Monday 8 March

08 h 00 Welcome / Poster installation / Registration

09 h 00 **Opening Ceremony**

10 h 30 **Break**

11 h 00 **Plenary lecture**
The importance of Engineering for Competitivity in the Food Industry.
Prof. Werner Bauer, Nestlé S.A., Executive Vice President, Technical, Production and R&D, Vevey, Switzerland

11 h 45 **Plenary lecture**
Designing Food Processing Systems for Long-Duration Space Explorations.
Prof. R. Paul Singh - University Davis, USA

12 h 30 **Lunch**

14 h 00 **Plenary lecture**
Emerging Technologies: Challenges and Opportunities.
Prof. D. Knorr, Berlin University of Technology, Germany

15 h 00 **Other Parallel Oral Sessions**

16 h 40 **Break**

17 h 10 **Other Parallel Oral Sessions**

17 h 10 ***Poster Session: Food process control***

5
Aging of sugar cane spirit using gamma radiation.
Walder J.M.M., Spoto M.H.F., Novaes F.V., Alcarde A.R.

35
A new impedancemeter for rapid control of foodstuff products.
Ribeiro T., Romestant G., Depoortere J., Pauss A.

47
Thermohygrometric sensor: a tool for optimizing the spray drying process.
Schuck P., Mejean S., Dolivet A., Jeantet R.

116
Design of information and automation system for integrated restaurant based on shared space technology.
Lee S.R., Chun J.K.

122
A non-destructive and continuous measurement of a drying process of foods using dielectric properties.
Hagura Y., Tohi S., Suzuki K.

138
Moisture transport and humidity control in refrigerated facilities.
Sujau M., Merts I., Cleland D.J., Bronlund J.E.

145
Shelf life management using multiple component Time-Temperature Integrators.
Giannakourou M.C., Taoukis P.

170
On-line detection of fecal contaminants using multispectral imaging system .
Park B., Lawrence K.C., Windham W.R., Smith D.P.

205
Pizza base classification using support vector machines.
Du C.J., Sun D.W.

215
Decision support system designed for the control of a drying sausage process.
Ioannou I., Trystram G., Mauris G., Perrot N.

243
Process of ultrasonic sign using wavelet for the detection of polluting particules
of coastal cheese elaborated in cesar.
Gutiérrez de Piñeres C.A., Fragoso E., David T.M., Cotes F.

264
Real time casein interaction analysis using surface plasmon resonance biosensors.
Marchesseau S., Mani J-C., Martineau P., Roquet F., Cuq J.-L., Pugnière M.

272
Thermal treatments optimization of mango nectar and puree (products).
Argaiz A., López-Malo A., Jiménez M.T., Ramírez M., Milacatl V.

285
Optimization of the economic dispatch problem using genetic algorithms.
Samed M.M.A., Ravagnani M.A.S.S., Gomes R., Baptista E.C.

348
Measurements of physicochemical properties of coffee during roasting process.
Valdovinos-Tijerino B., Heyd B., Trystram G.

391
Requirements for assembling of ready-to-eat meals.
Jennergren L., Kalaykov I., Ahrné L.

404
Optimisation of the meat emulsification process using at-line human evaluations and the Simplex method.
Curt C., Allais I., Perrot N., Chevallereau V., Trystram G.

413
Determination of the radial and vertical stresses (stress ratio l) in a special constructed die-sensor.
Haas S., Sommer K.

452
Measuring particulate concentration with a fiber optic light extinction sensor .
Payne F.A., Danao M.G.

465
Development of a fiber optic sensor to measure low fat concentrations in goats' whey .
Castillo M., Payne F.A., López M.B., Ferrandini E., Laencina J.

470
Observer design and parameter estimation tools for food processing plants.
Garcia M.R., Vilas C., Banga J.R., Alonso A.A.

474
Development and use of new enzymatic time temperature integrators (TTI)
to monitor thermal process impacts in heat-sterilized solid/liquid food products.
Guiavarc'h Y., Van Loey A., Hendrickx M.

549
Dynamic modelling with a view to control of food extrusion process:
Dynamic analysis of process variables.
Fodil-Pacha F., Arhaliass A., Aït-Ahmed N., Legrand J., Boillereaux L.

565
Relationship between on-line infrared measurements at the surface of meat cured producs and
drying process.
Gou P., Comaposada J., Reichert J.C., Arnau J.

609
A decision support system to control the aeration of a sponge finger batter.
Edoura-gaena R.B., Allais I., Gros J.-B., Trystram G.

635
Kinetic of syneresis during goat's cheese elaboration.
Castillo M., Payne F.A., López M.B., Ferrandini E., Laencina J.

655
Development of a machine vision based grading system for bovine carcasses following the SEUROP scale .
Precetti C., Bignon J.L., Lebert A.

805
Multivariate calibration of the chronoamperometric response of a disposable screen-printed biosensor.
Rojas J., Fontana Tachon A., Chevalier-Lucia D., Ghommidh C.

840
A pilot scale distillation unit at BNIC Station Viticole able to ta feet traditional distillation in 25 hl still.
Sommier A., Ferrari G., Galy B., Sellé M., Chipeaux C., Trystram G., Decloux M.

848
Application of translational process viscosimetry to control milk concentrate viscosity.
Howard V., O'Callaghan D., Cullen P.J., O'Donnell C.

985
Rapid monitoring of pathogens in food using biosensors.
Irudayaraj J., Cho Y.J.

18 h 30 End of the Day

Tuesday 9 March

08 h 30 **Plenary lecture**
Food Process Engineering for the purpose of tailored microstructure, rheology and related product characteristics
Prof. Dr.-Ing. Erich J. Windhab, Swiss Federal Institute of Technology, Zurich,

09 h 20 **Presentation of ISFE**
G. Barbosa Canovas

09 h 30 ***Food process control: Modelling, identification and control***

09 h 30 75
Process modelling for control system design: case study of a pilot-scale dryer.
Zhou W., Wong S.Y

09 h 50 99
Robust parameter estimation in heat and mass transfer models of food processing.
Rodríguez M., Alonso A.A., Banga J.R.

10 h 10 158
On-line monitoring of lactic acid bacteria biomass by an impedance sensor.
Arnoux A.S., Belloy L., Esteban G., Teissier P., Ghommidh C.

10 h 30 832
Implementation and validation of optimal heat generation profiles for simultaneous estimation of thermal food properties using a hotwire probe.
Nahor H.B., Scheerlinck N., Moles C.G., Banga J.R., Nicolaï B.M.

10 h 50 **Break**

11 h 20 **Other Parallel Sessions**

12 h 30 **Lunch**

14 h 00 **Plenary lecture**
Computers and processes engineering in food manufacturing : promises, challenges and realities. A subjective point of view
P. Escure, P. Cornillon, A. Genovesi, A. Pajonk - Danone Vitapole, Palaiseau, France

15 h 00 ***Food process control: Sensors and instrumentation***

15 h 00 1
Time-temperature integrators applied to pasteurised high-acid foods processed with ohmic heating.
Tucker G.S., Wolf D., Lach A.

15 h 20 393
Vision system learning for ready meal characterisation.
Munkevik P., Duckett T., Hall G.

15 h 40 656
A meat yield system for large bovine carcasses using machine vision.
Precetti C., Bignon J.L., Lebert A.

16 h 10 945
Food process investigation by Time Temperature Integrators.
Cox P.W., Fryer P.J.

16 h 30 969
Image classification of bananas (Musa Cavendish) during ripening based appearance features.
Mendoza F., Aguilera J.M.

16 h 50 **Break**

17 h 10 ***Food process control: decison support system, monitoring and automatic control***

17 h 10 98
Computing optimal operating policies for the food industry.
García M.S.G., Alonso A.A., Banga J.R.

17 h 30 261
Linear programming for wine bottling scheduling optimisation.
Berruto R., Tortia C., Gay P.

17 h 50 644
Optimization of low temperature and frozen storage conditions
for cooked rice based on consumer preference.
Hashimoto R., Ishikawa C., Ikeda G., Do G.S., Sagara Y.

18 h 10 688
Hierarchical data analysis based biological states recognition.
Cassar J.P., Guillou V.

18 h 30 741
Application of hot wire method to monitor fouling phenomena in food process.
Fillaudeau L., Cardenas R., Korolzuck J., Lejaye J., Cozic F., Debreyne P.

18 h 50 End of the day

21 h 00 **Concert for Voices and Organ**

Wednesday 10 March

08 h 30 **Plenary lecture**
Active packaging for food processing and preservation
Prof. Nathalie Gontard, professor, Montpellier University II, France

09 h 30 **Other Parallel Oral Sessions**

10 h 50 **Break**

11 h 20 ***Optimisation***

11 h 20 97
Efficient multi-criteria optimisation of thermal processing of foods.
Sendín O.H., Alonso A.A., Banga J.R.

11 h 40 293
Synthesis of optimal heat exchanger networks using genetic algorithm.
Ravagnani M.A.S.S., Silva A.P., Constantino A.A., Arroyo P.A.

12 h 00 568
Optimization of casein hydrolysate and whey on fermented milk production.
Oliveira M.N., Damin M.R.

12 h 20 **Lunch**

14 h 00 **Plenary lecture**
Predictive microbiology of foods: past, present and future.
Prof. Jan van Impe, University of Louvain, Belgium

15 h 00 **Other Parallel Oral Sessions**

16 h 40 **Break**

17 h 20 **Other Parallel Oral Sessions**

17 h 20 ***Poster session: Optimisation***

95
Optimal heating policies for surface decontamination of fruits.
Moles C.G., Scheerlinck N., Marquenie D., Nicolaï B.M., Banga J.R.

106
Efficient dynamic optimisation of the thermal processing of food using reduced order models.
Balsa-Canto E., Alonso A.A., Banga J.R.

107
Process optimisation studies for the air roasting of hazelnuts.
Demir A.D, Cronin K., Fitzpatrick J.J.

369
Modelling the degree of roast of an arabica coffee – a tool to optimise the process.
Mendes L.C., Menezes H.C.

481
Linking consumer response to process design II: Modelling and optimisation of food processing systems.
Stone C.E., Mullineux G., Medland A.J.

18 h 40 End of the day

19 h 00 **Gala Dinner**