub>2</sub> during fermentation process by means of impedance spectrometry sensor  
*Miguel A. Perez, Rocio Muñiz, Cristina De la Torre, Beatriz Garcia, Carlos E. Carleos, Raul Crespo, Luis Miguel Carcel*
- 11:20 – 11:40      Monitoring wine alcoholic fermentation using a resistivity sensor  
*Luis Miguel Cárcel, Raúl Crespo, Miguel Ángel Pérez-García, Ignacio Nevares, María Del Álamo*
- 11:40 – 12:00      Analysis of mixing degree of granular products using microtracers  
*Józef Grochowicz, Kazimierz Zawislak, Paweł Sobczak, Marian Panasiewicz, Jacek Mazur*
- 12:00 – 12:20      Researches regarding bioethanol yield increasing  
*Sonia Gutt, Georg Gutt*

**Tue 09:00 – 12:40      Session 6: Thermal Processing**

*Parkett 1 + 2*

*Chair: Alain LeBail, France*

- 09:00 – 09:20      Process development of premium quality  
canned Thai red curry paste  
*Pimpen Pornchalaempong, Kanokwan Teptakhob,  
Kanjana Lertamondireak, Kraisuwit Srisawat*
- 09:20 – 09:40      Characteristics in cell wall structure of green  
bean during control freezing point storage  
*Ying Ma, Guo Li*
- 09:40 – 10:00      Effect of freezing and cooking processes on  
the texture of Atlantic salmon (*Salmo salar*)  
fillets  
*Ebrahim Alizadehdoughikollae, Nicolas Chapleau,  
Marie de-Lamballerie, Alain LeBail*
- 10:00 – 10:20      The thermal stability of onion (*Allium cepa* L.)  
flavonols – Influence of crop production and  
food processing  
*Sascha Rohn*
- 10:20 – 10:40      Influence of shaking on heat penetration  
during retort processing  
*Samak Rakmae, Methira Thawornsuksiri,  
Walaiporn Rakpudsa*
- 10:40 – 11:00      *Coffee Break*
- 11:00 – 11:20      Mechanical and thermal treatments of crushed  
tomatoes or carrot purées: Effects on In vitro  
accessibility of antioxidants and on  
structure/consistency  
*Cecilia Svelander*
- 11:20 – 11:40      Influence of fat and protein contents on the  
thermo-physical properties of milk -application  
to the standardisation of milk-  
*Sophie Galland, Eric Peyrol*
- 11:40 – 12:00      Identification of an optimal set of parameters  
for the process of pasteurization of beverages  
by using dense gases  
*Gabriele Di Giacomo, Luca Taglieri*
- 12:00 – 12:20      Investigation of macro-structure of gluten-free  
rice cakes baked in infrared-microwave  
combination over  
*Elif Turabi, Gulum Sumnu, Serpil Sahin*

**Tue 09:00 – 12:40**

**Session 7: Functional Food and Health**

*Saal 1*

*Chair: Amauri Rosenthal, Brazil*

- 09:00 – 09:20 Impact of micronization on rapidly digestible, slowly digestible and resistant starch contents in different barley varieties  
*Shahram Emami, Venkatesh Meda, Robert T. Tyler, Mark Pickard*
- 09:20 – 09:40 Increasing of biodegradability and digestibility of dairy sludge by microwave treatment  
*Sándor Beszédes, Zsuzsanna László, Gábor Szabó, Cecília Hodúr*
- 09:40 – 10:00 Application of novel soybean varieties to Tofu (soybean curd) and utilization of the Tofu byproduct for functional food development  
*Toshinori Kimura, Atsuko Tsujino, Mugiho Yokota, Shuso Kawamura, Naoto Shimizu, Natsu Nakanishi, Noriko Tsuji*
- 10:00 – 10:20 Functional components in traditionally consumed foods from Botswana  
*Jideani Afam, Selalelo Mpotokwane, Malebogo Ralefala, Motlalepula Mokotedi, Kabo Moseitlha, Anna Nkwe-Mosele, Malaki Kamakama, Juda Bogopa*
- 10:20 – 10:40 Controlling the nutrient profile of fruits and vegetables during prolonged storage prior to processing  
*James Robertson, Claudia Niemann, Marie Alminger*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Identification and quantification of betalains, carotenoids and chlorophylls in prickly pear fruit  
*Elhadi Yahia, Elena Castellanos*
- 11:20 – 11:40 Evaluation of 11 pesticide residues in dried figs from Estahban region in Iran  
*Majid Javanmard*

**Tue 09:00 – 12:40**

**Session 8: Physico-Chemical and Microbiological Properties**

*Bühne 1 + 2*

*Chair: Yong He, China*

- 09:00 – 09:20 Interactions of a novel monoglyceride-stabilized oil in water emulsion with wheat flour, starch, and gluten  
*Brittany Huschka, Carolyn Challacombe, Alejandro G. Marangoni, Koushik Seetharaman*
- 09:20 – 09:40 Properties of MPC and WPC-stabilized O/W emulsions as influenced by oil droplet surface composition  
*Brygida Dybowska*
- 09:40 – 10:00 Effect of atmospheric pressure plasma treatment on the stability of flavonoids  
*Franziska Grzegorzewski, Jörg Ehlbeck, Lothar W. Kroh, Oliver Schlüter, Sascha Rohn*
- 10:00 – 10:20 Studies on physico-chemical characteristics and preservation of cultivated mushrooms  
*Sarfraz Hussain, Salim-Ur-Rehman, Qaisar Raza*
- 10:20 – 10:40 Physicochemical change and protein oxidation in porcine longissimus muscle as influenced by different freeze-thaw cycles  
*Baohua Kong, Xiufang Xia, Youling Xiong*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Evaluation of Escherichia coli inactivation and quality attributes in apple juice subjected to pulsed electric fields in combination with high intensity light pulses  
*Irene Miriam Caminiti, Izabela Palgan, Francesco Noci, Arantxa Muñoz, Paul Whyte, Denis A. Cronin, Desmond J. Morgan, James Lyng*
- 11:20 – 11:40 Spatial distribution, attachment and growth of bacteria on fruit and vegetable tissues  
*Tim Brocklehurst*
- 11:40 – 12:00 Changes of aldehydes in essential oil during postharvest treatment of red pepper (*Capsicum annuum* L.) for paprika production  
*Žarko Kevrešan, Ksenija Kuhajda, Neda Mimica-Dukic*
- 12:00 – 12:20 Fermentation of spherical bacterial cellulose product by shaking culture  
*Sixin Liu, Quanwei Wang, Congfa Li*
- 12:20 – 12:40 Chemical, nutritional and microbiological quality of fluid milk available in chittagong metropolitan area of Bangladesh  
*A.K.M. Humayun Kober, G.K. Debnath, G.C. Chanda*

<b>12:40 – 14:00</b>	<b>Lunch</b>	<b>Mercure Restaurant</b>
<b>14:00 – 15:00</b>	<b>Poster Session II</b>	<b>Regie 1 + 2 (Floor 17)</b>
<b>Tue 15:00 – 18:00</b>	<b>Session 9: Modelling II</b>	<b>Saal 2 + 3</b>
<i>Chair: Elisabeth Dumoulin, France</i>		
15:00 – 15:20	Modeling of microparticulation process of whey proteins: development and validation of a novel model based on the phenomena of their thermal denaturation <i>Alexander Tolkach, José Toro, Ulrich Kulozik</i>	
15:20 – 15:40	Multi-objective optimization of pervaporation process for food products <i>Graziano De Palma, Roberto Rizzo, Giuseppe Vignali</i>	
15:40 – 16:00	Computational fluid dynamics modelling and simulation of maltodextrin solutions spray drying to control stickiness <i>Alessandro Gianfrancesco, Christelle Turchiuli, Denis Flick, Elisabeth Dumoulin</i>	
16:00 – 16:20	Effect of temperature on water activity of Dutch type semi-hard cheese: computation and prediction on the basis of heat of sorption <i>Jiri Stencl, Vorlova Lenka, Bohumira Janstova, Michaela Drackova, Hana Pridalova</i>	
16:20 – 16:40	<i>Coffee Break</i>	
16:40 – 17:00	Quantification of nitrogen status in rice by least-squares support vector machines and reflectance spectroscopy <i>Yongni Shao</i>	
17:00 – 17:20	A predictive model to compare the factors influencing oat and barley $\beta$ -glucan levels in harvested grain <i>Uma Tiwari, Enda Cummins</i>	
17:20 – 17:40	Fast quantitative analysis of soluble solids content in cherry based on statistical analysis of PLS-LSSVM and genetic algorithm <i>Jia-Jia Yu, Yong He</i>	
17:40 – 18:00	Prediction of viscosity changes in rainbow trout skin gelatin, produced at different pre-treatment time using artificial neural network model <i>Hoda Shahiri Tabarestani, Yahya Maghsoudlou, Ali Motamedzadegan, Alireza Sadeghi Mahoonak</i>	

**Tue 15:00 – 18:00      Session 10: Image Processing I**

*Saal 1*

*Chair: Manuela Zude, Germany*

- 15:00 – 15:20      *In-situ* observation of high pressure induced changes of food materials using neutron radiography  
*Oliver Schlüter, Werner Herppich, Stefan Boguslawski, Dietrich Knorr, Nikolay Kardjilov*
- 15:20 – 15:40      Use of lacunarity for characterization of pork ham slice surfaces from digital binary images  
*Nektarios A. Valous, Fernando Mendoza, Da-Wen Sun*
- 15:40 – 16:00      Thermoluminescence detection of irradiated crustaceans: comparison between two methods for extracting minerals  
*Maria Cinzia Cammilleri, Antonio Bartolotta, Maria Cristina D'Oca, Sandra Antonella Giuffrida, Aldo Parlato*
- 16:00 – 16:20      Prediction of consumer panel assessment of beef palatability from digital image features  
*Patrick Jackman, Da-Wen Sun, Paul Allen, Karen Brandon, Anna-Marie White*
- 16:20 – 16:40      *Coffee Break*
- 16:40 – 17:00      Early prediction of rice leaf blast based on multi-spectral image  
*Kaisheng Yang, Lei Feng, Yong He*
- 17:00 – 17:20      Fish size estimation and sorting using laser light sectioning  
*Taweepol Suesut, Navaphattra Nunak*

**Tue 15:00 – 18:00      Session 11: Packaging**

*Parkett 1 + 2*

*Chair: Richard Love, New Zealand*

- 15:00 – 15:20      Packaging properties of cassava starch nanocomposite films  
*Ana Cristina Souza, Ewerton S. P. Ferrão, Fernanda Montelato, Antonio Carlos Coelho, Carmen Cecília Tadini*
- 15:20 – 15:40      Monitoring of the vibration damage for packaging mangos in a corrugated fiberboard box during transportation  
*Hung-Yen Chan, Chung-Kee Yeh*
- 15:40 – 16:00      Development of web-based software for packaging design  
*Pramod Mahajan, Maria Sousa-Gallagher, Jorge Oliveira*
- 16:00 – 16:20      Analysis of microwave distribution for ready-to-cook fresh-cut Asparagus packaging  
*Chanisara Noochuay, Jatuphong Varith, Wannee Chinsirikul, Monai Krairiksh*
- 16:20 – 16:40      *Coffee Break*
- 16:40 – 17:00      Water vapour permeability, mechanical and thermal properties of carboxymethyl cellulose-based edible films containing potassium sorbate  
*Babak Ghanbarzadeh*
- 17:00 – 17:20      The effect of calcium alginate coating on the storability of strawberry at the refrigerator  
*Nasrin Moayednia, Mohamad Reza Ehsani, Zahra Emam-Djomeh, Amir Farokh Mazaheri*
- 17:20 – 17:40      Effects of modified atmosphere packaging on the quality of barberry  
*Neptune Bidely, Shohreh Nik khah*
- 17:40 – 18:00      Effect of pretreatment by ethyl oleate and packaging on qualitative characteristics of stored dried mulberry  
*Mehdi Davoodi, Shohreh Nik khah, Amin Seyed yaghoubi*

**Tue 15:00 – 18:00**

**Session 12: Extraction**

*Bühne 1 + 2*

*Chair: Ying Ma, China*

- 15:00 – 15:20 An innovative process for extraction of fruit juice using microwave heating  
*Aurélie Cendres, Farid Chemat, Jean François Maingonnat, Catherine Renard*
- 15:20 – 15:40 Pulsed electric field assisted extraction of plant raw materials  
*Henry Jaeger, Nicolas Meneses, Dietrich Knorr*
- 15:40 – 16:00 Ultrasound accelerated maceration for direct aromatisation of olive oil with basil  
*Sébastien Veillet, Valérie Tomao, Farid Chemat*
- 16:00 – 16:20 Precipitation of ethyl cellulose by solution enhanced dispersion by supercritical fluids  
*Lan Chen, Guangtian Li, Zhepeng Liu*
- 16:20 – 16:40 *Coffee Break*
- 16:40 – 17:00 Pressurized low polarity water extraction kinetics of trans-resveratrol and trans- $\epsilon$ -viniferin in grape canes  
*Erkan Karacabey, Levent Bayğndğrlğ, Giuseppe Mazza*
- 17:00 – 17:20 Effects of whole fat rapeseed expanding on the pre-pressing cake oil residue  
*Lanfang Zhang, Shaohua Li, Shujun Li, Ziming Li, Hai Xiang, Jinqiang Guo, Jiajia Ren*
- 17:20 – 17:40 Antioxidant properties of various solvent extracts of some food processing by-products  
*Adel Mohdaly, Iryna Smetanska, Mohamed Atef Sarhan, Awad Mahmoud*
- 17:40 – 18:00 Effects of supercritical CO<sub>2</sub> fluid parameters on chemical composition and yield of carotenoids extracted from pumpkin  
*John Shi, Sophia Xue, Yueming Jiang*

**Tue 18:30 – 22:00**

**Symposium Dinner**

(Start 18:30, Boat landing place at Mercure)

**Boat trip**

## Wednesday, September 02

**Wed 09:00 – 12:40**

**Session 13: Engineering and Development**

**Saal 2 + 3**

*Chair: Jozef Grochowicz, Poland*

- 09:00 – 09:20 A study of the effect of micro and nano-bubbles in the dynamic properties of water  
*Fernanda Yumi Ushikubo, Seiichi Oshita, Ryou Nakagawa, Takuro Furukawa, Yoshio Makino, Yoshinori Kawagoe*
- 09:20 – 09:40 Ultrasonic assisted microencapsulation of cardamom essential oil  
*Masoud Najaf Najafi, Rassoul Kadkhodae, Seyed Ali Mortazavi*
- 09:40 – 10:00 Effects of the salting step conditions on Tunisian Kaddid meats: kinetics and quality  
*Mériem Chabouh, Ali Sahli, Sihem Bellagha, Abdelhamid Farhat*
- 10:00 – 10:20 Concentration and formulation of elder berry anthocyanins using membrane process and PGSS(TM) technology  
*Zsuzsanna Molnár, Mojca Škerget, Željko Knez, Gyula Vatai*
- 10:20 – 10:40 Obtention of gels from *Brama Australis* and biaxial extensional viscosity characterization  
*Fernando Osorio, Javier Enrione, Jennifer Crisostomo, Sergio Baeza*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Exploring metabolic responses of potato tissue Induced by electric pulses  
*Federico Gómez Galindo, Lars Wadsö, António Vicente, Petr Dejmek*
- 11:20 – 11:40 Implementation of water jet cut in cutting and peeling processes of agricultural products  
*Rene Carreno Olejua, Werner Hofacker, Oliver Hensel*
- 11:40 – 12:00 Optimal shape design of holding tubes configuration in aseptic processing  
*Fabrizio Sarghini, Paolo Masi*
- 12:00 – 12:20 Design and performance evaluation of a multi-crop slicing machine  
*Leo Ayodeji Sunday Agbetoye, Abdul-Lateef Balogun*

**Wed 09:00 – 12:40**

**Session 14: Image Processing II**

**Saal 1**

*Chair: Da-Wen Sun, Ireland*

- 09:00 – 09:20 Cold neutron radiography for non-destructive analysis of food water status  
*Uzuki Matsushima, Nikolay Kardjilov, André Hilger, Eberhard H. Lehmann, Anders Kaestner, Werner B. Herppich*
- 09:20 – 09:40 Variation in carrot texture under different storage conditions  
*Timea Kaszab, Ferenc Firtha, Andras Fekete*
- 09:40 – 10:00 Pork and turkey hams classification from colour and textural features using computer vision  
*Abdullah Iqbal, Nektarios A. Valous, Fernando Mendoza, Paul Allen, Da-Wen Sun*
- 10:00 – 10:20 Near-infrared spectral imaging for the evaluation of food additive effects on prawn properties  
*Mizuki Tsuta, Takehiro Sugiyama, Tetsuya Araki, Yasuyuki Sagara, Junichi Sugiyama*
- 10:20 – 10:40 Evaluation of white shrimp freshness during Iced storage using texture analyzer and machine vision  
*Navaphattra Nunak, Taweepol Suesut*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Digital image analysis for the optimal control of bread and rolls baking  
*Mario Jeckle, Dörte Solle, Bernd Hitzmann, Thomas Becker*
- 11:20 – 11:40 Microscopic analysis of particle caking of corn distillers dried grains with solubles  
*Klein Ileleji, Rose Prabim Kingsly*
- 11:40 – 12:00 Image processing applied to classification of avocado variety hass (*Persea americana* Mill) during their ripening process  
*Israel Arzate, Maria De Jesus Perea, Marco Antonio Moreno, Salvador Godoy, Gustavo Fidel Gutiérrez, Jose Jorge Chanona*

**Wed 09:00 – 12:40**

**Session 15: Drying**

*Parkett 1 + 2*

*Chair: Arun S. Mujumdar, Singapore*

- 09:00 – 09:20 Reuse of sucrose solutions in the production of osmotically dried peach  
*Sílvia Pimentel Marconi Germer, Marlene Rita de Queiroz, José Maurício Aguirre, Neliane Ferraz de Arruda Silveira, Daniele de Carvalho*
- 09:20 – 09:40 Drying characteristics of ginger rhizome (*Zingiber officinalis*)  
*Bilash Kanti Bala, M.A. Hoque, Md. Ayub Hossain, M. Borhan Uddin*
- 09:40 – 10:00 Optimization of drying parameters of saskatoon berries (*Amelanchier alnifolia*) using a combined microwave and vacuum method  
*Pranabendu Mitra, Venkatesh Meda*
- 10:00 – 10:20 Colour degradation of lemon balm (*Melissa officinalis* L.) as affected by the drying process  
*Dimitrios Argyropoulos, Joseph Kudadam, Joachim Müller*
- 10:20 – 10:40 Determine maximum permissible temperature for drying rapeseed and sunflower seed  
*Mehdi Baghi*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 Polyphenol degradation mechanisms during soaking and drying of apples  
*Emilie Devic, Sylvain Guyot, Jean Dominique Daudin, Catherine Bonazzi*
- 11:20 – 11:40 Mathematical modelling of solar assisted hybrid dryer for banana  
*Md. Ayub. Hossain, Baher Mahmoud Ahmed Amer, Klaus Gottschalk*
- 11:40 – 12:00 Development and evaluation of a solar assisted hybrid dryer for spices  
*Ayubl Hossain, Arshadul Hoque*

**Wed 09:00 – 12:40**

**Session 16: Food Quality and Measurement Techniques**

*Bühne 1 + 2*

*Chair: Kiyohiko Toyoda, Japan*

- 09:00 – 09:20 Definition of a new post-harvesting treatment of paddy rice; characterization of final product  
*Cong Duong Thai, Sabah Mounir, Isaac Pilatowski, Karim Allaf*
- 09:20 – 09:40 On the usage of ultrasound for online dough evaluation techniques  
*Hala Elfawakhry*
- 09:40 – 10:00 Non-destructive electromagnetic pecan analysis  
*Carol Jones, Josh Grundmann, Niels Maness, Paul Weckler*
- 10:00 – 10:20 Measuring and Steering vacuum in the milk tube to avoid vacuum maxima at the teat end  
*Ulrich Ströbel, Sandra Rose-Maierhöfer*
- 10:20 – 10:40 Geographical origin, cultivar, harvesting year verification of European and non-European olive oils using proton transfer reaction mass spectrometry with multivariate data analysis  
*Saskia van Ruth, Wies Akkermans, Rafa Perez Garcia, Alex Koot, Enzo Perri, Massimiliano Pellegrino, Jose Manuel Moreno Rojas, Claude Guillou, Anne Rossignal-Castera*
- 10:40 – 11:00 *Coffee Break*
- 11:00 – 11:20 The implementation and verification of advanced traceability system in the Polish fish processing plant  
*Olga Szulecka*
- 11:20 – 11:40 Sensory quality assurance for process optimization of cheese production  
*Julie Lundtoft Johnsen, Mette Marie Løkke, Christian Dehlholm*
- 11:40 – 12:00 Effect of spice oleoresin and powder on the quality and microbial shelf life of white bread  
*Taofik Shittu, Abosede Abioye*
- 12:00 – 12:20 Food quality and monitoring and bioprocessing in Georgia  
*Kakha Nadiradze, Nana Phirosmanashvili*
- 12:20 – 12:40 Quality characteristics of aonla pulp as affected by ohmic heating pretreatment  
*Santosh Patil, Anupama Singh, Manoj Kulshrestha, B.K Kumbhar, Hridayesh Pandey*

**Wed 12:40**

**End of the Symposium**

**Poster Session 1 (Monday 12:00 – Tuesday 12:00, Room:  
Regie 1 + 2, Floor 17)**

**Section 1: Modern Production and Postharvest Handling of Raw Material**

**P1-01**

Machine vision for automatic sorting and cultivar identification of rice grains

*Jose Domingo Guzman*

**P1-02**

Prediction of potato damage under impact loading with nonlinear model

*Hamed Afshari*

**P1-03**

Evaluation of adulterated caramel colour in commercial apple juices

*Calin Jianu, Ionel Jianu, Ileana Cocan, Cristina Rujescu, Ciprian Rujescu*

**P1-04**

Changes of chlorophylls,  $\beta$ -carotene and lutein during storage of lettuce of control plants and  $\text{CaCl}_2$  pre-harvest treatment.

*Irena Perucka, Katarzyna Olszówka*

**P1-05**

Reduction of gray mould on strawberries by acetic acid vapour and quality analysis of produce

*Karin Hassenberg, Martin Geyer, Werner B. Herppich*

**P1-06**

Enzymatic hydrolyze of soy oil using lipase by *Geotrichum candidum*

*Rafael Resende Maldonado, Felipe Massiero Fogaça, Gabriela Giolo Ramos, Gabriela Alves Macedo, Maria Isabel Rodrigues*

**P1-07**

Feasibility of a simplified handheld optical system for blueberries ripeness field evaluation

*Roberto Beghi, Riccardo Guidetti, Roberto Oberti, Luigi Bodria*

**P1-08**

Marketing of pomegranate in Iran: Difficulties and recommendations

*Shohreh Nik khah*

**P1-09**

Acoustic analysis for non-destructive detection of quality defects in fruits and vegetables

*Julia Foerster, Martin Geyer, Oliver Schlüter, Werner B. Herppich, Michael Kiefer, Christoph Lauer, Dietrich Knorr*

**P1-10**

Effect of calcium applications and storage condition in apples on calcium and polyphenol content related with physiological disorder of bitter pit in apples

*Rebeca Torres-Muñoz, Armando Quintero-Ramos, Esteban Sánchez-Chávez, Juan Manuel Soto Parra, Erika Salas-Muñoz*

**P1-11**

Improvement of fruit storage in the supply chain with modified atmosphere packaging

*Nicole Giuggioli, Francesco Geobaldo, Raffaella Ceccarelli, Cristiana Peano*

**P1-12**

Increased level of flavonoids in fermentation solution of dyers woad leaf  
*Tao Han, Ruo-hong Zhang, Li-ping Li, Bo-lin Zhang*

**P1-13**

Anthocyanin producing from grape pomace (*Vitis* sp) and barberry  
*Neptune Bidely, Abbas Hemmati Kakhky*

**Section 2: Food Processing with respect to Product Quality and Safety****P2-01**

Development of quality small – scale agricultural processing enterprises in Uganda  
*Obedi Nsubuga*

**P2-02**

Design and test of solar dryer for leafy vegetable  
*Ebrahim Ebrahimi*

**P2-03**

Production of virusless potato seed for Georgian potato farmers  
*Maia Kukhaleishvili, Kakha Nadiradze, Nana Phirosmanahsvili*

**P2-04**

Influence of temperature on quality of red pepper (*Capsicum annuum*, L. var. Hungarian) during dehydration: colour, texture and antioxidants properties  
*Antonio Vega-Gálvez, Margarita Miranda, Karina Di Scala*

**P2-05**

Changes of rheological behaviour of wheat flour by archaic wheat varieties addition  
*Ivan Švec, Marie Hrušková, Michala Kubalová, Markéta Bachanová*

**P2-06**

Lupin addition effect on wheat flour, dough and bread properties  
*Marie Hrušková, Ivan Švec, Michala Kubalová, Markéta Bachanová*

**P2-07**

Simulated in-transit vibration damage to watermelons  
*Feizollah Shahbazi, Ali Rajabipour, Saeed Mohtasebi, Shahin Rafie*

**P2-08**

Extraction and Identification of the hepatoprotective bio-active components of the root of *A. deliciosa*  
*Bai Xinpeng, Guo Zhiyong, Liu Xiaoqin, Qiu Aiyong*

**P2-09**

Hygiene and waste and wastewater management of fresh-cut vegetables  
*Marja Lehto, Ilkka Sipila, Maarit Mäki, Terhi Suojala-Ahlfors, Jenni Maatta, Risto Kuisma, Anna-Maija Sjoberg*

**P2-10-**

Influence of osmotic pre-treatment and microwave power on the volatile profile of dried cherry tomatoes  
*Ana Heredia, Irene Pardo, Estela Rosa, Ana Andrés Grau, Isabel Escriche*

**P2-11**

Effect of proteins on lactose-induced stickiness in dairy powders  
*Donal O'Callaghan, Sean Hogan*

**P2-12**

Soy milk residue ("okara") dried in flash dryer - uses as food ingredient

*Regina Kitagawa Grizotto, José Maurício Aguirre, Sílvia Pimentel Marconi Germer, Luciana Miyagusku, Eunice Akemi Yamada*

**P2-13**

Quality and development of organic juice of assai and passion fruit enriched with unripe banana pulp

*Gisele Anne Camargo, Julian Mieli, Rita de Cassia Ormonese, Flávio Schimdt*

**P2-14**

Antioxidant activity and polyphenols of the whole pulp cagaita (*Eugenia dysenterica*, D.C.)

*Lucia Maria Jaeger de Carvalho, Ediane Maria Gomes Ribeiro, Mirian Ribeiro Leite Moura, Eduardo Lopes Motta, Nancy Barbi, Daniela Soares Viana, Veronica Figueiredo, Alcides Ricardo Gomes Oliveira*

**P2-15**

Comparative study on nutritional and morphological aspects of lychees (*Litchi chinensis* Sonn.) after osmotic pre-treatment and conventional dehydration

*Lucia Maria Jaeger de Carvalho, Eduardo Lopes Motta, Mirian Ribeiro Leite Moura, Nancy Barbi, Ana Claudia de Macedo Vieira*

**P2-16**

Determination of the antioxidant capacity and polyphenols in acid lime (*Citrus latifolia*, Tanaka), cv. Tahiti, clarified by microfiltration: a preliminary study

*Lucia Maria Jaeger de Carvalho, Gisela Maria Dellamora Ortiz, Daniela Soares Viana, Ediane Maria Gomes Ribeiro, Eduardo Lopes Motta, Mirian Ribeiro Leite Moura*

**P2-17**

State diagram of deglet nour dates by differential scanning calorimetry

*Nejib Guizani, Ghalib Said Al-Saidi, M. Shafiur Rahman, Salwa Bornaz*

**P2-18**

Optimization of combined microwave-hot air roasting for malt based on energy consumption and neo-formed contaminants (NFCs) content

*Suthida Akkarachaneeyakorn, Jean Claude Laguerre, Jirarat Tattiyakul, Benjamin Neugnot, Francisco Morales, Ines Birlouez-Aragon, Patrick Boivin*

**P2-19**

Combined effect of glycerol and oleic acid on the physical and thermal properties of carboxymethyl cellulose based edible films

*Babak Ghanbarzadeh, Hadi Almasi*

**P2-20**

Effect of gellan gum as the fluid gel forming agent, on particle size distribution, turbidity and rheological properties of orange juice

*Leila Bagheri, Babak Ghanbarzadeh, Mohamd Musavi*

**P2-21**

Effect of superchilled storage on the freshness and quality of pork

*Jing Xie*

**P2-22**

The effects of different hydrocolloids on staling of gluten free cakes baked in different ovens

*Filiz Koksel, Gulum Sumnu, Serpil Sahin, Venkatesh Meda*

**P2-23**

Effect of storage and processing on reducing and non-reducing sugar content in potatoes

*Daina Karklina, Ruta Galoburda, Irisa Murniece*

**P2-24**

Influence of blanching and drying treatment on total polyphenols and antioxidant activity in apple pomace

*Maria Elena Heras-Ramírez, Armando Quintero-Ramos, Ricardo Talamás-Abbud, Rene Renato Balandrán-Quintana, Alejandro Camacho-Dávila, Ruben Márquez-Meléndez, Erika Salas-Muñoz, Jose Vinicio Torres-Muñoz*

**P2-25**

Lycopene solubility and its extraction from tomatoes and their by-products

*Dalia Mieliauskaite, Pranas Viskelis, Rimas Noreika*

**P2-26**

Quality of raspberry fruits after frozen storage

*Ramune Bobinaite, Pranas Viskelis*

**P2-27**

Fast determination of titanium dioxide content in juice powder based on Vis/NIR spectroscopy technique

*Min Duan, Yong He, Shi-lin Yuan*

**P2-28**

Screening of *Aspergillus niger* strains for the biotransformation of the solid residues of manioc processing for obtain glucose syrup

*Andrea Matos, Marina Becker, Thiago Nogueira, Edna M. M. Oliveira, Selma C. Terzi, Sônia Couri*

**P2-29**

The instant controlled pressure drop (DIC) technology as a manufacturing process of high quality snacks and expanded granule powders of onion and super-fruits

*Sabah Mounir, Nsren Albitar, Karim Allaf*

**P2-30**

Combination use of gravity separator and optical sorter for decontamination deoxynivalenol of wheat

*Hideyuki Takenaka*

**P2-31**

Determination of protein content of *Auricularia Auricula* using near infrared spectroscopy and least square-support vector machine

*Fei Liu, Guangming Sun, Yong He*

**P2-32**

Fast measurement of soluble solid content in mango based on visible and infrared spectroscopy technique

*Jia-jia Yu, Yong He*

**P2-33**

New preservation procedure for liquid egg

*Csaba Németh, László Friedrich, Klára Pásztor-Huszár, Csilla Vén, Ildiko Zeke, Csaba Balla*

**P2-34**

The effect of composition on the physical properties of compressed candy  
*Sven Karlovic, Dunja Horzic, Drazenka Komes, Ana Belscak, Damir Jezek, Branko Tripalo, Damir Karlovic, Mladen Brncic, Tomislav Bosiljkov*

**P2-35**

Morphological characterization of powder milk and their relationship with rehydration properties

*Maria de Jesús Perea, Israel Arzate, Eduardo Terres, Liliana Alamilla, Gustavo Fidel Gutierrez, Vicente Garibay, Jose Jorge Chanona*

**P2-36**

Studies of cryogenic freezing of multilayer confectionery products

*Ildikó Zeke, Csaba Balla, Csilla Vén, Csaba Németh, Klára Pásztor-Huszár, László Friedrich*

**P2-37**

How to assure the safety and high quality of canned food products processed in water-cascade and water-spray retorts

*Boguslaw Pawlikowski*

**Section 3: Emerging Technologies in Food Processing****P3-01**

Development and performance evaluation of a machine for removing essential oil from orange rind

*Leo Ayodeji Sunday Agbetoye, Abraham O. Oloye*

**P3-02**

Studies on the system parameters of a locally developed extruder at different extrusion conditions

*Folasayo Fayose, Agboola Simeon Ogunlowo*

**P3-03**

Biosensors and their applications in biology

*Hamed Afshari*

**P3-04**

Iran strategy for using nanotechnology in packaging industry

*Hamed Afshari*

**P3-05**

Physical properties of ultrasound treated whey protein suspensions with and without hydrocolloids addition

*Anet Režek Jambrak, Vesna Lelas, Marija Badanjak*

**P3-06**

A new, low-cost, on-line RGB colorimeter for wine industry based on optical fibers

*Cristina De la Torre, Rocio Muñiz, Beatriz Garcia, Miguel A. Perez*

**P3-07**

Application of optical fibers to true on-line turbidimeter for wine and other food industries

*Miguel A. Perez, Rocio Muñiz, Cristina De la Torre, Beatriz Garcia, Luis Miguel Carcel, Raul Crespo*

**P3-08**

High hydrostatic pressure enhancement of isoamyl acetate biosynthesis in ionic liquid-alcohol biphasic system

*Michael Eisenmenger, José Reyes-De-Corcuera*

**P3-09**

Can the wine store container be part of the winemaking process?

*Ignacio Nevares, María del Álamo, Luis Miguel Cárcel, Laura Gallego, Raúl Crespo*

**P3-10**

Recovery of aroma compounds from model solution using pervaporation membrane

*Laszlo Hornyak, Edit Márki, Gyula Vatai*

**P3-11**

The original technology processing vegetative mass of buckwheat

*Anatoliy Kosyan, Nataliya Taran, Oksana Sytar*

**P3-12**

Shelf-life investigation of whey protein concentrate-rice bran oil coated kiwifruit

*(Actinidia deliciosa)*

*Majid Javanmard*

**P3-13**

Shelf-life of whey protein concentrate-gellan coated apricots (*Prunus armeniaca* L.)

*Majid Javanmard*

**P3-14**

Pulsed electric fields to control microbial growth in raw milk

*Henry Jaeger, Dietrich Knorr*

**P3-15**

Three-dimensional measuring technique of bubble size distributions in ice cream

*Gabsoo Do, Yasuyuki Sagara, Hirofumi Kawanishi, Yeonghwan Bae*

**P3-16**

Infrared assisted microwave tempering of frozen foods

*Nadide Seyhun, Hosahalli Ramaswamy, Gulum Sumnu, Serpil Sahin, Jasim Ahmed*

**P3-17**

Temperature mapping of deep fried chicken strips using magnetic resonance imaging

*Isil Barutcu, Michael J. McCarthy, Young-Seob Seo, Serpil Sahin*

**P3-18**

Highbush blueberry (*Vaccinium Corymbosum* L, cv. C97-390) peroxidase: characterization and kinetics of thermal and high pressure inactivation

*Netsanet Shiferaw Terefe, Antoine Delon, Cornelis Versteeg*

**Section 4: Monitoring Technologies for in-situ Analyses in Bioprocesses****P4-01**

Comparison of two impact detecting devices to measure mechanical load on potatoes

*Feizollah Shahbazi, Martin Geyer, Ulrike Praeger, Claudia Konig, Bernd Herold*

**P4-02**

Applicability of chemiluminescence spectroscopy on the quality change of brown rice

*Motoyasu Natsuga, Kanichiro Yoshida, Chiaki Kanesawa, Wataru Matsuno, Hiroshi Ishii, Kazuo Tsukino*

**P4-03**

Estimation and on-line measurement of cow milk parameters to improve nutritional facts and quality of milk from farm side

*Rocio Muñiz, Miguel A. Perez, Carlos E. Carleos, Jesus A. Baro*

**P4-04**

Detection of oxidation processes in bovine raw milk using fluorescence spectroscopy

*Julia Durek, Björn Surowsky, Janina Saskia Wulf, Oliver Schlüter*

**P4-05**

Mastitis detection and prevention during milking process

*Antje Fröhling, Manuela Wienke, Sandra Rose-Meyerhöfer, Heide-Marie Lochotzke, Oliver Schlüter*

**P4-06**

Calibration models for online monitoring of syneresis in a cheese vat using broad-spectrum NIR reflectance over a range of milk fat level and gel firmness at cutting

*Maria Jose Mateo, Donal O'Callaghan, Colm O'Donnell*

**Section 5: Modelling as a Tool for Process Management****P5-01**

Application of weibull model for describing osmotic dehydration of mamey strips

*Otoniel Corzo, Nelson Bracho, Oscar Ramirez*

**P5-02**

An incremental adaptive procedure to modeling of viscoelastic contact problems in solid spherical fruits

*Mahdi Kasraei, Hoseyn Ashrafi*

**P5-03**

Mathematical modeling of the time-dependent poisson's ratio in linear viscoelastic solid fruits

*Mahdi Kasraei, Hoseyn Ashrafi*

**P5-04**

Mathematical model for microwave-assisted extraction used for the isolation of Platycodin from Platycodon radix

*Quancheng Zhou*

**P5-05**

Mathematical modeling of vacuum drying of Kabkab date paste

*Zahra Ashraf, Mohammad-Ali Sahari, Zohreh Hamidi*

**P5-06**

Non-destructive on-tree monitoring of *Prunus domestica*

*Janina Saskia Wulf, Michael Neumüller, Dieter Treutter, Manuela Zude*

**P5-07**

Application of different PLS methods for variable selection on Vis-NIR spectroscopy to determine pH and soluble solid content of syrup of plum

*Di Wu, Fang Cao, Yong He*

**P5-08**

Decision support system for osmotic dehydration process of tomatoes

*Gisele Anne Camargo, Mariângela Amendola, Nádia Schiavon Veiga*

**P5-09**

Simulation of malt roasting during microwave heating

*Suthida Akkarachaneeyakorn, Jean Claude Laguerre, Jirarat Tattiyakul*

**Section 6: Chemical Food Analyses in the Supply Chain****P6-01**

Chemical analysis of soybean methyl ester as biodiesel

*Hamid Mashhadi Meighani, Morteza Almasi, Hosein Bakhoda, Mehdi Mohsenifar*

**P6-02**

Comparison of physical and chemical properties of soybean methyl ester as biodiesel and diesel fuel

*Hamid Mashhadi Meighani, Morteza Almasi, Hosein Bakhoda, Mehdi Mohsenifar*

**P6-03**

Structural and rheological properties of Barijeh (*Ferula galbaniflua*) gum

*Jafar Milani, Zahra Emam-Djomeh, Manoochehr Hamedi*

**P6-04**

Decision making about banana storage conditions based on the effect of temperature on quality

*Eva Domenech, Sebastian Martorell, Isabel Escriche*

**P6-05**

Study of volatile compounds in cagaita

*Lucia Maria Jaeger de Carvalho, Eduardo Lopes Motta, Nancy Barbi, Ediane Maria Gomes Ribeiro, Daniela Soares Viana, Mirian Ribeiro Leite Moura, Veronica Figueiredo*

**P6-06**

Migration from cap-coating material into liquid food via package headspace

*Gholamhassan Asadi*

**P6-07**

Deformation and impregnation properties of whole red and golden Delicious apples

*Hugo Mújica-Paz, Bertha Anabel Urquidi-Meléndez, Cynthia Mireya Sáenz-Hernández, Aurora Valdez-Fragoso*

**P6-08**

The change of pphenolic substance distribution of rowanberry fruit during ripening

*Cem Baltacđoglu, Sedat Velioglu, Ali Esin*

**Poster Session 2 (Tuesday 12:40 – Wednesday 12:40,  
Room: Regie 1 + 2, Floor 17)**

**Section 1: Modern Production and Postharvest Handling of Raw Material**

**P1-14**

Regulation and metabolic analysis for the fermentation of succinic acid from crop straw hydrolyte

*Shaotong Jiang, Xingjiang Li, Iijun Pan, Jiusong Sun, Zhaojun Wie*

**P1-15**

Controlling textural, microbiological and biochemical attributes of fruits and vegetables during prolonged storage prior to processing

*Jim Robertson, Elizabeth Sagers, Tim Brocklehurst, Klaus Wellner, Keith Waldron*

**P1-16**

Drying characteristics of scallop

*Yoshiki Muramatsu, Akio Tagawa, Eiichiro Sakaguchi*

**P1-17**

Production of cellulases by filamentous fungi and characterization of the crude enzyme

*Sonia Couri, Selma da Costa Terzi, Antonio Xavier Farias, Marcelo Fraga, Vanessa Cristina Peixoto, Mônica Caraméz Triches Damaso Damaso*

**P1-18**

Screening of lipolytic filamentous fungi and study of lipase production using three different reactors

*Carolina Gomes Moreira, Mônica Caraméz Triches Damaso Damaso, Romulo Cardoso Valadão, Sonia Couri*

**P1-19**

Sensory study of astringency threshold in persimmon after tannin removing treatment

*Daniela De Grandi Castro Freitas, Augusto Cesar Vieira Neves JR, Antonio Gomes Soares, Marcos J. Oliveira Fonseca, Regina Celi Cavestré Coneglian*

**P1-20**

Nutritional and antioxidant characteristics of tomato fruit during ripening

*Elhadi Yahia, Dulce Maria Rivera*

**P1-21**

Nutritional content and anti-oxidant capacity in ten cultivars and lines of prickly pear cactus fruit

*Elhadi Yahia, Candelario Mondrago-Jacobo*

**P1-22**

Mechanical system control in biological farming for protected crops

*Lorenzo Maria M. Abenavoli, Giuseppe Sciarrone*

**P1-23**

Effect of moisture content on physical properties of canadian flaxseed

*Rama Chandra Pradhan, Venkatesh Meda, Satya Narayan Naik*

**P1-24**

Interactive effects of genotype and fertilizer application on the flour making properties of cassava roots

*Taofik Shittu, Lateef Sanni, Samuel Awonorin, Bussie Maziya-Dixon, Alfred Dixon*

**P1-25**

Effects of essential oils on sprout suppression and global quality of potatoes cv Monalisa

*David Gomez-Castillo, Cristina Arroqui, Paloma Virseda*

**Section 2: Food Processing with respect to Product Quality and Safety****P2-38**

Microstructure and flowability parameters of starches

Mateusz Stasiak, Marek Molenda, Jozef Fornal, Wioletta Błaszczak

**P2-39**

Antioxidant and free radical-scavenging activities of rapeseed protein hydrolysates

*Mu Pan, Shaotong Jiang, Lijun Pan*

**P2-40**

Methods of funding for the industrial application of experimental food production and conservation techniques

*Kharla Segovia Bravo, Ismael Almazan, Oonagh Mc Nerney*

**P2-41**

Application of NMR & MRI in food quality and stability improvement

*Yun Li, Xiangyang Lin, Yuhuan Liu, Yiqin Wan, Paul Chen, Roger Ruan*

**P2-42**

Solar drying of food materials: developments and potentials

*Bilash Kanti Bala, Serm Janjai*

**P2-43**

A novel method of Pattern recognition for honey source base on visible/near infrared spectroscopy

*Yan Yang, Yong He, Hai-Qing Yang, Peng-Cheng Nie*

**P2-44**

Aeration behavior evaluation in a horizontal silo utilizing CFD tool

*Gabriel Henrique Horta de Oliveira, Fábía Martins Carvalho, Márcio Arêdes Martins*

**P2-45**

Analysis of residual Bisphenol A, Bisphenol F and their epoxy derivatives in food cans coating by high performance liquid chromatography

*Lanfang Zhang, Hong Zhang, Ming Xue, Jia-zheng Miao*

**P2-46**

Characterization of collagen from the skins of Anglerfish (*Lophius litulon*) and other species fish: a comparative study

*Lanfang Zhang, Hong Zhang, Suzhen Zhuo*

**P2-47**

Simultaneous determination of 13 quinolones in fish tissue by high-performance liquid chromatography with fluorescence

*Lanfang Zhang, Xiaoli Bao, Hong Zhang*

**P2-48**

Non-destructive monitoring procedure based on qPCR for the estimation of aerobic microbial load on minimally processed lettuce

*Perla Gomez, Magali Pagnon, Marcos Egea-Cortines, Francisco Artes Calero, Julia Weiss*

**P2-49**

Adjusting steam deacidification parameters for oil quality improvement

*Simone Monteiro Silva, Klicia A. Sampaio, Thiago Taham, Silvana A. Rocco, Roberta Ceriani, Antonio J. A. Meirelles*

**P2-50**

Effect of microwave pasteurization on orange juice color and carotenoid pigments

*Luciano Cinquanta, Alessandra Fratianni, Lucia Stoduto, Gianfranco Panfili*

**P2-51**

Effect of homogenisation of milk on physico – chemical properties of Kunda

*L Mahalingaiah, S. Kulkarni, B.V. Venkateshaiah, K. Jayaraj Rao*

**P2-52**

Extraction and chemical characterization of mucilage from mesquite, aloe vera, maguey and prickly pear cactus cladodes (nopal) and evaluation of its prebiotic effect on the growth of 2 probiotic bacteria

*Elhadi Yahia*

**P2-53**

The antioxidant capacity in 40 horticultural commodities and correlation with the content of phenolic compounds and carotenoids

*Elhadi Yahia, Azucena Barrera*

**P2-54**

Textural characteristics of probiotec yoghurt produces by transglutaminase addition

*Jelena Šarovic, Spasenija Milanovic, Mirela Iličić, Katarina Durakovic, Mladenka Pestoric*

**P2-55**

Effect of *Lactobacillus casei* on fatty acids in models of ripening cheese slurry

*Anna Bzducha-Wróbel, Mieczysław Obiedziński*

**P2-56**

Durum wheat bread: old Sicilian landraces and new varieties

*Giulia Gallo, Marisol Lo Bianco, Rosaria Bognanni, Giuseppe Saimbene, Anna Orlando, Oscar Grillo, Rossella Saccone, Gianfranco Venora*

**P2-57**

Sourdough effects on the crumb texture and shelf-life evaluated with dynamometer and Image analysis measurements in the Dittaino Pagnotta P.D.O., a durum wheat bread produced by a Sicilian bakery industry

*Mohammad Ali Doust, Benedetto Rizzo, Biagio Pecorino, Oscar Grillo, Rossella Saccone, Gianfranco Venora*

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The path of food safety in tuna production chain

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