



Paris, October 2-3rd 2019

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Advanced
Analytical Technologies
for Proteins



Biocitech, Romainville-Grand Paris, France

GOLD SPONSOR



Program

Wednesday October 2nd

SILVER SPONSOR



8:30 Welcome coffee

8:50 Welcome address, **Sylvio BENGIO**, Adebitech

9:00-9:30 Keynote Lecture

9:00 **Christoph RÖSLI**, Novartis, Late Phase Analytical Development (Basel)
QbD-based selection of analytical methods for development and characterization of a biotherapeutic

Session 1 - Introduction to Protein analysis and analytical bottlenecks

Session chairs: **Alain RIAUBLANC**, INRA and **Jacques DUMAS**, Sanofi

9:30 **Michel LOPEZ**, IMPROVE
Challenges associated with plant proteins analysis

10:00 **Guy de MARTYNOFF**, Cytune Pharma
How to approach analytical bottlenecks during therapeutic protein development?

10:30 **François BECHER**, CEA
Mass spectrometry applications in biopharmaceutical analysis

11:00 - 11:30 Coffee break / exhibitions / posters / networking

Session 2 - Analysis of Protein/Peptides Structures and Functions

Session chairs: **Céline LESUR**, Ingredia and **Pascal DHULSTER**, Institut Charles Viollette

11:30 **Audrey ROMELARD**, Ingredia
Analytical approaches during milk bioactive peptide development : Lactium®'s example

12:00 **Frédéric BAUDOUIN**, IMPROVE
Characterization of functional properties of plant proteins

12:30 **Christophe FLAHAUT**, Institut Charles Viollette
Integrative approach for peptidome characterization to unravel the encrypted bioactivity of protein byproducts

1:00 **Romdhane KAROUI**, Univ. Artois
Front face fluorescence and mid infrared spectroscopies as a tool to study the molecular structure of proteins: relationship with their technofunctional properties

1:30 - 2:30 *Buffet lunch / exhibitions / posters / networking*

Session 3 - Protein aggregation and nanoparticle analysis

Session chair: **Bruno GUIGLIARELLI**, Univ. Aix-Marseille

2:30 **Alessandro MASIERO**, Sanofi
Protein aggregation: Fundamental mechanisms and in-silico predictive approaches

3:00 **Adeline BOIRE**, INRA
Droplet millifluidic technologies and proteins assembly

3:30 **Daniel SOME**, Wyatt Technology
From proteins to nanomedicines: Next steps in biophysical characterization with light scattering

4:00 **Xavier HUET**, Meso Scale Discovery
MesoScale Technology: multiparametric approach for therapeutic purpose from R&D to bioprocess

4:30 - 5:00 *Coffee break / exhibitions / posters / networking*

5:00 **Constanze HELBIG**, Coriolis Biopharmaceuticals (Germany)
Orthogonal analysis of aggregates and particles in biopharmaceutical products

5:30 **Cédric BROSSARD**, Malvern
Advanced methods in particle analysis

6:00 **Arnaud DELOBEL**, Quality Assistance (Belgium)
Structural characterization and epitope mapping by HDX/MS

6:30 *Short presentations of exhibitors innovations*

Beckman Coulter France

Eurofins

Fortébio - Molecular Devices

GE Healthcare

Malvern Panalytical

NanoTemper Technologies

PerkinElmer

PharmaFluidics

Promise Proteomics

ProteinSimple

SCIEX

Thermo Fisher

Wyatt Technology

7:30 *Cocktail / exhibition / posters*

Thursday October 3rd

8:30 Welcome coffee

Session 4 - Protein analytical methods: from AUC to SPR and High throughput methods

Session chairs: **Sylvio BENGIO**, *Adebiotech* and **Guy DE MARTYNOFF**, *Cytune Pharma*

9:00 **Frédéric GIRARD**, *Eurofins*

Advanced Analytical Methods in Bioprocessing of Therapeutic Proteins

9:30 **Emeric GUENEAU**, *GE Healthcare*

Concentration analysis and ligand-binding assays in analytical development: An emerging role for SPR

10:00 **Quentin ENJALBERT**, *ANAQUANT*

A full solution for HCPs quality control analysis through the downstream process by LC-MS

10:30 **Bertrand RAYNAL**, *Institut Pasteur*

Analytical ultracentrifugation applications

11:00 - 11:30 Coffee break / exhibitions / posters / networking

11:30 **Alexey RAK**, *Sanofi, IDD Structure Design & Informatics (SDI)*

Novel Low-Protein Consuming High Throughput Biophysical Methods for mAbs, ADCs and Multi-Specific Biologics Characterization

12:00 **Marcin MOCZULSKI**, *SCIEX*

Characterization of glycoforms by high throughput glycan screening

12:30 **Yannis FRANÇOIS**, *Univ. Strasbourg, LSMIS*

Advance in capillary electrophoresis: application to the characterization of biotherapeutics

1:00 - 2:30 Buffet lunch / exhibitions / posters / networking

Session 5 - Emerging approaches and technologies

Session chair: **Valérie BELLE**, *Univ. Aix-Marseille*

2:30 **Bruno GUIGLIARELLI**, *Univ. Aix-Marseille*

Electron Paramagnetic Resonance for Protein Studies: Investigating Dynamic Properties and Structural Changes in Proteins

3:00 **Gilles JAOUEN**, *PharmaFluidics (Gent, Belgium)*

A novel robust LCMS approach using micro Pillar Array Columns (μ PAC™)

3:30 **Christophe QUÉTARD**, *FortéBio- Biologics by Molecular Devices*

Cell line development: accelerating antibody discovery by monitoring titer and glycosylation with the Octet platform

4:00 **Anne SÉVÉRAC**, *Sanofi Protein Science and Technology*

Microfluidics-based automated electrophoresis to support characterization of Biotherapeutics : case-studies

4:30 **Pierre SOULE**, *NanoTemper Technologies*

Quality control with the Tycho NT.6®: seeking the unseen about your protein

5:00 - 5:30 Coffee break / exhibitions / posters / networking

5:30 Presentation of Flash posters

5:30 Daniel SOME, Wyatt Technology

Characterization of multivalent-multivalent biomolecular interactions with CG-MALS

5:35 Jean MERCIER, Genedata AG

Employing the MS-based Multi-attribute Method (MAM) for Automated Quality Monitoring of Biotherapeutics

5:40 Philippe VASSAULT, Waters

Online IEX-MS Characterization and Monitoring of mAb Charge Heterogeneity Using an Optimized Cation Exchange Resin and Compact TOF Mass Spectrometer

5:45 Frédéric VIOLLEAU, Toulouse FFF Center - Ecole d'Ingénieurs de PURPAN

Toulouse FFF Center (TFFFC): Performance of Field-Flow Fractionation techniques for milk protein characterization

5:50 Rémy COCHEREAU, UR1268 Biopolymères, Interactions et Assemblages, INRA, 44000 Nantes, France

Using microfluidics to investigate the role of membrane on liquid-liquid phase separation of proteins

5:55 Nicolas AUTRET, Covaris

Reproducible and Hands-off Sample Preparation Workflow for Mass Spectrometry with Focused, Acoustics-Based Ultrasonication

6:00 General Conclusions and end of Conference