

Agrostat 2016 (March 21-24)
14th Symposium on Statistical Methods for the Food Industry

Program of the conference

Monday, March 21st, 2016

08:30	14:30	Registration
09:30	13:00	Workshops, morning session
13:00	14:15	Lunch
14:15	17:45	Workshops, afternoon session

Tuesday, March 22nd, 2016

08:00	08:55	Registration
08:55	09:25	Opening of the conference Agrostat 2016

Session I: Chemometrics

09:25	10:10	Invited speaker: <u>Douglas Rutledge</u> (<i>AgroParisTech, France</i>) Independent Components Analysis : theory, applications and difficulties
10:10	10:30	New formulation for multi-block PLS-DA. Application to metabolomics data. <u><i>Véronique Cariou</i></u> , <i>El Mostafa Qannari</i> , <i>Mohamed Soumah</i> , <i>Marie-Cécile Alexandre-Gouabau</i> , <i>Thomas Moyon</i>
10:30	10:50	Computation on partitionned matrices in chemometrics and sensometrics. <u><i>Mohamed Hanafi</i></u>
10:50	11:05	Chemometrics poster teaser session (5)
11:05	11:35	coffee break
11:35	11:55	Simultaneous decomposition of multivariate images: Application to near infrared hyperspectral images of wheat. <u><i>Benoît Jaillais</i></u> , <i>Eloïse Lancelot</i> , <i>Philippe Courcoux</i>
11:55	12:15	Nouveaux plans d'expériences pour la formulation. <i>Aurélie Béal</i> , <i>Charles Gomes</i> , <i>Magalie Claeys-Bruno</i> , <u><i>Michelle Sergent</i></u>
12:15	12:35	Reconciling mixture designs and factorial designs in order to identify best recipes in a holistic way. <u><i>Andreas Rytz</i></u> , <i>Mireille Moser</i> , <i>Mélissa Lepage</i> , <i>Cassandra Mokdad</i> , <i>Marie Perrot</i> , <i>Nicolas Antille</i> , <i>Nicolas Pineau</i>

CorneR

12:35	13:05	CorneR presentation + 2' poster teaser speeches (7)
13:05	14:20	Lunch

Session II: Big Data

14:20	15:05	Invited speaker: <u>Karl Aberer</u> (<i>EPFL, Switzerland</i>) Harnessing Human Intelligence for Big Data Analytics
15:05	15:25	Veracity Scoring of Social Media Content. <u><i>Mark Wolff</i></u>
15:25	15:45	Deploying R&D analytics at the pace of the data-driven business. <u><i>Adrian Clarke</i></u>
15:45	15:50	Big Data poster teaser session (2)
15:50	16:20	coffee break
16:20	16:40	The advent of Big Data in Agriculture. <u><i>Salima Taïbi</i></u>
16:40	17:00	Many small data can make big data. The SensoBase story. <u><i>Pascal Schlich</i></u> , <i>Caroline Peltier</i> , <i>Nadra Mammasse</i> , <i>Nicolas Pineau</i>
17:00	18:00	Big Data round table - <i>Chairman: Diego Kuonen (Statoo Consulting)</i> Title to be defined <u><i>Pascale Rondeau</i></u> Ab silico ad salus; Interactive Visualization of Network Phenomena in Highly Heterogeneous and Voluminous Data. <u><i>Mark Wolff</i></u>

Wednesday, March 23rd, 2016

Session III: Sensometrics

- 08:45 09:30 Invited speaker: **Hal MacFie** (*Hal MacFie Sensory Training Ltd, UK*)
Sensometrics has got to move on!
- 09:30 09:50 Using partial bootstrap to evaluate the uncertainty associated with TCATA product trajectories.
John C. Castura, Allison K. Baker, Carolyn F. Ross
- 09:50 10:10 Les modèles d'Unfolding multidimensionnel pour l'analyse des préférences.
Philippe Courcoux, Eric Teillet
- 10:10 10:30 Poster teaser session (8)
- 10:30 11:00 coffee break
- 11:00 11:20 Causal reasoning applied to sensory analysis: the case of the Italian wine.
Silvia Golia, Eugenio Brentari, Maurizio Carpita
- 11:20 11:40 Extension of ComDim for the analysis of (K+1) datasets; application in sensometrics.
Angelina El-Ghaziri, Véronique Cariou, Douglas Rutledge, El Mostafa Qannari
- 11:40 12:00 Inter-panel diagnosis, a comparison of palatability answers obtained in expert, semi-expert and in-home cat panels.
Laure Le Paih, Julien Rogues, Claire Forges, Christelle Tobie
- 12:00 13:00 Sensometrics round table - *Chairman: Hal MacFie*
La sensométrie : au cœur du process d'innovation de L'Oréal R&I
Damien Brémaud
- 13:00 14:00 Lunch

Poster session & corneR

- 14:00 15:00 Poster session & corneR

Social event & Gala Dinner (Olympic museum)

- 15:00 16:00 bus travel: conference -> International Olympic museum
- 16:00 18:00 Visit of the International Olympic museum
- 18:00 19:30 Aperitif at International Olympic museum
- 19:30 23:00 Gala Dinner at International Olympic museum
- 23:00 bus travel: back to hotels

Thursday, March 24th, 2016

Session IV: Risk & Process

- 08:45 09:30 Invited speaker: **Richard Brereton** (*Bristol University, UK*)
The challenges of validating multivariate methods for pattern recognition
- 09:30 09:50 Proof of safety for a new variety/ product relative to a common-used one for multiple endpoints.
Ludwig Hothorn
- 09:50 10:10 Quantification of water content in biscuit using near infrared hyperspectral imaging spectroscopy and Chemometrics.
Eloïse Lancelot, Philippe Courcoux, Sylvie Chevallier, Alain Le-Bail, Benoît Jaillais
- 10:10 10:20 Risk & Process poster teaser session (3)
- 10:20 10:50 coffee break
- 10:50 11:10 How many data for "process capability"?
Scott Hindle
- 11:10 11:30 Comment les plans d'expériences contribuent au développement durable.
Eva Bessac
- 11:30 12:30 Risk & Process round table - *Chairman: Enrico Chavez (Nestlé)*
Title to be defined
John O'Brien
Batch Statistical Process Control (BSPC): a powerful multilevel risk & process analytics tool
Sébastien Preys
- 12:30 13:00 Closure session
- 13:00 14:00 Lunch or sandwich bag

Poster presentations

Chemometrics posters

- 1.P1** Chemometric analysis of Near-Infrared spectra for determining molecular distribution of gelatin extracted from pork rinds.
Simon Duthen, Adil Quali Alami, Didier Kleiber, Frédéric Violleau, Christine Raynaud, Jean Dayde, Cécile Levasseur-Garcia
- 1.P2** Estimation of Chemical Composition of Quinoa (Chenopodium quinoa Willd.) by Near-Infrared Transmittance Spectroscopy.
Christian Encina-Zelada, Vasco Cadavez, Jorge Pereda, Luz Gómez-Pando, José A. Teixeira, Ursula Gonzales-Barron
- 1.P3** Modelling sensory property against instrumental measurements by PLS-Path Modeling: application to dairy products.
Marine Masson, Anne Saint-Eve, Delphine Huc, David Blumenthal
- 1.P4** Proposal of statistical procedure to relate aroma chemistry data to aroma sensory data.
Marie Auda, Nicolas Pineau, Andréas Rytz, Frederic Mestdagh, Luigi Poisson
- 1.P5** Development of goji berries in brewing : comparisons between analytical data and sensory.
Julien Ducruet, Pierrick Rébénague, Serge Diserens, Agnieszka Kosinska Cagnazzo, Isabelle Héritier, Wilfried Andlauer

Big Data posters

- 2.P1** A formal approach for the representation and the combination of imperfect data
Jérôme Dantan, Yann Pollet, Salima Taibi
- 2.P2** Nestlé's state-of-the-art technologies to keep Food Safe and improve global Public Health.
Caroline Barretto, Catherine Ngom-Bru

Sensometrics posters

- 3.P1** Kinetics of consumption, an innovative tool to measure cat food palatability and satiety.
Julien Roques, Laure Le Paih, Claire Forges
- 3.P2** A Review of the Current Methods Assessing Food Preferences in Dogs and Cats.
Laure Le Paih, Franck Peron, Christelle Tobie, Julien Rogues
- 3.P3** Replicates in sensory profiling.
Mélissa Lepage, Mireille Moser, Andreas Rytz, Nicolas Pineau
- 3.P4** Proposal for addressing parameter effect significance in a factorial design of experiment with sensory data.
Mireille Moser, Thorn Thaler, Nicolas Pineau, Andreas Rytz
- 3.P5** Product's sensory characterization and study of preference using paired comparison approach
Lucile Riaboff, Thibault Schneider
- 3.P6** An alternative to preference mapping: Regression trees and Random forests. Application to preferences for ciders
Léa Koenig, Adèle Lepetit, Ronan Symoneaux, Philippe Courcoux
- 3.P7** Recursive partitioning methods for identifying relevant variables in a sparse unbalanced data set
Orlane Briand, Ivonne Debec, Arnaud Montet, Lorraine de Malleray, Evelyne Vigneau
- 3.P8** Use of symbolic principal component analysis to account for imprecision within the sensory map of products
Cynthia Cordier, Claire Grandière, Cécile Coulon-Leroy, Véronique Cariou

Risk & Process posters

- 4.P1** Risques et procédés chez Nespresso : l'appui des statistiques.
Agnès Oaé, Marc Moal, Julien Viquerat
- 4.P2** Heat resistance of Escherichia coli O104:H4 in ground chicken as affected by pomegranate powder (70% ellagic acid).
Vasco Cadavez, Ursula Gonzales-Barron, Vijay J. Juneja
- 4.P3** Prediction of dosing behavior based on powder properties using Lasso regression and Monte-Carlo techniques.
Jean-Vincent Le Bé, Sophie Berçot, Isabelle Castella, Vincent Girard, Marie Perrot

corner posters

- R.1** Monitoring sensory panel performances with the MAMCAP R-package.
Caroline Peltier, Michel Visalli, Pascal Schlich
- R.2** Mapping products with the CVA R-package.
Caroline Peltier, Michel Visalli, Pascal Schlich
- R.3** ClustVarLV : an R package for the clustering of variables around latent variables.
Evelyne Vigneau
- R.4** FreeSortR : a R package for the analysis of free sorting data.
Philippe Courcoux
- R.5** MatrixCorrelation: an R package for assessing and exploring the similarity between data sets.
Kristian Hovde Liland, Tormod Næs, Ulf Geir Indahl
- R.6** CompR : R package for uni or multivariate preference data analysis using paired comparison model
Michel Séménou
- R.7** tempR: Temporal sensory data analysis.
John C. Castura