

08:30 AM - 09:30 AM

PL-3
(Auditorium)Green Chemistry at Bayer: Vision and Examples from a chemist's perspective
Niklas VON DER ASSEN & Julien Egger, BAYER AG

09:30 AM - 10:30 AM

OC-1-1-1 (Auditorium) OC-1-1-2 (Room 6) OC-1-2 (Room 2) OC-1-3 (Room 1) OC-1-4 (Room 3) OC-1-5 (Room 4)

43	Deoxydehydration of small natural polyhydroxylated molecules: a useful tool to obtain volatile hydrocarbons from natural renewable oxygenated compounds Nicola D'ALESSANDRO	199	Water tolerant alumina based heterogeneous catalyst for biomass conversion Amandine CABIAC	397	Phosphine-free Pincer Cobalt Catalyst Precursors for the Selective Hydrogenation of Olefins Andrea DELL'ACQUA	10	Glycerodendrimers: new tools for slow release essential oil-based biosourced herbicides Chloé MAES	292	New Eco-friendly Surfactant to Generate Thick and Long Lasting Foam Estelle ILLOUS	84	SUSSOL - Sustainable Solvents Selection and Substitution Software Hannes SELS
393	Base-free conversion of glycerol to methyl lactate using a multifunctional catalytic system consisting of Au-Pd nanoparticles on carbon nanotubes and Sn-MCM-41-XS Zhenchen TANG	242	Ligand-stabilized homogeneous Mo catalysts for deoxydehydration reactions Maxime STALPAERT	631	Photo-reforming of glycerol over the microemulsion-mediated TiO ₂ catalysts Valeria MASLOVA	479	Scaling Up Subcritical Water Extraction of Feruloylated Arabinoxylans from Wheat Bran Reskandi RUDJITO	45	Collaborative projects to develop sustainable ingredients for food and cosmetic industry Gislene DA SILVA	379	Insights into the Solid-Liquid Equilibria of Eutectic and Deep Eutectic Mixtures Mônia A. R. MARTINS
464	Solketal: a key molecule in glycerol chemistry? Vadim SAMOILOV	246	Phosphonium ionic liquids as catalytic solvents for the bio-based production of alkenes, dienes and acrylic acid Maxime STALPAERT	713	Benzyl C-H Arylation with Visible-Light/Nickel Catalysis: The Dual Role of Benzophenone Patricia KRACH	487	Polyhydroxyalkanoates production through microbial conversion of forest wastes: a three-step process. Paulo C. LEMOS	657	Biobased polymer latexes produced by free radical emulsion polymerization of eugenol derivatives Samantha MOLINA-GUTIERREZ	444	Extraction and characterization of bioactive lipids from microalgae using Supercritical CO ₂ and its commercial applications NIDHI HANS
466	Synthesis of C ₄ diacid from biomass-based furanics derivatives Gerald ENDERLIN	430	Selective Oxidation of Alkyl Aromatics using Molecular Oxygen by Supported Silver Nanoparticles with Visible Light Zhe LIU	1055	Silver nanodots anchored on functional cellulose nanocrystals as sustainable catalysts and antimicrobial agents for environmental applications Feiping ZHAO	599	Valorization of wheat bran: the role of microwaves in the recovery of feruloylated arabinoxyloligosaccharides with hot compressed water Victoria PAZO-CEPEDA	691	Engineering hemicellulose-lignin complexes' extraction for obtaining emulsion stabilizing hydrocolloids Henrik GRENMAN	681	Modelling the physical chemistry of the interactions between organosolvent mixed solvents and lignocellulose components Francesco DI RENZO

OC-1-6 (Room 5)

193	Catalytic upgrade of biobased chemicals using microfluidic devices Julien ESTAGER	455	Selective extraction of diterpenes from the macroalga <i>Bifurcaria bifurcata</i> using high-pressure assisted extraction Sonia SANTOS
274	Mechanochemical synthesis of azhydrazones and triazoles and evaluation of their biological activities Lori GONNET	703	Synthesis of a tetrasaccharide derivative related to the cell wall polysaccharide of <i>B. anthracis</i> utilizing one-pot glycosylation reactions Rina GHOSH

11:00 AM - 11:30 AM

KN-1-1 (Auditorium) KN-1-2 (Room 2) KN-1-3 (Room 5)

1141	Architectural control of isosorbide-based polyethers via ring-opening polymerization Theresa M. REINEKE	1009	Catalytic depolymerization of cellulose and chitin Atsushi FUKUOKA	1101	New sustainable surfactants for innovative cosmetic products Boris ESTRINE
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KN-1-4 (Room 4) KN-1-5 (Room 3) KN-1-6 (Room 1)

1145	Solvent-free Approaches to Nanoparticles Synthesis and Polymer Functionalization Audrey H. MOORES	1136	O ₂ , H ₂ : small molecules essential for the ecological transition Régis RÉAU	1096	Chemical Production of Chemicals and Nutrients from Renewable Resources Ning YAN
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285	A new renewable route for succinic acid: the aqueous phase catalytic transfer hydrogenation of bio-based maleic acid with bio-based formic acid. Manuel LOPEZ GRANADOS	361	Sustainable Valorization of Cellulosic Biomass-Derived -Valerolactone to -Methylene-Valerolactone over Hierarchical Superior Basic Zeolite via Tandem Flow Process MAJD AL-NAJI	211	Insight into the mechanism of base free furfural oxidation using Raman spectroscopy Joëlle THURIOT	334	Sequential valorization of bioactive polymers from mushroom farming by-products Amparo JIMENEZ	58	Current Development in biobased polyester: PRIC range Guillaume CHOLLET	154	Clean biocatalytic processes using sponge-like ionic liquids and supercritical carbon dioxide Pedro LOZANO
291	Electro- and Chemo-catalytic Conversion of Biogenic 3-Hydroxy Decanoic Acid into Green Fuels Joel B. MENSAH	366	The sustainable synthesis of biosourced terpenoid-based (meth)acrylates using the CHEM21 green metrics toolkit Martijn DROESBEKE	488	Semi-continuous two step catalytic process for the production of 2-methylpiperazine by using glycerol as starting raw material DOMINE Marcelo E.	363	Niobium oxide prepared through a novel supercritical CO ₂ -assisted method as versatile heterogeneous catalyst for the synthesis of 5-HMF and azoxybenzene Yehan TAO	75	Synthesis of bio-based amine monomers for epoxy curing Anne-Sophie MORA	215	Epoxidation of Limonene Serge KALIAGUINE
317	Replacement of CuCr catalysts by environmentally benign CuZn catalysts - effect of the chemical composition and pre-treatment on hydrogenolysis performance Oleg KIKHTYANIN	404	From Carboxylic Acids to Biopyrrolidones - Biomass for Sustainable Polymer Production Moritz HAUS	735	Microwave-assisted 2,5-furandicarboxylic acid production using ruthenium on activated carbon Deyang ZHAO	368	Boosting the ruthenium catalyzed bio-ethanol homologation with a redox active co-catalyst Rita MAZZONI	120	Synthesis and enzymatic polycondensation of new diol-diamide monomers from microalgae Meimoun JULIE	439	New Strategies for Acid-Acid-Catalyzed Reactions with Auto-Tandem Catalysis Yantong GU
358	Bio4Products: Creating sustainable resources for processing industry Hans HEERES	406	Levulinic acid esters production via heterogeneous catalysis: from batch to continuous technology SALMI Tapio	736	Catalytic upgrading of furfuryl alcohol to alkyl levulinates under batch microwave irradiation Christophe LEN	416	Sn-Al-containing Beta and USY zeolites for the one pot transformation of glucose into methyl lactate Jose IGLESIAS	348	Hop for Green Polymer Materials Etienne GRAU	545	Acid Scavengers for Selective and Efficient Cleavage of Aryl Alkyl Ethers by Lewis Acids Dayong SANG

02:00 PM - 03:00 PM

PL-4
(Auditorium)Biorefinery Schemes towards Platform Chemicals: heterogeneous organocatalysis and hyperpolar solvent media
Markus ANTONIETTI, MPI-KGF

03:00 PM - 04:00 PM

OC-3-1-2 (Room6) OC-3-2-2 (Room 1) OC-3-2-3 (Room 2) OC-3-4 (Room 3) OC-3-5 (Room 4) OC-3-8 (Room 5)

337	Organocatalytic cleavage of fatty derivatives to esters Thomas DE DIOS MIGUEL	474	Cellulose conversion to lactic acid over HPAs supported catalysts Asimina MARIANO	53	Reduction of esters and alpha, beta-unsaturated carbonyl compounds to alcohols using Fe or Ru MACHO-BH catalysts and ethanol as a source of hydrogen Sarah KIRCHHECKER	367	Biobased phase transition plasticizers for long term applications in polylactic acid Antoine GALLOS	17	A General Palladium Catalyst for Cross-Coupling Reactions in Deep Eutectic Solvents Beatriz SAAVEDRA	222	Synthesis and Characterization of ESTOLINE: Bringing Innovation to formulators through a smart combination of Green Chemistry and Functionalities Philippe MARECHAL
344	Non-isocyanate bio-based polyurethanes through reactive extrusion Fiona MAGLIOZZI	555	Tuning the Acid Strength and Surface Polarity of Silica-Supported Sulfonic Acid Catalysts Antony FERNANDES	129	Direct Liquid-Phase Amination of Phenols into Anilines and Cyclohexylamines Thomas CUYPERS	478	Biobased thermoset resins: versatility and new horizons offered by furanics Nathanael GUIGO	66	Combination of metal- and bio-catalyzed organic reactions in Deep Eutectic Solvents and water Joaquin GARCIA	287	Solvent: Constraint for Sustainable development in Pharmaceutical Industry Sylvie DHULUT
600	Regioselective synthesis, isomerisation, in vitro oestrogenic activity, and co-polymerisation of bisguaiacol F (BGF) isomers SELS Bert	684	Continuous esterification in organic solvents as a step in the valorization of CO ₂ . Johann-Kilian SCHNOOR	206	Kinetic analysis of reduction of 4-Nitrophenol by (water soluble) Palladium Nanoparticles Studied by a Langmuir-Hinshelwood mechanism. Does we compare apples and oranges? Anas IBEN AYAD	1126	Low temperature VOC catalytic total oxidation by O ₃ TOUATI HOUCINE	659	UMR7314 Materials for Energy by Computational Design: exploring organic electrodes toward next-generation batteries Christine FRAYRET	692	Finding the needle in the haystack - A software-based approach to data-driven compound design Dora BARNA
726	Bioplasticizers based on modified plant oils Anna CHEREPANOVA	728	Rational Design of Lewis Superacids Leading to an Unprecedented Ti (III) Trifluoromethane Catalysts for the Direct Amination of Alcohols Marc PERA-TITUS	611	Catalytic conversion of glycerol into solketal with Ga-silicate nanoparticles prepared by aerosol process Alvise VIVIAN	683	Build-to-Spec. Bio-based Building-Blocks for Thermosets Materials Samuel MALBURET	682	Deep eutectic solvents (DES)-based materials for the integration of desulfurization and denitrogenation processes of fuels Filipa LIMA	827	Green Production Technology of Cyclohexanone oxime Bin SUN

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94	Influence of synthesis method of ZrO ₂ -supported Au-Pt catalysts in aerobic base-free oxidation of glucose towards glucaric acid Natalia POTRZEBOWSKA	346	PHOTO-ACTIVATED NANOCATALYSTS FOR THE SELECTIVE MODIFICATION OF FREE CARBOHYDRATES Gwladys POURCEAU	424	Eco-friendly synthesis of metallic nanoparticles and catalytic properties in aqueous media. Erwann GUENIN	93	Achiral Reduction of Carbonyl Derivatives Jacques LE PAIH	153	Selective leaching of lead and zinc over iron from jarosite using methanesulfonic acid Thupten PALDEN	160	Rapid desorption of CO ₂ from deep eutectic solvents at lower temperature: An alternative technology with industrial potential CHANDRAKANT MUKESH
176	Extraction and in situ saccharification and fermentation of xylans for the production of xylitol in deep eutectic solvents Eduarda S. MORAIS	411	Production of sucrose esters through solid-liquid transesterification Tapio SALMI	465	Metal binding and catalysis: exploring the role of methionine in artificial metalloenzymes Hasan Tanvir IMAM	170	Covalent Organic Frameworks - Highly versatile and metal-free adsorbents and catalysts. Pascal VAN DER VOORT	186	Recovery of valuable metals from NdFeB magnets by mechanochemically assisted ferric sulfate leaching Steff VAN LOY	445	Extraction of high value lipophilic compounds from biomass by-products using natural deep eutectic solvents Nuno SILVA
224	SELECTIVE OXIDATION OF SUGARS AND ALCOHOLS USING GOLD BASED CATALYSTS Ulf PRUSSE	448	OXIDATION OF GLUCOSE TO GLUCARIC ACID USING SUPPORTED GOLD CATALYSTS Eleonora MONTI	476	Organocatalyzed synthesis of cyclic carbonates from CO ₂ and renewables Thomas WERNER	270	Cobalt(III) catalysts applied to the hydro-silylation of esters for the sustainable synthesis of aldehydes and alcohols Francine AGBOS-SOU-NIEDERCORN	470	Arsenic Pollutants Removal from Water by Sulphur Species Functionalized Mg-Al Layered Double Hydroxide Zhe LIU	449	Ionic liquids as alternative solvents under the scope of biomass valorization Leonardo Mendes
587	Recent advances in production of succinic acid from glucose using Nb-based zeolites nanocomposites Natalia CANDU	787	Valorization of Sugarcane Bagasse to a Platform Chemical Levulinic Acid catalyzed by 1-Butyl - 2,3 - Dimethylimidazolium Tetrafluoroborate [BMIm][BF ₄] Lethiwe MTHEMBU	602	Additive Free Isomerization of Allylic Alcohols to Ketones with 1st Row Transition Metal PNP Pincer Catalysts Sergey TIN	673	Creation of Highly Active Water-Splitting Photocatalyst by Controlling Cocatalyst Yuichi NEGISHI	480	Potential of wheat bran hemicelluloses as soft multifunctional materials Secil YILMAZ TURAN	786	New eutectic mediums for biomass processing Svitlana FILONENKO

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369	Ethanol-to-butadiene: physicochemical properties of highly active Zn-Ta catalysts Guillaume POMALAZA	621	Mussels inspired bio-polymer for H ₂ production at room temperature Laura BIRBA	494	Eco-design technology to develop a natural interpenetrating biopolymer network (IBPN) with outstanding properties Laurie VERZEAUX	732	Catalyst-free reduction of nitrobenzene to aniline using lignocellulosic biomass Christophe LEN
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05:30 PM - 06:30 PM

OC-5-1-1 (Auditorium) OC-5-2-1 (Room 5) OC-5-3 (Room 2) OC-5-4 (Room 1) OC-5-5 (Room 3) OC-5-7 (Room 4)

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504	Beyond tin-containing zeolites - New opportunities in catalytic carbohydrate conversion by Tin-Organic Frameworks Marcus ROSE	414	Selective hydrogenation using bimetallic RhCo@SILP Simon RENGSHAUSEN	502	Ionic liquids solutions for the recovery of valuable metals from acid mine drainage waters Helena PASSOS	501	Avant-garde process intensification in the production of epoxidized fatty acids and fatty acid esters Adriana FREITES AGUILERA	622	Chemical valorization of viticultural waste in Savoie Mont Blanc (France): high-value compounds extraction as an alternative to open-air burning practice Marion ZWINGELSTEIN	249	Selective aqueous phase hydrogenation of succinic acid to 1,4-butanediol: MOx-Pd (M = Re, Mo) supported catalysts Madjid OUALI
698	Sugar derived platform molecules for the development of bio-sourced solvents and polymer Bruno ANDRIOLETTI	419	Hydrogenation Reactions Catalyzed by Bidentate Manganese (II) Complexes Duo WEI	693	Combining metal recovery and micellar catalysis with surfactants Damien BOURGEOIS	557	TERPENES-BASED (METH)ACRYLIC POLYMERS Laurent BILLON	260	Deep eutectic solvents comprising active pharmaceutical ingredients- antibiotic-based liquid formulations for drug delivery Sonia PEDRO	497	Treatment of methylene blue by mesoporous Fe/SiO ₂ prepared from rice husk pyrolytic residues Changwei HU
705	One-Step Synthesis of N-Heterocyclic Compounds from Carbohydrates over Tungsten-Based Catalysts Xi CHEN	432	One-Pot Lignocellulosic Biomass Conversion into Selective Chemicals over Bimetallic CuRu-based Catalyst DEEPAK VERMA	1107	Efficiency of sulfonated reduced graphene oxide in the glycerol etherification with tert-butyl alcohol Yannick POUILLOUX	662	Photolabile organic catalysts for delayed ring opening polymerization Patrick LACROIX-DESMAZES	1050	Integrated process for the extraction and preservation of lacase from Trametes versicolor growth media using aqueous biphasic systems Marguerita ROSA	727	Pickering Interfacial Catalysis for the Oxidative Cleavage of Cyclohexene: A Novel and Green Approach for the Synthesis of Dicarboxylic Acids Marc PERA-TITUS

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744	Application of computational methods to predict aquatic toxicity of pesticides Selene RAMER	733	Sustainability analysis of an algae-based value chain in North-West Europe ORMEROD Dominic

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POSTER SESSIONS

ISGC 2019
May 13th - 17th

SCIENTIFIC PROGRAM
Tuesday, May 14th



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