

PROGRAMME DAY 1: TUESDAY 5 DECEMBER

FOR MORE INFORMATION ABOUT LECTURES AND SPEAKERS
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08.30 - 10.00	REGISTRATION AND COFFEE, PUT UP POSTERS DAY 1								
10.00 - 10.30	KEYNOTE: WILHELM HUCK - RADBOD UNIVERSITY NIJMEGEN (AUDITORIUM) DISSIPATIVE SYSTEMS SHOWING SIGNS OF LIFE			KEYNOTE: ALEXANDER VAN OUDENAARDEN - HUBRECHT INSTITUTE (ROOM 63-64) WHOLE-ORGANISM CLONE-TRACING USING SINGLE-CELL SEQUENCING			KEYNOTE: ANA POMBO - HUMBOLDT UNIVERSITY OF BERLIN (ROOM 82-83) GENOME ARCHITECTURE MAPPING: DISCOVERING CHROMATIN CONTACTS IN RARE CELL TYPES		
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	SIGNALLING BY UBIQUITIN AND SUMO MODIFICATION Chair: Huib Ova	LIPIDS AND BIOMEMBRANES Chair: Antoinette Killian	MODELING OF PROTEIN PROTEIN INTERACTIONS Chair: Daan Geerke	ENZYMATIC CATALYSIS Chair: Gerard Roelfes	BACKER LECTURE Chair: Jeroen Cornelissen	INVESTIGATING CELLULAR ORGANIZATION Chair: Puck Knipscheer	MEDICINAL CHEMISTRY Chair: Frits Peters	(BIO)PARTICLE ANALYSIS Chair: Sabeth Verpoorte	METABOLOMICS Chair: Celia Berkers
10.30 - 10.50	F. Liebelt (LUMC; Vertegaal) SUMO regulates the Cockayne syndrome B protein in response to UV-induced DNA damage			K. Wichapong (UM; Nicolaes) A Fast and Powerful Computational Approach to Identify Protein-Protein Complexes: From in silico Molecular Mechanism to Novel Therapeutics			W. Böhmer (UvA; Mutti) Efficient one-pot amination of alcohols and carbonyl compounds by amine dehydrogenases		
10.50 - 11.10	R.Q. Kim (NKI; Sixma) Chemical, biophysical and structural analysis reveals how USP7 is activated in a two-step process			G. Koçer (UT; Jonkheijm) Cell-Instructive Biointerfaces using Supported Lipid Bilayers			C. Geng (UU; Bonvin) iSEE: Structure and Evolution-based Random Forest Predictor of Binding Affinity Changes upon Mutations		
11.10 - 11.30	COFFEE BREAK								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	BIOCATALYSIS (1) Chair: Jasmin Mecinovic	INTRACELLULAR CHEMISTRY Chair: Claire Wyman	VIRAL DEFENSE MECHANISMS Chair: Raoul de Groot	PROTEIN STRUCTURE Chair: Bert Poolman	COMPLEX SAMPLE ANALYSIS Chair: Isabelle Kohler	Computational drug discovery Chair: Kim Bonger	PEPTIDE AND PROTEIN ASSEMBLY Chair: Maarten Merckx	Protein and disease Chair: Simone Lemeer	STRUCTURE-FUNCTION Chair: Hugo van Ingen
11.30 - 11.50	C. Paul (WUR; Franssen) Selected oxidation reactions catalyzed by monoxygenases with nicotinamide coenzyme biomimetics			S. De Henau (UMCU; Dansen) Mitochondrial redox signaling induces polarization of the C. elegans embryo			R. Staals (WUR; Van der Oost) Phage wars - the bacterium strikes back		
11.50 - 12.10	S. Chordia (RUG; Roelfes) Directed evolution of artificial enzymes in living cells			A.S.G. Lorenzoni (RUG; Scheffers) Xanthomonas citri MinC oscillates from pole to pole to ensure proper cell division and shape			P. Mohanraju (WUR; Van Kranenburg) Characterizing a Thermostable Cas9 and Exploring Its Potential As a Genome Engineering Tool for Both Thermophilic and Mesophilic Prokaryotes		
12.10 - 12.30	C. Bisterfeld (TUD; Hanefeld) Enzyme-catalysed Ester Synthesis in Water			I. L. Rempel (ERIBA, UMCG/RuG; Veenhoff) Nucleocytoplasmic transport during replicative aging - a single cell study			E. Treffers (LUMC; Snijder) Protein-directed -2/-1 programmed ribosomal frameshifting in arterivirus genomes		
12.30 - 13.30	LUNCH								
13.30 - 15.00	POSTER SESSION (ALL POSTERS DAY 1: CHEMISTRY OF LIFE)								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	FOCUS SESSIONS Chair: Hermen Overkleef	Mass Spectrometry Based Proteomics in the Health and Life Sciences Chair: Maarten Altelaar	Dynamic genome organization Chair: Kerstin Wendt	Looking into the cell with cryoEM Chair: Friedrich Foerster	CRISPR Chair: Stan Brouns	Ubiquitin conjugation and deconjugation Chair: Chris Williams	Organised by top sector Chemistry Chemistry and Health: Future Medicines Chair: Mario van der Stelt	Applications of nanobodies: from molecular biology to the clinic Chair: Sabrina Oliveira	Translational Chemistry: Molecular imaging, Mechanisms, and bioMarkers Chair: Ingrid Dijkgraaf
15.00 - 16.20	1. Gideon Davies (Uni of York) Mechanistic and cellular insight into medically-relevant glycosides: itineraries and destinations 2. Ivan Gagarinov (UU) Chemoenzymatic Synthesis of N-Glycans and their MS properties 3. Raoul de Groot (UU) Viral attachment to sialoglycan-based receptors: a close association through fleeting interactions			1. Chuna Choudhary (Uni of Copenhagen) Understanding lysine acetylation signaling through quantitative mass spectrometry 2. Martina Pirro (LUMC) Proteomic analysis of aberrant glycosylation in cancer cells 3. Simone Lemeer (UU) Drug resistance assessed by mass spectrometry based omics technologies			1. Marc Marti-Renom (CNAG) Structure determination of genomes and genomic domains by satisfaction of spatial restraints 2. Ralph Stadhouders (EMC) Gene regulation in a 3D chromatin environment shapes cell fate 3. Jorine Eeftens (TUD) Single-molecule approaches to unravel the mechanism of the condensin complex		
16.20 - 16.40	COFFEE & SNACK BREAK								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	EPIGENETICS AND CHROMATIN Chair: John van Noort	MEMBRANE AND PROTEIN STRUCTURE Chair: Piet Gros	PROTEIN INTERACTIONS Chair: Stefan Rüdiger	LIGHT ACTIVATION OF SYNTHETIC MOLECULES Chair: Nathalie Katsonis	SYNTHESIS & CATALYSIS Chair: Hermen Overkleef	BIOMOLECULAR NANOTECHNOLOGY Chair: Daniela Wilson	BIOCATALYSIS [2] Chair: Peter-Leon Hagendoorn	CHEMICAL TOOLS IN BIOLOGICAL SYSTEMS Chair: Tom Wennekes	FROM FIREWORKS TO ART Chair: Arno Kentgens
16.40 - 17.00	S. Tanis (RU; Mulder) Transcriptional regulation of human epidermal stem cell differentiation			J. Santos (RUG; Slotboom) Vitamin B12 uptake			M. Mijnders (UU; Braakman) Folding and domain assembly of the ABC transporter CFTR		
17.00 - 17.20	D. Poramba Liyanage (NKI; Van Leeuwen) Decoding the chromatin proteome of a single transcribed locus			V. Arkhipova (RUG; Guskov) Crystal structure of archaeal homologue of mammalian glutamate transporters in complex with D-aspartate			S. Andrei (TU/e; Ottmann) Stabilization of protein-protein interaction: application to Notch4		
17.20 - 17.40	M. Perino (RU; Veenstra) Mtf2 mediates direct Polycomb recruitment to unmethylated DNA in ES cells			J.J. Dominguez Pardo (UU; Killian) The styrene-maleic acid copolymer: a versatile tool in membrane research			W. Elings (LEI; Ubbink) Fighting resistance: Mycobacterium tuberculosis β -lactamase and clavulanic acid inhibition		
17.40 - 18.00	B. Henneman (LEI; Dame) The archaeal hypernucleosome			V. Bolomini Vittori (RUMC; Cambi) Phosphatidic Acid islets drive the formation of actin-rich cell protrusions.			J. Medeiros-Silva (UU; Weingarth) Antibiotics, seen at high-resolution and in the native state		
18.00 - 18.20	G. King (VU; Peterman) The Biophysical Chemistry of Ultra-fine DNA Bridge Resolution during Mitosis			M. Krishnan (LEI; Pandit) Large-scale in vitro production, refolding and dimerization of Pstb5 in different microenvironments			S. Denisov (UM; Dijkgraaf) Sec-Scan: a new approach for reliable disulfide connection assignment in peptides and proteins.		
18.30 - 20.00	DINNER								
20.00 - 20.05	POSTER PRIZE AWARDS DAY 1 (BENELUXZAAL)								
20.10 - 20.55	PLENARY LECTURE: ALBERT HECK - UTRECHT UNIVERSITY (BENELUXZAAL) INVESTIGATING THE CELLULAR PROTEIN SOCIETY BY MASS SPECTROMETRY								
21.00 - 22.00	STUDY GROUP DAY 1 MEETINGS (VARIOUS ROOMS)								
22.00 - 01.00	EVENING PROGRAMME								

LEGENDA
 BIOCHEMISTRY & MOLECULAR BIOLOGY
 CHEMICAL BIOLOGY

ANALYTICAL CHEMISTRY & BIOPHYSICS
 MATERIALS CHEMISTRY

PROGRAMME DAY 2: WEDNESDAY 6 DECEMBER

FOR MORE INFORMATION ABOUT LECTURES AND SPEAKERS
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7.00 - 9.00	BREAKFAST								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	
	UBIQUITIN PROTEASOME SYSTEM Chair: Alfred Vertegaal	REGULATION OF DNA REPAIR Chair: Joyce Lebbink	INSIGHT IN DISEASES Chair: Jeroen Cornelissen	PROTEIN STRUCTURE Chair: Friedrich Foerster	MODULATION AND DETECTION OF PROTEIN-LIGAND INTERACTIONS BY LIGHT Chair: Wiktor Szymanski	NANOPARTICLES IN LIFE SCIENCES Chair: Raymond Schiffelers	CHEMICAL PROBES Chair: Romano Orru	PROTEIN DYNAMICS Chair: Christian Ottmann	
9.00 - 9.20	X. Chen (RUG; Williams) Pex13p degradation facilitates peroxisomal matrix protein import in Hansenula polymorpha	J. Schimmel (LUMC; Tijsterman) Mutational signatures of non-homologous and polymerase Theta-mediated end joining in embryonic stem cells	M. Can Araman (LEI; Van Kasteren) Bioorthogonal antigens-shedding light on the impact of posttranslational modifications in rheumatoid arthritis	S. Guo (TU/e; Voets) Structure of a 1.5-MDa ice-binding protein reveals its role in binding bacteria to ice with diatoms	N. Hauwert (VU; Leurs) A bi-directional photo-antagonist toolbox for histamine H3 receptor photopharmacology	O. Koshkina (RUMC; Srinivas) Perfluorocarbon-loaded Nanoparticles with Multi-domain Structure for Multiscale In Vivo Imaging	M. Harvey (LEI; Van der Mare) SYNTHETIC SCHISTOSOMA MANSONI GLYCANS FOR DIAGNOSTIC AND VACCINE APPLICATIONS	E. Salamatova (RUG; Pchenitchnikov) Organised but intermittent: a liquid mimicking disordered proteins	
9.20 - 9.40	G. van der Heden van Noort (LUMC; Ovaa) Capturing cysteine proteases in action: novel activity based probes reveal linkage-specific reactivity of deubiquitylating enzymes	M. Lamers (EMC; Wyman) The molecular dynamics of the DNA replicase revealed by cryo electron microscopy and single molecule light microscopy	F. Coiffi (UT; Broersen) A protein-protein interaction connecting neuroinflammation and neurodegeneration in Alzheimer's disease.	D. Meijer (UU; Janssen) Single particle cryo-electron microscopy to study synaptic cell adhesion molecules	M. Soethoudt (LEI; Van der Stelt) Click chemistry with photoreactive probes visualizes endogenous cannabinoid CB2 receptor expression on human immune cells	G. Arias Alpizar (LEI; Kros) Selective blood vessel deletion through stabilin-dependent nanoparticle uptake in scavenger endothelial cells	C. de Boer (LEI; Overkleef) Synthesis and evaluation of activity-based endoglycosidase probes	E. Arik (VU; Groot) Protein and chromophore dynamics of the signal transducer Photoactive Yellow Protein resolved on full femto- to millisecond time scale	
9.40 - 10.00	J. Luimstra (LUMC; Neeffjes) A hot trick for efficient peptide exchange on MHC class I multimers	A. Bolner (Hubrecht; Knipscheer) Endogenous DNA interstrand crosslinks are repaired via the Fanconi anemia pathway and a newly identified pathway	M. Rontogianni (UU; Altelaar) Proteomic analysis of breast cancer- derived exosomes	R. Tassoni (LEI; Van Wezel) X-Ray Crystal Structure and Biochemical Characterization of the COG0325 protein YlmE from Streptomyces coelicolor A3(2).	A. Pees (VUMC; Windhorst) Development of high specific activity [¹⁸ F]trifluoromethylation methods for PET tracer synthesis.	M. Meijer (LEI; Bonnet) Near-IR activation of light-activatable ruthenium-based anticancer prodrugs with upconverting nanoparticles	E. Mons (LUMC; Ovaa) Unexpected alkyne reactivity with active site cysteine nucleophiles	P. Konold (VU; Kennis) Reaction Dynamics of the Orange Carotenoid Protein Probed by Femtosecond to Millisecond Infrared Spectroscopy	
10.00 - 10.15	COFFEE BREAK								
10.15 - 10.20	OPENING PLENARY DAY (BENELUXZAAL)								
10.20 - 11.05	PLENARY LECTURE (KNAW VAN 'T HOFF): JACQUELINE BARTON - CALTECH (BENELUXZAAL) DNA SIGNALING								
11.05 - 11.25	KNCV GOLD MEDAL LECTURE: NATHALIE KATSONIS - UNIVERSITY OF TWENTE (BENELUXZAAL) MECHANIZING MOLECULAR MATTER								
11.25 - 12.10	PLENARY LECTURE: FERDI SCHÜTH - MAX-PLANCK-INSTITUT FÜR KOHLENFORSCHUNG (BENELUXZAAL) NANOSTRUCTURED SOLIDS FOR APPLICATION IN CATALYSIS AND BEYOND								
12.15 - 13.15	LUNCH, eXCHAINS LUNCH, NextGenChem@NL LUNCH, eXCHAINS ACTIVITIES								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	FOCUS SESSIONS Chemistry, physics and engineering of viruses and virus-like particles Chair: Paul van der Schoot	Inorganic Materials for Renewable Energy, Chemistry of Battery Materials Chair: Marnix Wagemaker	Rational design of molecular probes for nanoscopy Chair: Jacob Hoogenboom	Chemistry in synthetic cells: from catalysis to communication Chair: Evan Spruijt	Molecular Engineering with DNA Chair: Bauke Albeda	New Roles of Clouds of Small Particles in Energy Conversion Processes Chair: Dirk Roekaerts	Organised by top sector Chemistry Making the molecules of the future: Sustainable Chemistry and Energy Chair: Eelco Vogt	Bio-inspired materials Chair: Nico Sommerdijk	Organised by top sector Chemistry Chemistry of Materials – into the circular economy Chair: Katja Loos
13.15 - 14.35	1. Jeroen Cornelissen (UT) Chemical Virology: engineering viruses with new properties 2. Wouter Roos (RUG) Viral nanoparticles: From self-assembly to material properties 3. Pepijn Moerman (UU) Kinetics versus Thermodynamics in Virus Capsid Polymorphism	1. Petr Novak (ETH Zurich) Operando battery research 2. Mark Huijben (UT) Mastering the interface for enhanced solid-state batteries 3. Tomas Verhallen (TUD) A direct view on Li-ions in batteries, operando Neutron Depth Profiling	1. Daan Brinks (TUD/Harvard Uni) NOVArch: Creation of a photoactivated reporter for voltage imaging in brain 2. Cristina Flors (IMDEA Nanoscience) Novel photosensitizing flavoproteins as tags for correlative light and electron microscopy 3. Nicole Pirozzi (UMCG) Probes for element-based identification for multi-color electron microscopy	1. Bastiaan Budding (TU/e) Synthetic cell communication 2. Sherif Mansy (Uni of Trento) Genetically encoded artificial cells that can engage in 2-way chemical communication 3. Oscar Ces (Imperial College London) Microfluidic Technologies for the Bottom-Up Construction of Artificial Cells	1. Digvijay Gahtory (WUR) Introduction to the Chemistry for Future Medicine Initiative 2. Andreas Herrmann (RWTH Aachen Univ) DNA Hybrids: From Tools for Drug Synthesis to Nanomedicine 3. Cees Dekker (TUD) DNA beyond the genome – from biophysics to origami motors	1. Martin Schiemann (Ruhr-Univ Bochum) Metal particles as fuels – energy and chemistry cycles 2. Gert-Jan Gruter (Avantium/UvA) The Opportunity of Sustainable Plastic Materials 3. various pitches	1. Pieter Bruijninx (UU) Scientific Challenges and Opportunities in Catalytic Biomass Conversion 2. Gert-Jan Gruter (Avantium/UvA) The Opportunity of Sustainable Plastic Materials 3. various pitches	1. Albert Schenning (TU/e) Nature generated in plastic 2. Maarten Bakker (TU/e) Supramolecular particle and hydrogel assemblies for cardiac regeneration 3. Wim Noorduin (AMOLF) Synthesis of bioinspired self-assembled functional shapes	1. Sicco de Vos (Corbion) Corbion Biorefinery: From Lactic Acid to Biobased Building Blocks 2. Glauco Battagliarin (BASF) Polymer Biodegradability research @BASF 3. Jacco van Haveren (WUR) Biobased building blocks and polymers based upon them
14.35 - 14.55	COFFEE BREAK								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	PARKZAAL	82-83	80-81	
	FOCUS SESSIONS Site-selective Catalysis Chair: Adri Minnaard	Astrochemistry: roadmaps towards molecular complexity in space Chair: Harold Linnartz	Viruses like it sweet! Multivalent interactions in influenza recognition Chair: Jurriaan Huskens	Organised by Hoogerwerff Foundation Hoogerwerff Foundation 1917 – 2017; Vision and Trends in Process Technology Chair: Peter Berben	Polymers in Motion Chair: Dick Broer	Organised by KNCV Chemistry Education in the Netherlands: what's new? Chair: Fer Coenders	Building a synthetic cell, bottom up Chair: Dirk Slotboom	Organised by top sector Chemistry Evidence-based sensing – Novel Technologies & Industrial Challenges Chair: M. Prins	
14.55 - 16.25	1. Matthieu Sollogoup (Univ Pierre et Marie Curie) Site-selectively modified Cyclodextrins for site-selective catalysis 2. Pim Linnebank (UvA) Hydrogen bonding as a tool to control selectivity in transition metal catalysis 3. Steven Wan (RUG) Site-selective C-C bond formation in unprotected monosaccharides using photoredox catalysis	1. Jonathan Tennyson (Uni College London) MExoMol en ExoPlanets 2. Wybren-Jan Buma (UvA) High-resolution IR spectroscopy of the isolated aromatic universe: Bad vibrations at work 3. David Parker (RU) Interstellar ice and velocity map imaging	1. Rainer Haag (FU Berlin) Multivalent nanosystems directed against viruses 2. Erhard van der Vries (RIZ Hannover/UU) Boundaries of influenza virus evolution: Quantifying the cost of virus antigenic drift to escape from host immunity 3. Daniele di Iorio (UT) Creating artificial cell membrane mimics for quantifying the multivalent binding of influenza	1. Colette Alma (VNCI) Introduction 2. Pieter Bruijninx (UU), Gert Jan Gruter (Avantium) Renewable Raw Materials 3. Richard van de Sanden (Differ), Fokko Mulder (TUD) Energy Transition 4. Kitty Nijmeijer (TUE), Sascha Kersten (UT) Process Intensification	1. Peter Palfy-Muhoray (Uni of Kent) Light driven motors and liquid crystals 2. Nathalie Katsonis (UT) Converting light into helical motion 3. Danqing Liu (TU/e) Morphing surfaces in liquid crystal polymer networks	1. Wesley Browne (RUG) Excellent teaching 2. Hans Vogelzang (Grijdanus Scholengemeenschap Zwolle) Scrum 3. Henri Matimba (UU) Chem4all	1. Marileen Dogterom (TUD) Building minimal mitotic spindles in artificial confinement 2. Bert Poolman (RUG) Can we build a minimal form of life from molecular components? 3. John van der Oost (WUR) A systematic approach to optimize heterologous gene expression	1. Amedeo Bellunato (LEI) The unconventional design of nanopore, nanogap, nanowire 2D sensors 2. Michel Eppink (WUR/Synthon) Label free high throughput applications in the biopharmaceutical industry 3. Karolien de Wael (Uni of Antwerpen) Bio-inspired singlet oxygen based electroensing 4. Industrial speaker focussing on process analytics	
16.25 - 16.45	COFFEE & SNACK BREAK								
ROOM	BOSZAAL	63-64	58	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	STRUCTURE AND NANOMECHANICS Chair: Jan van Esch	POLYMER PARTICLE AND FILM SYNTHESIS Chair: Katja Loos	CLUSTERS & MATERIALS Chair: Shirin Faraji	SOFT MATERIALS IMAGING Chair: Paul van der Schoot	CONTROLLED SELF-ASSEMBLY Chair: Paul Kouwer	GAS PHASE IR SPECTROSCOPY Chair: Jos Oomens	INTERFACES AND SURFACES Chair: Boelo Schuur	BIOINORGANIC CHEMISTRY Chair: Dennis Hetterscheid	PHOTO- AND ELECTROCATALYSIS Chair: Guido Mul
16.45 - 17.05	A. Vagias (RUG; Portale) In situ investigation of film formation process and nanostructural transformations in waterborne coatings	M. Kosian (WUR; Smulders) Corrosion-Resistant Stainless Steel by Photoinitiated Surface Copolymerization	S. Krishnamurthi (UT; Brocks) The edges and boundaries of transition-metal-di-chalcogenides	H. van der Kooij (WUR; van der Gucht) Imaging the molecular motions of fracture and healing	Y. Wang (TUD; Eelkema) Directed supramolecular self-assembly using a catalyst signal	W. Roeterdink (UvA; Petrigiani) High-resolution infrared and electronic spectroscopy of PAH molecules	M. ten Kate (TUD; Van Ommen) Coating K ₂ SiF ₆ :Mn ⁴⁺ -red-emitting phosphor via gas-phase deposition in a fluidized bed reactor	F. Jiang (LEI; Bouwman) The Redox Equilibrium between a Co(III) Thiolate and Co(II) Disulfide Compound	X. Zhang (DIFFER; Bieberte-Hütter) Optimizing Photoelectrodes for Water Oxidation by Density Functional Theory
17.05 - 17.25	T. van de Laar (WUR; Sprakel) Grayscale force sensing in single molecules	P. Kröger (UT, Paulusse) Versatile Single Chain Polymeric Nanoparticles via Thiol-Michael Addition	A. S. Bondarenko (RUG; Jansen) Nano-confinement of excitons in self-assembled molecular tubes	H.-W. Ooi (UM; Baker) Towards development of dynamic bioinks	B. Pappas (RUG; Otto) Minimalistic Dynamic Peptide Nucleic Acid Self-Replicators	V. Yatsyna (RU; Rijs) Structural preferences of cooled isolated peptides visualized by infrared fragmentation spectroscopy	H. Bazayr (UT; Lammertink) Liquid-liquid displacement in slippery liquid infused membranes (SLIM)	J. Chen (UU; Klein Gebbink) Iron oxidation catalysts with a rigid N ₄ ligand and their use in selective C-H oxidations	L.Wu (TU/e; Hofmann) Tuning the Active Sites of Vertically Aligned 2H-WS ₂ for Hydrogen Evolution via Defect Engineering
17.25 - 18.00	NWO MEETING FOR GROUP LEADERS (ROOM 55-57) CAREER SESSIONS (VARIOUS ROOMS)								
18.15 - 20.00	SEATED DINNER (BENELUXZAAL)								
20.00 - 20.30	AWARD CEREMONIES: ATHENA PRIZE; GOUDEN KIEM- CHEMISTRY START-UP OF THE YEAR; TOP SECTOR CHEMISTRY STUDENT COMPETITION; GOLD MEDAL HOOGWERFF FUND (BENELUXZAAL)								
20.30 - 21.30	'AFTER DINNER' PLENARY LECTURE: BEN FERINGA - UNIVERSITY OF GRONINGEN (BENELUXZAAL) THE JOY OF DISCOVERY								
21.30 - 22.30	STUDY GROUP DAY 3 MEETINGS (VARIOUS ROOMS)								
22.00 - 01.00	EVENING PROGRAMME								

LEGENDA

BIOCHEMISTRY & MOLECULAR BIOLOGY
 CHEMICAL BIOLOGY
 ANALYTICAL CHEMISTRY & BIOPHYSICS
 CATALYSIS

PROCESS TECHNOLOGY
 MATERIALS CHEMISTRY
 PHYSICAL & THEORETICAL CHEMISTRY

PROGRAMME DAY 3: THURSDAY 7 DECEMBER

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7.00 - 9.00	BREAKFAST							
9.00 - 9.45	PLENARY LECTURE: ZHENAN BAO - STANFORD (BENELUXZAAL) SKIN-INSPIRED ORGANIC ELECTRONIC MATERIALS AND DEVICES							
ROOM	BOSZAAL	63-64	55-57	AUDITORIUM	65	PARKZAAL	82-83	80-81
	HOMOGENEOUS CATALYSIS Chair: Sander Wezenberg	WATER AND BIOBASED POLYMERS Chair: Ilja Voets	TAILORED HETEROGENEOUS CATALYSTS FOR GAS PHASE REACTIONS Chair: Paolo Pescarmona	SELF-ASSEMBLY IN SOFT MATTER Chair: Mark Vis	BIOMASS CATALYSIS AND PROCESSING Chair: Isabel Arends	OPTICAL EXCITATIONS IN METALS AND SEMICONDUCTORS Chair: Andrea Baldi	ELECTRONIC STRUCTURE & SPECTROSCOPY Chair: Thomas la Cour Jansen	THEORY Chair: Hilke Bahmann
9.45 - 10.05	Y. Álvarez-Casao (UvA; Fernández-Ibáñez) Pd-catalyzed cross-dehydrogenative coupling of o-xylene under industrially relevant conditions	C. Fodor (RUG; Loos) Enzymatic Synthesis of Biobased Oligo-/Polyalkylenehydroxybenzoates	A. Szécényi (TUD; Gascon) Selective oxidation of methane by Fe sites incorporated into MIL-53(AI) metal organic framework	J. Landman (UU; Petukhov) Inward growth by nucleation: hierarchical self-assembly of ordered membranes	T. Brouwer (UT; Schuur) Reactive Extraction of Levulinic Acid, Formic Acid and Furfural from Biomass Derived Aqueous Solutions containing Sulphuric Acid	J. van der Hoeven (UU; Ngene) Synthesis and in-situ alloying of bimetallic nanorods	C. Temiz (TUD; Grozema) Optimizing Charge and Excited State Dynamics in pi-Stacked Hexa-Peri-Hexabenzocoronenes	K. Stanciakova (UU; Bulo) New insights into water-induced zeolite dealumination
10.05 - 10.25	D.G.A. Verhoeven (UU; Moret) Ni(0) Complexes of Diphosphine-Imine Ligands: Structure, Reactivity and Mechanistic Insights in Alkene Hydrosilylation	A. Wróblewska (UM; Bernaerts) Rigid, carbohydrate-derived polyamides containing cyclic biacetal moieties: preparation, characterization and degradation study.	L. Pompe (UU; De Jongh) Increased Stability of Copper Catalyst for Methanol Synthesis Supported on Mesoporous Cage-like Silica	M. Rinaldin (LEI; Kraft) Fluid domains pinned by geometry and composition in scaffolded membranes	H. van der Bovenkamp (RUG; Heeres) Platform chemicals from biomass: Catalyst stability studies for levulinic acid hydrogenations with supported metal catalysts	E. van Harten (UU; Meijerink) InGaP/ZnSeS nanocrystals as bright narrow red band emitters for lighting applications	W. Zhang (LEI; Orrit) Enhancement of two-photon-excited fluorescence by gold nanorods	T. Karman (RU; Groenenboom) Ab initio calculations of differential cross sections for NO-O2 collision experiments
10.25 - 10.45	V. Sinha (UvA; De Bruin) Mechanistic insights into aqueous methanol dehydrogenation	I. Jiménez Pardo (TU/e; Esteves) Design of self-dispersible charged-polymer building blocks for waterborne polyurethane dispersions	Y. Wang (TUD; Makkee) New concept for diesel engine NOx abatement by direct and fast reductant injection upstream catalytic converter	K. Zhang (TUD; Mendes) Patterning supramolecular micelles of block copolymers as a nano-fibrous platform for cell growth and alignment	E. Usalamin (TU/e; Pidko) From bio-derived furanics to aromatics over HZSM-5: how to promote the desired reaction pathways?	Y. Wu (UvA; Zhang) A novel approach in tailoring upconversion luminescence dynamics of biofunctional nanomaterials	O. Chukhutsina (VU; Croce) The secret of the Christmas tree: how to stay green in winter?	K. Shakouri (LEI; Kroes) Accurate neural network description of high-dimensional molecule-surface dynamics: N2 dissociation on Ru(0001)
10.45 - 11.05	F. Rekhrouk (UvA; Slootweg) Cooperative Lewis Acid/Base Chemistry for Metal-free Catalysis	V. Lakshminarayan (TUD; Van Esch) In control of pH-triggered supramolecular gelation by a chemical reaction	J.L. Weber (UU; De Jong) Conversion of synthesis gas to olefins and aromatics	X. Li (LEI; Sevík) Revealing the Structure of Chlorosomes	C. Lancefield (UU; Bruijninx) Novel insights into the molecular structure of kraft lignin and its mechanisms of formation	N. Kirkwood (TUD; Houtepen) Gallium for zinc cation exchange in InZnP nanocrystals leads to photoluminescence enhancement	M. Ghiasi (UU; De Groot) Unraveling the electronic structure of photocatalytic LaMn0.5Co0.5O3 perovskites	T. Teodoro (VU, Visscher) Applying Density Functional based Tight Binding methods for Obtaining Vibrational Circular Dichroism Spectra
11.05 - 11.25	COFFEE BREAK							
ROOM	BOSZAAL	63-64	55-57	AUDITORIUM	65	58	82-83	80-81
FOCUS SESSIONS	Catalysis with non-noble metals Chair: Harry Bitter	Process Intensification for the Biobased Economy Chair: Volker Hessel	Closing Cycles: Recycling of scarce elements and CO2 Chair: Boelo Schuur	Topological Materials Chair: Celso de Mello Donega	Theoretical chemistry and reactivity Chair: Céilia Fonseca Guerra	Multi-scale catalytic reactor engineering Chair: Hans Kuipers	Future of organic photovoltaics Chair: Remco Havenith	Active particles Chair: Alfons van Blaaderen
11.25 - 12.45	1. Victor Teixeira da Silva (Univ Rio de Janeiro) Towards noble metal free heterogeneous catalysis 2. Bas de Bruin (UvA) Catalytic Radical-type Reactions Controlled by Non-Noble Metal Catalysts 3. Luana Souza Macedo (WUR) Metal carbides and phosphides for deoxygenation of biobased feedstocks	1. Erik Heeres (RUG) Multiphase conversions in centrifugal contactor-separators 2. Vinay Mahajan (TUD) The peculiar behaviour of elongated particles in fluidized beds: experiments versus simulations 3. Smitha Sundaram (TU/) Cost analysis of enzymatic biodiesel production in small-scaled packed-bed reactors using waste sunflower oil	1. Jason Love (Univ Edinburgh) Metal recovery and recycling by urban mining 2. Paolo Pescarmona (RUG) Catalytic fixation of CO2 into polymeric and cyclic carbonates 3. Martin Bos (UT) CO2 to methanol: The 'Logic' process	1. Chris Palmstrøm (Uni of California) Emergent Phenomena in Heusler Compound Heterostructures 2. Mark Golden (UvA) Surprises at the surface of topological insulators 3. Sasa Gazibegovic (TU/e) Epitaxy of advanced nanowire quantum devices	1. Israel Fernández (Univ Madrid) Understanding and tuning the reactivity of fullerenes 2. Trevor Hamlin (VU) Diels-Alder Reactivity of Strained Cycloalkenes 3. Helen Chadwick (LEI) Methane dissociation on the steps and terraces of Pt(211)	1. Dettlef Lohse (UT) Heat Transfer in Bubbly Flows 2. Marjolijn Dijkstra (UU) Structuring matter at multiple length scales: Designing new porous materials with hierarchical functionality 3. Ivo Filot (TU/e) Hierarchical Multiscale Catalytic Reactor Modeling in Fischer-Tropsch Synthesis	1. Ryan Chiechi (RUG) Synthetic Control Over the Dielectric and Electronic Properties of Pi-conjugated Molecules 2. Peter Bauerle (Uni of Ulm) Thiophene-based nanomaterials for renewable energy conversion 3. Falton Colberts (TU/e) Water-based processing of electro-active layers for organic solar cells	1. Olivier Dauchot (ESPCI) How speed selection drives collective motion in populations of active agents 2. Daniela Wilson (RU) Synthetic Motile Systems from Polymeric Assemblies 3. Laura Filion (UU) Predicting phase diagrams for active particles
12.30 - 13.30	LUNCH							
13.30 - 15.00	POSTER SESSION (ALL POSTERS DAY 3: CHEMISTRY OF MATERIALS & CHEMICAL CONVERSION)							
ROOM	BOSZAAL	63-64	55-57	AUDITORIUM	65	PARZKAAL	82-83	80-81
	DEFECTS IN SEMICONDUCTORS Chair: Arjan Houtepen	OXIDE CHEMISTRY Chair: Bernard Dam	THE MANY FACES OF CO2 CONVERSION Chair: N.R. Shiju	COLLOIDS Chair: Laura Rossi	CONDENSED PHASE MOLECULAR SPECTROSCOPY Chair: Fred Brouwer	RESPONSIVE SOFT MATERIALS Chair: Ernst Sudhölter	MICROFLUIDIC PROCESSING Chair: Michiel Kreutzer	SUPRAMOLECULAR CHEMISTRY Chair: Albert Schenning
15.00 - 15.20	E. M. Hutter (TUD; Savenije) Metal halide perovskites: what happens on excitation?	M. Meijerink (UU, Zecevic) Nanoscale TEM imaging of oxides in liquid	C. Vogt (UU; Weckhuysen) Structure Sensitivity Allows Tuning of Ethane, Ethanol and CO selectivity in a Classic Ni Methanation Catalyst	F. de Boer (UU; Imhof) Edible Colloidal Colorants	T. Francese (RUG; Havenith) Magnetic Fingerprint of Planar Bistable Dithiazolyl Molecular Magnets	P. de Amleida (RU; Kouwer) Mechanics of ultrasensitive hybrid hydrogels	D. Cambie (TU/e; Noel) A leaf-inspired luminescent solar concentrator for energy efficient continuous-flow photochemistry	X. Caumes (UvA; Reek) Catalysis at extremely high local concentrations in [chiral] nanospheres facilitating copper catalysed transformations
15.20 - 15.40	W. Shi (TUD; Brück) Key aspects of the degradation mechanism of ZnO:Al TCO electrodes during damp-heat exposure of Cu(In,Ga)Se2 solar cells revealed by thin film positron annihilation studies	S. Ganapathy (TUD, Wagemaker) Accessing the bottleneck of all-solid-state batteries, Li-ion transport over the solid electrolyte-electrode interface	A. Kamphuis (RUG; Pescarmona) Tailored functionalisation of CO2-based polycarbonates	S. Stuij (UvA; Schall) Colloidal assembly by critical Casimir forces	B. Strudwick (UvA; Buma) VCD for catalysis: elucidating structure and enantioselectivity	W. Feng (TU/e; Broer) Electric field driven topographical deformation of a liquid crystal polymer coating	O. Altenburg (TUD; Era) Microfluidic measurement of crystallization kinetics in the presence of mixing	D. Roke (RUG; Wezenberg) Light-gated rotation in a molecular motor - dithienylethene switch hybrid
15.40 - 16.00	A. Berends (UU, Mello Donega) Surface chemistry determines fate of shell overgrowth on colloidal nanocrystals	S. Zhou (RUG; Noheda) Searching for the "Silicon" of piezoelectrics: Epitaxial growth of alpha-GeO2	T. Kimpel (TU/e; Hensen) On the mechanistic pathways of CO and CO2 hydrogenation on cobalt-based catalysts	F. Dekker (UU; Philipse) Novel Hollow Silica Nano-Cubes: Preparation and Optical Properties	A. Narsaria (VU; Bickelhaupt) Rational design of Near-Infrared (NIR) absorbing organic dye molecules	C. Vrusch (TU/e; Van der Schoot) How reversible crosslinks affect the mechanical response of a polymer network	C. Zhang (TU/e; Hessel) Multi-Step Solvent Factory	R. Plessius (UvA; Van der Vlugt) Introducing Redox-Active Components into Supramolecular Assemblies – toward Stimuli-Responsive Cages
16.05 - 16.35	KEYNOTE: MICHEL ORRIT - LEIDEN UNIVERSITY (AUDITORIUM) SINGLE MOLECULES AND SINGLE GOLD NANOPARTICLES IN THE SPOTLIGHT		KEYNOTE: DICK BROER - UNIVERSITY OF GRONINGEN (ROOM 63-64) REACTIVE MESOGENS: FROM INFORMATION DISPLAYS TO SOFT ROBOTICS AND DANCING SURFACES		KEYNOTE (HOOGWERFF GOLD MEDALIST): FREEK KAPTEIJN - DELFT UNIVERSITY OF TECHNOLOGY (ROOM 82-83) CATALYSIS ENGINEERING - A DECATHLON			
16.40 - 17.00	POSTER PRIZE AWARDS DAY 3 (KEMPENZAAL/eXCHAINS FLOOR)							
	COFFEE & SNACK BREAK							
17:00	CLOSURE							

LEGENDA
 CATALYSIS
 PROCESS TECHNOLOGY

MATERIALS CHEMISTRY
 PHYSICAL & THEORETICAL CHEMISTRY