

# PROGRAMME DAY 1: MONDAY 3 DECEMBER 2018

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09.00 - 10.30	REGISTRATION AND COFFEE, PUT UP POSTERS DAY 1							
10.30 - 11.00	<b>KEYNOTE: KENICHIRO ITAMI - NAGOYA UNIVERSITY (AUDITORIUM)</b> SYNTHETIC CHEMISTRY MEETS PLANT BIOLOGY AND CHRONOBIOLOGY		<b>KEYNOTE: KEVIN VERSTREPEN - KU LEUVEN, FLANDERS INSTITUTE FOR BIO-TECHNOLOGY (ROOM 82-83)</b> A SYSTEMS APPROACH TO GENERATE SUPERIOR INDUSTRIAL YEASTS		<b>KEYNOTE: ANNA AKHMANOVA - UTRECHT UNIVERSITY (ROOM 63-64)</b> SEEING MICROTUBULE-BINDING PROTEINS AND DRUGS IN ACTION			
<b>ROOM</b>	<b>PARKZAAL</b>	<b>80-81</b>	<b>82-83</b>	<b>AUDITORIUM</b>	<b>55-57</b>	<b>63-64</b>	<b>65</b>	<b>BOSZAAL</b>
	<b>NEW CONCEPTS IN MEDICINAL CHEMISTRY</b>	<b>CHEMICAL BIOLOGY IN VIVO</b>	<b>BIOCATALYSIS</b>	<b>ENCAPSULATED ENZYMES</b>	<b>MEASURING SPECIAL PROCESSES</b>	<b>CELL DIVISION/GENOME STABILITY</b>	<b>PROTEOMICS/ENZYME NETWORKS</b>	<b>MEMBRANE TRANSPORTERS</b>
	Chair: Daan van der Es	Chair: Christian Ottmann	Chair: Marco Fraaije	Chair: Bauke Albeda	Chair: Maarten Honing	Chair: Hannes Lans	Chair: Marjolijn Kikkert	Chair: Tzviya Zeev-Ben-Mordehai
11.10 - 11.25	<b>A. Janssen (LEI, Van der Stelt)</b> DDM, a machine learning model, visualises and predicts kinome-inhibitor interaction landscapes	<b>M. van de Graaff (LEI, Van Kasteren)</b> Controlling toll-like receptor activity in space and time	<b>L. Biewenga (RUG, Poelarends)</b> Chemoenzymatic cascade synthesis of pharmaceutically active gamma-aminobutyric acids	<b>J. Toebes (RU, Wilson)</b> Enzyme driven supramolecular nanomotors from polymeric vesicles	<b>K. Bezemer (UvA, Van Asten)</b> Chemical impurity analysis of home-made explosive ETN for forensic intelligence using LC-MS	<b>R. Schmidt (UU, Van den Heuvel)</b> Optogenetic control of spindle positioning in vivo	<b>B. Helwig (RU, Huck)</b> Bottom-up construction of an adaptive enzymatic reaction network	<b>A. Garaeva (RUG, Slotboom)</b> Cryo-EM structure of human neutral amino acid transporter ASCT2
11.25 - 11.40	<b>P. de Vink (TU/e, Brunsveld)</b> A cooperativity paradigm for small molecule stabilization of protein-protein interactions	<b>C. van Gelder (UU, Alteleaer)</b> Mapping the temporal dynamics of mGluR-LTD, combining AHA labeling, phosphoproteomics and APEX2	<b>M. Delgove (UM, Bernaerts)</b> A thermostable oxidative enzyme applied to the synthesis of polymeric building blocks	<b>R. Klem (UT, Cornelissen)</b> Enzyme loaded protein cages as nanomedicine in leukemia treatment	<b>A. Vagias (RUG, Portale)</b> Monitoring nanostructural transformations during film formation in waterborne latex coatings	<b>R. Luirink (VU, Geerke)</b> Bacterial cell division proteins FtsQ and FtsB: computer simulation to understand their interactions	<b>J. Zhu (UU, Heck)</b> Variation in the personalized human milk proteome over the lactation period	<b>M. Renne (UU, De Kroon)</b> ERMS-facilitated transfer of phospholipids to mitochondria is molecular species-selective
11.40 - 12.00	COFFEE BREAK							
<b>ROOM</b>	<b>PARKZAAL</b>	<b>80-81</b>	<b>82-83</b>	<b>AUDITORIUM</b>	<b>55-57</b>	<b>63-64</b>	<b>65</b>	<b>BOSZAAL</b>
	<b>SESSION CONTINUED</b>	<b>SESSION CONTINUED</b>	<b>SESSION CONTINUED</b>	<b>BACKER LECTURE</b>	<b>SESSION CONTINUED</b>	<b>SESSION CONTINUED</b>	<b>SESSION CONTINUED</b>	<b>SESSION CONTINUED</b>
	Chair: Dennis Löwik	Chair: Tom Wennekes	Chair: Tina Vermonden	Chair: Adri Minnaard	Chair: Sander van Kasteren	Chair: Francesca Mattioli	Chair: Puck Knipscheer	Chair: Daan Geerke
12.00 - 12.15	<b>S. El Aidi (RUG, Van den Bogaart)</b> Host-microbe chemical dialogue restricts L-DOPA bioavailability in Parkinson's disease treatment	<b>N. Reintjens (LEI, Van der Mare)</b> TLR 4-Ligand - Antigen conjugates as novel vaccine-modalities	<b>J. Vilim (UvA, Mutti)</b> Catalytic promiscuity of galactose oxidase: a mild synthesis of nitriles from alcohols, air, ammonia	<b>A. Wong (Harvard)</b> Synthesis of out-of-equilibrium reaction networks	<b>M. Grajewski (RUG, Verpoorte)</b> Organ-on-a-chip device for real-time monitoring of biliary transport in precision-cut liver slices	<b>Y. Mardenborough (EMC, Lebbink)</b> The disordered linker regions in MutL enable roadblock bypass during DNA mismatch repair	<b>H. Busch (TUD, Hagedoorn)</b> Towards a novel Michael hydratase - finding a needle in a haystack	<b>J. van 't Klooster (RUG, Poolman)</b> Protein-specific lipidomes of plasma membrane of yeast and role of lipids on transporter function
12.15 - 12.30	<b>S. Jekhmane (UU, Weingarth)</b> The mode of action of the peptide-antibiotic plectasin in native-like membranes	<b>L. Nederveen-Schippers (RUG, Korholt)</b> The role of LRRK2 dimerization in Parkinson's disease	<b>S. Marsden (TUD, Hanefeld)</b> Phosphate acts as an efficient proton relay in class II hydroxypyruvate aldolases	<b>G. van Kollenburg (RU, Jansen)</b> Process path models	<b>K. Sato (Hubrecht, Knipscheer)</b> HSF2BP negatively regulates DNA interstrand crosslink repair by direct interaction with BRCA2	<b>L. Yakovlieva (RUG, Walvoort)</b> Studies of the hyperglycosylation mechanism of an Haemophilus influenzae adhesin	<b>L. Yakovlieva (RUG, Walvoort)</b> Studies of the hyperglycosylation mechanism of an Haemophilus influenzae adhesin	<b>W. Oosterheert (UU, Gros)</b> Structural insights into transmembrane-electron transport and iron reduction by human STEAP4
12.30 - 12.45	<b>M. Rong (VU, Bitter)</b> SAR-Optimized type VII secretion inhibitors to exploit novel targets in M. tuberculosis	<b>L. Fliervoet (UU, Hennink)</b> Balancing hydrophobic and electrostatic interactions in thermosensitive polyplexes	<b>S. Thangavelu (RUG, Poelarends)</b> Modular enzymatic cascade synthesis of vitamin B5 and its derivatives	<b>F. van Geenen (WUR, Nielen)</b> Reactive laser ablation electrospray ionization time-resolved mass spectrometry of click reactions	<b>T. Molenaar (NKI, Van Leeuwen)</b> The histone methyltransferase SETD2 maintains chromatin integrity	<b>N. Prust (UU, Lemeer)</b> Phosphoproteome study on Staphylococcus aureus to identify phosphoproteins involved in virulence	<b>Y. Clerico Mosina (RUG, Paulino)</b> The two-faces of the TMEM16 family: calcium-activated ion channels or lipid scramblases?	
12.45 - 13.45	LUNCH							
13.45 - 15.30	POSTER SESSION (ALL POSTERS DAY 1: CHEMISTRY OF LIFE)							
<b>ROOM</b>	<b>PARKZAAL</b>	<b>80-81</b>	<b>82-83</b>	<b>AUDITORIUM</b>	<b>55-57</b>	<b>63-64</b>	<b>65</b>	<b>BOSZAAL</b>
<b>FOCUS SESSIONS</b>	<b>Organised by KNCV</b>	<b>Organised by Holland Chemistry</b>	<b>Chemistry and Biology of Nicotinamide Adenine Dinucleotide</b>	<b>Supramolecular chemistry with carbohydrates</b>	<b>Chemical tools to study immune system kinetics</b>	<b>Chromatin structure and dynamics</b>	<b>Non-target screening of contaminants of emerging concern for environmental water quality monitoring</b>	<b>Cellular structural biology</b>
	Accelerating Drug Discovery by Selection and Evolution of very large Libraries Chair: Roland Pieters	Addressing Antimicrobial Resistance: from Bench to Bedside Chair: Nathaniel Martin	Chair: Gerbrand van der Heden van Noort	Chair: Tidlo Mooibroek	Chair: Sander van Kasteren	Chair: Francesca Mattioli	Chair: Annemieke Kolkmann	Chair: Marc Baldus
15.30 - 16.50	<b>1. Michael Famulok (Univ. of Bonn)</b> Using aptamer libraries for profiling drug response in cancer patients <b>2. Peter Timmerman (Pepscan &amp; UvA)</b> Discovery of Bioactive CLIPS-peptides by High Throughput Screening of Phage Display Libraries <b>3. Vito Thijssen (UU)</b> RaPID generation of bioactive peptides containing unnatural amino acids	<b>1. Kees de Joncheere (WHO)</b> R&D for new antibiotics: the Netherlands contribution with NADP <b>2. Peter Nibbering (LUMC)</b> Novel antimicrobial peptides eradicate antimicrobial resistant bacteria, biofilms and persisters <b>3. Stephen Cochrane (Queen's University Belfast)</b> Synthesis of labelled bacterial lipids to aid in the development of new antimicrobial compounds and targets	<b>1. Caroline Paul (TUD)</b> Synthetic NAD cofactors in biocatalytic processes <b>2. Gytis Jankevicius, (Oxford)</b> Enzymes mediating ADP-ribosylation of proteins and DNA <b>3. Jim Voorneveld (LEI)</b> Synthetic challenges of mono-ADP-ribosylated peptides and oligonucleotides	<b>1. Anthony Davis (Bristol)</b> A Biomimetic Receptor for Glucose: Supramolecular Chemistry with Real-World Implications <b>2. Seino Jongkees (UU)</b> Macrocyclic peptide scaffolds for glycan presentation to proteins <b>3. Oscar Francesconi (Florence)</b> Biomimetic synthetic receptors: targeting non-all-equatorial carbohydrates in water	<b>1. Aaron Esser-Kahn (Univ. of Chicago)</b> Bond breaking reactions in the study of TLR-signalling <b>2. Marc-Robillard (Tagworks Pharma)</b> Click-to-Release technology for controlled drug delivery <b>3. Kim Bonger (RU)</b> Selective Targeting of Pathogenic B-cells in Rheumatoid Arthritis <b>4. Anouk van der Gracht (LEI)</b> The inverse electron demand Diels-Alder allows chemical control over T-cell activation in vivo	<b>1. Beat Fierz (EPFL Lausanne)</b> Revealing transcription factor invasion into compact chromatin <b>2. Hugo van Ingen (UU)</b> Resolving nucleosome-protein interactions by NMR <b>3. Cathrin Gräwe (RU)</b> Global profiling of protein-DNA and protein-nucleosome binding affinities using quantitative mass spectrometry	<b>1. Juliane Hollender (EAWAG)</b> Target screening with high resolution mass spectrometry for a comprehensive chemical water quality assessment <b>2. Andrea Brunner (KWR Watercycle Research Institute)</b> Applications of non-target screening to monitor water quality during drinking water treatment processes <b>3. Rick Helmus (UvA)</b> Open source software for mass spectrometry based non-target screening in the environment	<b>1. Kay Grünewald (Oxford &amp; CSSB Hamburg)</b> Integrated structural cell biology of virus-host interactions <b>2. T.b.a.</b> <b>3. Sid Narasimhan (UU)</b> Structural studies on Ubiquitin using in-cell solid-state NMR
16.50 - 17.10	COFFEE BREAK							
<b>ROOM</b>	<b>PARKZAAL</b>	<b>80-81</b>	<b>82-83</b>	<b>58</b>	<b>55-57</b>	<b>63-64</b>	<b>65</b>	<b>BOSZAAL</b>
	<b>LIGHT-BASED TOOLS FOR MEDICAL RESEARCH</b>	<b>SMALL MOLECULE SYNTHESIS</b>	<b>(BIO)MATERIALS</b>	<b>MEASURING NATURAL MOLECULES</b>	<b>NEW DIMENSIONS IN ANALYSIS AND IDENTIFICATION</b>	<b>TRANSCRIPTION AND CHROMATIN</b>	<b>UPS/PROTEIN QUALITY</b>	<b>STRUCTURE AND DYNAMICS OF PROTEINS AND LIPIDS</b>
	Chair: Dennis Löwik	Chair: Tom Wennekes	Chair: Tina Vermonden	Chair: Jeroen Jansen	Chair: Geert van Kollenburg	Chair: Ronald van Rij	Chair: Puck Knipscheer	Chair: Daan Geerke
17.10 - 17.25	<b>A. Busemann (LEI, Bonnet)</b> Cell imaging of click-enabled ruthenium complexes for photoactivated chemotherapy	<b>S. Ali (LEI, Codee)</b> Automated solid phase synthesis of s. aureus wall teichoic acid fragments	<b>M. Putti (TU/e, Dankers)</b> A supramolecular synthetic platform for introduction of notch ligands at the surface of biomaterials	<b>E. van Andel (WUR, Zuilhof)</b> Highly selective capturing of biomolecules by antifouling zwitterionic polymer-coated microbeads	<b>N. Abdhussain (UvA, Schoenmakers)</b> Electro-driven microfluidic chip for spatial multi-dimensional separations	<b>I. Brouwer (NKI, Lenstra)</b> Interplay between transcription factors, nucleosomes and bursting at single-molecule level	<b>S. Devarajan (RUG, Williams)</b> Insights into a ubiquitin-dependent protein quality control pathway at the peroxisomal membrane	<b>F. Bianchi (RU, Van de Bogaart)</b> Trans-membrane domains: an overlooked source of antigens
17.25 - 17.40	<b>M. Hoorens (UMCG, Szymanski)</b> Remote control over biological functions using photo-switchable inhibitors	<b>H. Elferink (RU, Boltje)</b> An integrated approach to understand stereoselective glycosylation reactions	<b>Y. Zhang (RU, Kouwer)</b> Biological applications of synthetic biomimetic hydrogels	<b>R. Armstrong (TU/e, Zijlstra)</b> Plasmonic switches for small-molecule biosensing with single-molecule sensitivity	<b>T. Adamopoulou (UvA, Janssen)</b> TWO-dimensional Insertable Separation Tool (TWIST)	<b>H. Zhang (UU, Van Ingen)</b> Unwrapping of nucleosomes by histone variant H2A.B	<b>M. van Huizen (LUMC, Kikkert)</b> Nidovirus infection induces an upregulation of K27-linked ubiquitination	<b>F. Nami (LEI, Pandit)</b> Protein and lipid dynamics in stacked and unstacked thylakoid membrane: combined NMR/EPR approach
17.40 - 17.55	<b>X. Gómez-Santacana (VU, Wijtmans)</b> 1st and 2nd generation photoswitchable ligands for GPCRs: switching affinity and efficacy	<b>R. de Vries (RUG, Roelfes)</b> Bioorthogonal modification of dehydroalanine residues in RIPPS via Diels-Alder cycloadditions	<b>S. Hafeez (UM, Baker)</b> Molecularly designed hydrogel networks as viscoelastic matrices for tissue engineering	<b>R. Lubken (TU/e, Prins)</b> Single-molecule kinetic fingerprinting for sensitivity and specificity in biosensing	<b>D. Hadavi (UM, Honing)</b> Advancing ion mobility MS/MS strategies using adduct ions: broadening the scope to stereoisomers	<b>J. Rougeot (RU, Kamminga)</b> Polycomb group proteins regulate spatially restricted gene expression and tissue maintenance	<b>M. Jafarinia (RUG, Onck)</b> Phase separation of toxic ALS dipeptide repeat proteins	<b>L. Nicol (VU, Croce)</b> Non-photochemical quenching without LHCI
17.55 - 18.10	<b>Y. Feng (UvA, Zhang)</b> A bioorthogonal solution for upconversion luminescence-guided surgery and postoperative therapy	<b>G. Le Calvez (RUG, Minnaard)</b> Total synthesis of mycosteroid acid of M. tuberculosis and the pheromone of Margarodes prieskaensis	<b>P. Suthavas (UM, Van Rijt)</b> Nanoparticle based coatings to instruct bone regeneration and proteomics	<b>G. Huang (RUG, Maglia)</b> Engineering FraC nanopore for single molecule peptide mass spectrometry and proteomics	<b>T. Brooijmans (UvA, Peters)</b> Molecular heterogeneity analysis of carboxylic acid functionality in waterborne synthetic polymers	<b>F.-Z. Rashid (LEI, Dame)</b> The 3-dimensional organization of the bacterial genome and its interplay with gene expression	<b>M. Koopman (UU, Rüdiger)</b> Untangling fibrils of the Alzheimer protein Tau	<b>P. Koukos (UU, Bonvin)</b> HADDOCK goes membrane: Integrative modelling of membrane complexes
18.10 - 18.25	<b>D. Kotlarski (RUG, Feringa)</b> Light dosimetry: a method for conditional adjustment of circadian period	<b>Q. Liu (LEI, Filippov)</b> Towards the chemical synthesis of branched poly-ADPr oligomers	<b>A. Ianrio (TU/e, Esteves)</b> Encapsulation, adsorption and depletion of additives by dispersed block copolymer micelles	<b>J. Slagboom (VU, Kool)</b> Nanofractionation analytics for identification of coagulopathic snake venom peptides and enzymes	<b>R. Voeten (VU, Somsen)</b> Probing [bio]polymer branching and conformation with trapped ion-mobility spectrometry	<b>E. Ne (EMC, Mahmoudi)</b> CRISPR/dCas9-mediated locus-specific identification of the latent and activated HIV promoter complex	<b>P. Sahasrabudhe (UU, Braakman)</b> Folding modulators of the Cystic Fibrosis Transmembrane Conductance Regulator (CFTR)	<b>N. Crone (LEI, Kros)</b> Conformational restriction of coiled-coil based fusogens
18.30 - 20.00	DINNER							
20.00 - 20.05	POSTER PRIZE AWARDS DAY 1 (BENELUXZAAL)							
20.10 - 20.55	<b>PLENARY LECTURE: JASON CHIN - MRC-LMB, UNIVERSITY OF CAMBRIDGE (BENELUXZAAL)</b> REPROGRAMMING THE GENETIC CODE							
21.00 - 01.00	EVENING PROGRAMME							

**LEGEND**

MEDICINAL CHEMISTRY  
 BIOMOLECULAR CHEMISTRY  
 ANALYTICAL CHEMISTRY & MATERIALS  
 CHEMISTRY

PROTEINS, DNA, RNA  
 BIOMEMBRANES & STRUCTURAL BIOLOGY