Monday february 26, 2024

HOURS	PRE-CONFERENCE TRAINING
09:00 - 12:00	Multi-block spectroscopy and metabolomics data analysis – Marion Brandolini-Bunlon - Benoît Jaillais - Mohamed Hanafi
09:00 - 12:00	Structural equations and their applications – Véronique Cariou - Jean-Michel Galharret
09:00 - 12:00	Spectral unmixing and resolution of multivariate curves - Raffaele Vitale
14:00 - 17:00	Hyperspectral Imaging - Ludovic Duponchel
14:00 - 17:00	Review of the main Machine Learning methods - Sylvie Roussel
14:00 - 17:00	Specificity of principal component analysis applied to spectral data and preprocessing of near-infrared spectra – Jean-Michel Roger
14:00 - 17:00	A little journey through causality - Philippe Bastien

Tuesday February 27, 2024

HOURS	CONFERENCE
08:15 - 08:45	Welcome
08:45 - 09:00	Message from the Organizing Committee and the General Director of Oniris
09:00 - 09:40	Guest speaker: Data visualization: some recent advances - Jean-Daniel FEKETE
09:40 - 10:40	Session 1 : Image processing and analysis - B. Jaillais & B. Mahieu
09:40 - 10:00	Even traditional chemometric tools can aid us in addressing intricate challenges, such as dealing with spectral interferences in LIBS imaging - Ludovic Duponchel
10:00 - 10:20	Linear unmixing of a series of hyperspectral Raman images to reveal variations of outer layers during wheat grain development - Fabienne Guillon
10:20 - 10:40	MALDI imaging enhanced by automatic clustering for the exploration of tumor heterogeneity - Guerrini Ruggero
10:40 - 11:10	Coffee break/posters
11:10 - 12:30	Session 2 : Pharmaceutical Sciences and Metabolomics - S. Rudaz & M. El Rakwe
11:10 - 11:30	Analysis of monoclonal antibodies preparation by ultraviolet spectroscopy coupled with chemometrics - Antoine Dowek
11:30 - 12:00	Raman technology implementation PAT for Cell culture development: a universal statistical Raman model for accelerated and easier new process development - Sylvain Trigueros
11:50 - 12:10	PLSDA versus PCA on barycenters, applied to metabolomics in a context of discrimination - Marion Brandolini-Bunlon
12:10 - 12:30	LC-HRMS data analysis using multiblock approach - Application to the reactivity of lignocellulosic biomass – Jordane Poulain
12:30 - 12:50	Sponsors presentations
12:50 - 14:00	Aperitif – Lunch / posters
14:00 - 14:40	Guest speaker: Compositional data analysis made simple: unsupervised and supervised learning - Michael Greenacre
14:40 - 15:40	Session 3 : Advanced Methodologies - J. Boccard & G. Saporta
14:40 - 15:00	An entropic approach to modeling - Philippe Bastien
15:00 - 15:20	Unified framework and comparison of multiblock methods - Stéphanie Bougeard

HOURS	CONFERENCE
15:20 - 15:40	Comparison of multiblock chemometric strategies for integrating biomarkers of chemical exposure and effect in environmental health studies – Etienne Babin
15:40 - 16:10	Coffee break/posters
16:10 - 17:30	Session 4: Advanced Methodologies – V. Cariou & JM. Roger
16:10 - 16:30	Domain Regularization for Partial Least Squares Regression – Ramin Nikzad-Langerodi
16:30 - 16:50	Towards an automatic identification of microplastics? – Maria El Rakwe
16:50 - 17:10	Diviner: A Semi-automatic Machine Learning Approach to Calibration Model Building – Barry M. Wise
17:10 - 17:30	Detection of nanoparticle toxicity to microorganisms by topological data analysis of high dimensional single-cell nanomechanical data – Marc Offroy
17:30	End of the first day
19:45 - 23:00	Gala Dinner

Wednesday february, 28 2024

HOURS	CONFERENCE
08:15 - 09:00	Welcome
09:00 - 09:40	Guest speaker: Unsupervised monitoring of multivariate calibration models - Wouter Saeys
09:40 - 10:40	Session 5: Multivariate Statistics - M. Brandolini-Bunlon & P. Bastien
09:40 - 10:00	Fingerprints of wines obtained by ICP-MS : Discrimination of the 10 Beaujolais crus - Yohann Clément
10:00 - 10:20	Sensor fusion of Raman spectroscopy and capacitance data using particle filter approach in bioprocesses – Johan Cailletaud
10:20 - 10:40	Comparison of Mid-Infrared and handheld Raman spectroscopy for the detection and quantification of Argan oil adulteration through PCA, PLS-DA, and PLS - Meryeme El Maouardi
10:40 - 11:10	Coffee break/posters
11:10 - 12:20	Image processing and analysis - P. Lanteri & L. Duponchel
11:10 - 11:30	NIR hyperspectral imaging applied to the Art and chemometrics – Benoit Jaillais
11:30 - 11:50	Usefulness of data simulation for training denoising algorithms by Deep Learning in infrared spectral histology – Seydou Kane
11:50 - 12:20	Challenge - Pierre DARDENNE - Presentation of participation results
12:20 - 13:20	Lunch / posters
13:20 - 16:00	Special session « MIMS » : Joint dimensionality reduction and clustering for multisources data – M. Hanafi & Jean-Michel Roger - Introduction
13:30 - 14:05	Finding the hidden link: Statistical methods for multi-view high-dimensional data - Katrijn VAN DEUN
14: 05 - 14:40	Relationships between multidimensional latent path models and common/distinct components in data fusion - Age K. SMILDE
14:40 - 14:55	Discussion
14:55 - 15:25	Structural Equation Modelling in chemometrics. - Zouhair EL HADRI
15:25 - 16:00	Multi-view clustering: models, algorithms and applications - Mohamed NADIF
16:00 - 16:20	End of the conference and awards