

# Rolduc2024 | 5th NVMS-BSMS Conference on Mass Spectrometry | Program

Sunday			
14:30 - 16:15	Registration		
16:15 - 16:35	Aula Major	Opening by Anouk Rijs ( <i>Chair NVMS</i> ) & Jef Rozenski ( <i>Chair BSMS</i> )	
16:35 - 17:20	Aula Major	<b>K1- Kathrin Breuker</b> , <i>University of Innsbruck</i> Stoichiometry-resolved native top-down mass spectrometry for the study of RNA-small molecule interactions	<i>Chair:</i> Anouk Rijs
17:20 - 18:05	Aula Major	<b>K2- Martin Giera</b> , <i>Leiden University Medical Center</i> The Neurolipid Atlas – Mapping lipidomic changes in neurodegenerative diseases	<i>Chair:</i> Guinevere Lageveen-Kammeijer
18:15 - 22:00	Buffet dinner & Welcome party		
Monday			
09:00 - 09:15	Aula Major	Opening by Anouk Rijs ( <i>Chair NVMS</i> ), Jef Rozenski ( <i>Chair BSMS</i> ), Pieter Langerhorst ( <i>YoungNVMS</i> )	
09:15 - 10:00	Aula Major	<b>K3- Simona Francese</b> , <i>Sheffield Hallam University</i> Fingerprints, from catching criminals to catch cancer	<i>Chair:</i> Jef Rozenski
10:00 - 11:10	Aula Major	<b>Flash presentations (PhD students)</b>	<i>Chair:</i> Eef Dirksen
11:10 - 11:40	Coffee break		
<i>Room</i>	<i>Hall 1</i>	<i>Hall 2</i>	<i>Hall 3</i>
<i>Topic</i>	<b>Large molecules - Proteomics 1</b>	<b>Small molecules - Oligosaccharides</b>	<b>New developments - Ion mobility</b>
<i>Chair</i>	Guinevere Lageveen-Kammeijer	Pascal Gerbaux	Jan Commandeur
11:45 - 12:05	<b>O1- Eva Smit</b> , <i>Sanquin</i> Proteomics Reveals Distinct Protein Patterns To Postpartum Development In Small For Gestational Age Preterm Infants	<b>O8- Julia Vreugdenhil</b> , <i>Utrecht University</i> <i>De novo</i> sequencing of human milk oligosaccharides using IMS-MS	<b>O15- Raya Sadighi</b> , <i>VU Amsterdam</i> Novel strategies for the characterization of the early-stages of aggregate formation of $\alpha$ -Synuclein using hyphenated mass spectrometry
12:05 - 12:25	<b>O2- Dario A. T. Cramer</b> , <i>Leiden University Medical Center</i> Exploring Interpersonal Variability in Serum Glycoproteins: a Quantitative Analysis of Glycoforms in Healthy Donors.	<b>O9- Jitske van Ede</b> , <i>TU Delft</i> Exploring the diversity of nonulosonic acids in pathogenic microbes: targets for the development of novel antimicrobials	<b>O16- Hugo Muller</b> , <i>University of Liège</i> Sliding windows in ion mobility (SWIM): a new approach to increase the separation power in trapped ion mobility-mass spectrometry hyphenated with chromatography
12:25 - 14:00	Lunch and poster session for odd numbered posters (corridors on ground floor)		
<i>Room</i>	<i>Hall 1</i>	<i>Hall 2</i>	<i>Hall 3</i>
<i>Topic</i>	<b>Heck Session</b>	<b>Small molecules - Varia</b>	<b>Large molecules - Antibodies</b>
<i>Chair</i>	Albert Heck	Arjen Gerssen	Eef Dirksen
14:00 - 14:20	<b>O3- Evolène Deslignière</b> , <i>Utrecht University</i> The Good, the Bad, and the Ugly: Analysis of mRNA Molecules by Mass Spectrometry and Mass Photometry	<b>O10- Liam Nestor</b> , <i>VU Brussel</i> Metabolic profiling of epileptic hippocampal tissue upon chemogenetic modulation of astrocytes using CE-HRMS	<b>O17- Amber Rolland</b> , <i>Utrecht University</i> Fab profiling reveals plasma IgA1 clones can co-occur in both monomeric and J-coupled dimeric forms
14:20 - 14:40	<b>O4- Tobias Woerner</b> , <i>Thermo Fisher</i> Single Molecule Mass Spectrometry - democratization of native MS	<b>O11- Ross Chawner</b> , <i>Waters</i> Waters SELECT SERIES: Unrivalled Ion Mobility Performance and High Mass Resolution Independent of Scan Speed	<b>O18- Pieter Langerhorst</b> , <i>Sanquin research</i> A multiplexed LC-MS/MS approach to quantify the immunoglobulin landscape in blood: from concept to clinical validation
14:40 - 15:00	<b>O5- Sarah Cianferani</b> , <i>Strasbourg University</i> Multifaceted Conformational Characterization of Native Therapeutic Antibodies by structural mass spectrometry approaches	<b>O12- Quentin Duez</b> , <i>UMONS</i> Metal-ligand equilibria in solution: Quantitative insights from isotopic labelling	<b>O19- Yue Li</b> , <i>Leiden University Medical Center</i> Antibody Fc profiling of IgG, IgA and IgM by light chain capturing coupled with nanoLC-MS analysis
15:00 - 15:30	Coffee break		
<i>Room</i>	<i>Hall 1</i>	<i>Hall 2</i>	<i>Hall 3</i>
<i>Topic</i>	<b>Large molecules - Conformation and stability</b>	<b>New developments</b>	<b>Small molecules - pollutants</b>
<i>Chair</i>	Eef Dirksen	Anouk Rijs	Arjen Gerssen
15:30 - 15:50	<b>O6- Thomas Tilmant</b> , <i>University of Liège</i> Revisiting Protein Gas-Phase Unfolding: Contribution of the Mobile Proton Model through Chemical Modifications and Ion Mobility	<b>O13- Richard Scheltema</b> , <i>Liverpool University</i> Fast and accurate disulfide bridge detection	<b>O20- Kas Houthuijs</b> , <i>VU Amsterdam</i> Identification and quantification of plastic particles in human blood using non-targeted pyrolysis-GC-MS
15:50 - 16:10	<b>O7- Tanja Habeck</b> , <i>TU Darmstadt</i> Studying homo- and hetero-oligomers with native ion mobility – mass spectrometry to understand the conformational interplay of different amyloid $\beta$ peptides	<b>O14- Steven Daly</b> , <i>MS Vision</i> Teaching Old Dogs New Tricks: Extending the Utility of your Mass Spectrometer	<b>O21- Jan Jordens</b> , <i>VITO</i> Unraveling the PFAS puzzle: towards a workflow for total PFAS screening
16:15 - 17:00	Aula Major	<b>K4- Claire Eyers</b> , <i>University of Liverpool</i> What do we really know about +80 Da mass shifts?	<i>Chair:</i> Richard Scheltema
17:00 - 18:00	Aula Major	<b>K5- Matyas Bittenbinder</b> , <i>Naturalis / VU Amsterdam</i> The good, the bad and the venom cocktail – what can we learn from these bioactive cocktails?	<i>Chair:</i> Anouk Rijs
18:00 - 19:00	Hall 2	yNVMS pubquiz	
19:00	Conference dinner		
20:30	Conference party		
Tuesday			
09:00 - 09:30	Hall 1	<b>Annual assembly NVMS</b>	
09:30 - 10:15	Aula Major	<b>K6- Tim Causon</b> , <i>BOKU University</i> New opportunities and tools for using IM-MS in analytical methods	<i>Chair:</i> Ann van Eeckhaut
10:15 - 11:00	Aula Major	<b>K7- Frank Vanhaecke</b> , <i>Ghent University</i> Use of inductively coupled plasma – mass spectrometry (ICP-MS) as a versatile tool in the biomedical sciences.	<i>Chair:</i> Filip Cuyckens
11:00 - 11:30	Coffee break		
<i>Room</i>	<i>Hall 1</i>	<i>Hall 2</i>	<i>Hall 3</i>
<i>Topic</i>	<b>Large molecules - Proteomics 2</b>	<b>New developments</b>	<b>Small molecules - Lipidomics</b>
<i>Chair</i>	Pieter Langerhorst	Richard Scheltema	Pascal Gerbaux
11:30 - 11:50	<b>O22- Ramon van der Zwaan</b> , <i>TU Delft</i> Pushing the limits of proteomics: characterizing microbial processes in wastewater treatment plants	<b>O26- Victor C. Yin</b> , <i>Utrecht University</i> Development and Applications of Ultra-long Transients for Orbitrap-based Single Ion Mass Spectrometry	<b>O30- Michel van Weeghel</b> , <i>Amsterdam UMC</i> Unraveling mono genetic disorders with complex pathologies through advanced 4D-lipidomics: Insights into ALD and BTHS
11:50 - 12:10	<b>O23- Christel Kuik</b> , <i>M4i</i> The proteome response of Staphylococcus Aureus to titanium biomaterial surface roughness	<b>O27- Ian Anthony</b> , <i>M4i</i> Advancements in fast mass microscopy speed, molecular information, and data processing	<b>O31- Tim Hendriks</b> , <i>M4i</i> Unveiling Lipidomal Dynamics in Glioblastoma Recurrence: Single-Cell MALDI-MSI of Patient-Derived Cell Lines
12:10 - 13:40	Lunch and poster session for even numbered posters (corridors on ground floor)		
<i>Room</i>	<i>Hall 1</i>	<i>Hall 2</i>	<i>Hall 3</i>
<i>Topic</i>	<b>Large molecules - CE-MS</b>	<b>Small molecules - Food &amp; Flavors</b>	<b>Large molecules - Proteoforms and complexes</b>
<i>Chair</i>	Guinevere Lageveen-Kammeijer	Martin Pabst	Bram Sniijders
13:40 - 14:00	<b>O24- Johann Far</b> , <i>University of Liège</i> Higher order structures of biomolecules investigated by capillary electrophoresis and ion mobility MS	<b>O28- Emilie Usureau</b> , <i>DSM-Firmenich</i> Flavor mapping by HS-SPME GC-HR-MS to improve flavor molecular information and understand flavor formation	<b>O32- Andrea Gargano</b> , <i>University of Amsterdam</i> Going big: non-denaturing HRMS- hyphenated separations unleash the analysis of complex proteoform mixtures over 100 kDa
14:00 - 14:20	<b>O25- Elena Domínguez Vega</b> , <i>Leiden University Medical Center</i> Unravelling functional changes in antibody proteoforms using affinity CE-MS	<b>O29- Mudita Vats</b> , <i>M4i</i> Mass Spectrometry Imaging Reveals Essential Oil Treatment Effects on Downy Mildew in grapevine ( <i>vitis vinifera</i> L.)	<b>O33- Edvaldo Vasconcelos Soares Maciel</b> , <i>TU Darmstadt</i> Chemical vs. collision-induced disruption of artificially-induced ternary protein complexes.
14:30 - 15:10	Aula Major	<b>K8- Rawi Ramautar</b> , <i>Leiden Academic Centre for Drug Research</i> Charge to move forward in Volume-restricted Metabolomics	<i>Chair:</i> Ann van Eeckhaut
15:15	Aula Major	<b>Poster award ceremony &amp; goodbye</b>	
			<i>Chair:</i> Jef Rozenski