ECB2026 Tuesday Posters

Paper Title	Flash Poster Presentation
Stream 1 - Innovations for healthy living	
IHL-101 - A novel plant myrosinases: efficient recombinant production and its preventive anticarcinogenic potential	Symposium 13: Green pharmaceutical and molecular farming
IHL-201 - Biocompatible covalent organic frameworks for biofilm control with intrinsic antibacterial activity	
IHL-202 - Engineering reassembled macrophage-derived lysosomes (ReLys) as a biocompatible nanoplatform for enhanced immunotherapy and healthy living	
IHL-203 - Doxorubicin targeting using RGD peptide–modified chitosan oligosaccharide–coated graphene quantum dot carriers	
IHL-204 - Bioengineered Saccharomyces cerevisiae-derived hybrid nanovesicles for intestinal barrier studies	
IHL-205 - Bacteriophage-based nanoemulsion stabilized with biosurfactantsand bacterial cellulose for the treatment of bacterial skininfections	
IHL-206 - Innovative pteridine photosensitizers for targeted photodynamic therapy	
IHL-207 - Impact of non-nutritive sweeteners on lipid metabolism and metabolic homeostasis in Caenorhabditis elegans	
IHL-208 - A genetic framework of genes involved in callus growth	
IHL-209 - Field release and evaluation of transgenic barley expressing viral antigens for oral vaccination of fish	
IHL-210 - Development of a tunable microalgal platform for keto-carotenoid production	
Stream 2 - Solutions for a sustainable planet	
SSP-201 - Enzymatic degradation of man-made plastics	
SSP-202 - Eco-friendly technology for Cu removal from wastewater	
SSP-203 - How do iron nitrides perform in pharmaceutical-contaminated waters?	
SSP-204 - Microbial enrichment for H_2/CO_2 valorisation in gas fermentation	
SSP-205 - Genetic engineering of diatoms as sustainable biofactories for biohydrogen production and storage	
SSP-206 - Thermo-physicochemical evaluation of oleaginous fungal lipids for advanced biofuel systems with prospective sustainable aviation relevance	
SSP-207 - Pretreatment of wheat straw by choline chloride-based deep eutectic solvents with different Kamlet-Taft parameters	
Stream 3 - Manufacturing with microbes	
MM-201 - Engineering the cyanobacterium Synechocystis sp. PCC 6803 to improve the heterologous production of glycine betaine	Symposium 11: Prokaryotic cell factories
MM-202 - Screening of CYP fusion constructs: terminal hydroxylation of bio-based substrates	Symposium 11: Prokaryotic cell factories
MM-203 - Harnessing the proofreading pathway in E. coli for rProtein production	Symposium 11: Prokaryotic cell factories, part 2
MM-204 - Rewiring Rhodococcus opacus: a smarter path to sustainable lipids	Symposium 11: Prokaryotic cell factories
MM-205 - Towards a mechanistic whole-cell model of gene expression for optimizing heterologous dopamine production in Escherichia coli	Symposium 11: Prokaryotic cell factories, part 2
MM-206 - Engineering Lactococcus cremoris for enhanced cellulase secretion through prophage holin co-expression	Symposium 11: Prokaryotic cell factories
MM-207 - Transcriptomic analysis of Bacillus thuringiensis: new insights to produce interest industrial metabolites.	
MM-208 - Optimizable nanostimulators for pyocyanin production	
MM-209 - Production of astaxanthin in Bacillus Subtilis. Bioprocess optimization and scale-up	
MM-210 - Optimizing recombinant protein export in high cell density fed-batch cultures of Escherichia coli	
MM-211 - Metabolic and enzyme engineering towards bioproduction of anisole	
MM-212 - Domesticating environmental isolates as emerging chassis for biorefineries	
MM-213 - Formate-driven redox engineering for enhanced microbial production of amino acids	
MM-214 - Toward mixed sugar lactic acid production: modulating carbon catabolite repression and optimizing xylose metabolism in Parageobacillus thermoglucosidasius	
MM-215 - Cyanobacteria as microbial factories for hydrogen biofuel production	
MM-216 - Accelerated production of 3-hydroxypropionic acid from glycerol using a fast-growing marine bacterium	
MM-217 - Metabolic engineering for the construction of the synthetic pathway for aromatic amines/nitro compounds via p-aminophenylalanine	
MM-218 - Improving the activity of a heterologous redox enzyme (CYP110D1) by redirecting photosynthetic electron flow and protein engineering	
MM-219 - Identification of novel SpeD enzymes with enhanced activity for spermidine biosynthesis	
MM-220 - Modular engineering of hydroxylase–decarboxylase pathways for L-DOPA and dopamine production in Corynebacterium glutamicum	
MM-221 - High-level de novo NMN overproduction in Escherichia coli as non-canonical redox cofactor	
MM-222 - Conversion of syngas-derived C2 carbon sources to C2+ biochemicals by microbial cell factories	
MM-223 - Omics as a diagnostic tool from laboratory to production scale	Symposium 15: Eukaryotic microbial cell factories
MM-224 - Production of gibberellic acid by Fusarium fujikuroi under different C:N ratio in stirred tank bioreactor	Symposium 15: Eukaryotic microbial cell factories
MM-225 - Optimizing Pichia pastoris as a fermentation platform for the production of alternative proteins	Symposium 15: Eukaryotic microbial cell factories
MM-226 - Exploring energy metabolism on C1 carbon sources in the yeast Komagataella phaffii	
MM-227 - Casein production in Aspergillus oryzae: a case study for secretion of intrinsically disordered proteins	
MM-228 - Metabolic impact of cytosolic and mitochondrial redox perturbations on recombinant protein production in Komagataella phaffii under methanolic growth conditions	
MM-229 - Exploring the potential of the CAT1 promoter for methanol-free protein production in Komagataella phaffii	
MM-230 - Lignocellulosic inhibitors: can they drive yeasts towards enhanced lipid and carotenoid production?	
MM-231 - Cupriavidus cauae PHS1 as a thermotolerant chassis for diverse high-temperature biorefinery applications	Symposium 11: Prokaryotic cell factories, part 2
MM-232 - Optimization of gas transfer for gas fermentation in stirred tank bioreactor for poly(3-hydroxyalkanoate) production	
MM-233 - Characterization of autotrophic growth and polyhydroxyalkanoate biopolymer synthesis in hydrogen oxidizing bacterium Hydrogenophaga pseudoflava	
MM-234 - From side-stream to superfood: scalable microbial protein and nutraceuticals from sugar beet molasses via optimized Rhodospirillum rubrum bioprocess	
MM-235 - Biodegradation of pine fiber-based bioplastics by fungi	
MM-236 - Sustainable process optimization for rosmarinic acid extraction from plant sources using water and ethanol-based systems	
MM-237 - Investigation of dissolved oxygen strategy for improving carotenoids production from adaptive evolved Rhodotorula toruloides by applying pineapple processing byproduct	
MM-238 - Biotechnological production of bacterial cellulose from industrial side streams: a promising avenue to replace polystyrene	
MM-239 - Toluene valorization into polyhydroxyalkanoates: validation of a novel biological continuous two-stage system	
MM-240 - Sulforaphane production from broccoli residues via high-solids submerged fermentation using Aspergillus awamori	
MM-241 - Expanding the biocatalytic toolbox: novel bacterial aryl-alcohol oxidases for sustainable oxidation chemistry and biomass valorization	
MM-242 - Transcriptomic landscape mapping via GHSOM for physiological state-guided bioprocess optimization in yeast	
MM-243 - Process intensification of lactate-producing Ogataea polymorpha methanol fermentations through rational screening and smart feeding strategies	
MM-244 - Boosting acetogenic conversion pathways: improving syngas-to-acetate yields via A. woodii enriched culture	
MM-245 - Systems-level design rules in multi-stage continuous bioprocesses	
MM-246 - Design of sustainable multienzymatic systems for the biocatalytic production of industrially relevant chemicals	
MM-247 - Attempts to scale up pyocyanin production	
MM-248 - Boosting ε-caprolactone production in E. coli via optimised multi-enzyme cascades and controlled recombinant expression	
MM-249 - Construction of thermostable enzymes with protein engineering	
MM-250 - Precision fermentation platform for sustainable production of 5 aminovaleric acid and its high-value applications	
MM-251 - Site-directed mutagenesis of Thielavia terrestris cutinase to improve thermal stability and plastic degradation	
MM-252 - Altering energetic and physiological responses of solventogenic clostridia under lignocellulose-derived inhibitors	
MM-253 - Covalent Jo-In complexes for the assembly of artificial cellulosomes	
MM-254 - Building self-assembled and reusable multi-enzymatic nanoreactors for the biorecycling of PET textile waste	
MM-255 - Bioprocess intensification in microbial PHA production: overcoming scale-up bottlenecks beyond the lab reactor	
MM-256 - ColorFun: scaling fungal colorant lab research to sustainable applications in industry	
MM-257 - IBISBA: accelerating biotechnology innovation through a European shared infrastructure	
MM-258 - A novel in vitro synthetic route for the production of bio-based acetoin from ethanol	
MM-259 - Techno-economic evaluation of process-integration in case of Yarrowia divulgata manufacturing erythritol and pyomelanine via fermentation	
MM-260 - Fermentation strategies for enhanced PHBV production by Haloferax mediterranei using sugar rich waste streams	
MM-261 - Chlorite dismutase from Dechloromonas sp. Miss R: a key enzyme of an enzy-PLA filter for water remediation form chlorite residues	
MM-262 - Pressure-enhanced gas fermentation of MSW-derived syngas by Eubacterium callanderi KIST612	
MM-263 - Biocatalytic synthesis of phloroglucinol oligomers as analytical standards for phlorotannin characterization in the brown alga Ectocarpus siliculosus	
MM-264 - Enzymatic and microbial upcycling of packaging waste into sustainable plasticizers	
MM-265 - Discovery of novel thermophilic endoglucanases from university compost through sequence-based metagenomics	
MM-266 - Valorisations of liquid digestate for Nannochloropsis limnetica cultivation with inorganic carbon supplementation	
MM-267 - Optimization of xylooligosaccharide production from wheat straw and evaluation of its prebiotic potential on broiler chicken microbiota	
MM-268 - Valorizing pectin-rich residues as a sustainable substrate for Komagataella phaffii	
MM-269 - Programmable bacterial adhesion to plastic surfaces for enhanced biodegradation	
MM-270 - Driving performance and process reproducibility in recombinant protein manufacturing through optimal selection of yeast-derived bionutrients	
MM-271 - Steering fungal metabolism through cultivation design	
MM-272 - Development and systems analysis of Nordic value chain for conversion of lignocellulose to C8–C16 biofuels via wood molasses and bioethanol	
MM-273 - Synthetic lichen for the mixotrophic conversion of lignocellulosic biomass into fuels and chemicals	
MM-274 - Solid-state fermentation of Xylaria neonigripes using grains and agro-byproducts to enhance bioactive metabolite production	
MM-275 - The bio-production of adipic acid from guaiacol: evolution, engineering and biocatalysis	
MM-276 - AI-guided digital twin development for DHA production using continuous fermentation and dynamic process data	
MM-277 - Kinetic study of biological ferrous sulphate oxidation byiron-oxidising bacteria	
MM-278 - Development of a Corynebacterium glutamicum platform for recombinant human collagen type III production	
Stream 4 - Feeding the planet	
FP-203 - Deep proteomic and metabolomic perspectives of trap leaf morphogenesis and prey digestion in the carnivorous plant	Symposium 12: Novel crops design, part 2
FP-205 - Harnessing purple phototrophic bacteria to shape the new food landscape: from space inspired concepts to smart and circular nutrition	
FP-206 - Continuous culture of Limnospira indica in an air-lift bioreactor to produce food and oxygen for life support in Space missions	