

XII International Forum on Industrial Bioprocesses Braga, Portugal

Schedule of contributory poster presentations

Date: 10th September 2026

Time 1300-1500h

Poster no PP	Details
001	Genomics-Guided Bioprocessing and Advanced Lipopeptide-Rich <i>Bacillus subtilis</i> Formulation for High-Performance Biocontrol in Vegetable Crops <u>Ajit Kumar Passari</u>, Divya Sharma, Pragati Katiyar, Vimala Prakash Technology Innovation Centre, IPL Biologicals Limited, Mayfield Garden, Gurugram, Haryana, India
002	Two routes for tyrosol production by metabolic engineering of <i>Corynebacterium glutamicum</i> <u>Nora Junker</u>⁺, Sara-Sophie Poethe⁺, Volker F. Wendisch Genetics of Prokaryotes, Faculty of Biology and Center for Biotechnology, Bielefeld University, Bielefeld, Germany
003	Chemical and microbiological impact of wine-based marinades in combination with carvacrol and organic acids on chicken meat fillets <u>Ioanna Mantzourani</u>¹, Maria Daoutidou², Athanasios Alexopoulos², Stavros Plessas² ¹Department of Chemistry, University of Patras, Patras; ²Department of Agricultural Development, Democritus University of Thrace, Orestiada, Evros, Greece
004	Lectin-coated silver-based nanoparticles as an efficient optical nanosensor for gentamicin in food matrices <u>Wanios Garcia</u>¹, Diógenes Gaudencio da Silva Fernandes¹, Claudener Souza Teixeira² ¹Federal University of ABC (UFABC), Santo André, SP, Brazil; ²Federal University of Cariri, Crato, Brazil
005	Valorization of Agro-Industrial Side-streams for Sustainable <i>Pleurotus ostreatus</i> Biomass Production under Optimized Submerged Fermentation <u>Vasiliki Adamopoulou</u>, Angeliki Tzouvarakou, Argyro Bekatorou Department of Chemistry, University of Patras, Patras, Greece
006	Effect of Baffles on Biomass Production, Texture, and Total Protein Content of <i>Rhizopus delemar</i> and <i>Rhizopus oligosporus</i> in Submerged Fermentation <u>Henrique Lentulo Araújo</u> University of Minho, Centre of Biological Engineering, Braga, Portugal
007	Seaweed Valorization through Two-Stage Filamentous Fungal Fermentation for Functional Ingredient Production <u>Catalina Landeta-Salgado</u>^{1,2,3}, Javiera Munizaga³, Javier Paredes³, María Elena Lienqueo²

	¹Departamento de Ciencia de los Alimentos y Tecnología Química, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile, Independencia, Santiago, Chile; ²Center for Biotechnology and Bioengineering, Department of Chemical Engineering, Biotechnology, and Materials, University of Chile, Santiago, Chile; ³MycoSeaweed Tech SpA, Santiago, Chile
008	Study of red pigment production on <i>Fusarium</i> spp. mycoprotein produced with different carbon sources <u>Mariana Pereira</u>¹, Eduardo Coelho^{1,2}, Ana Machado Silva³, Cristina Rocha^{1,2}, José Teixeira^{1,2} ¹CEB - Centre of Biological Engineering, University of Minho, Portugal; ²LABELS – Associate Laboratory, Braga/Guimarães, Portugal; ³MC Shared Services S.A., Lugar do Espido, Maia, Portugal
009	Pretreatment strategies for the recovery of high purity lignin from olive tree pruning <u>Irene Gómez-Cruz</u>^{1,2}, María del Mar Contreras^{1,2}, Eulogio Castro^{1,2} ¹Department of Chemical, Environmental and Materials Engineering and ²Institute of Biorefineries Research, Universidad de Jaén, Jaén, Spain
010	Brewery Spent Grain for Sustainable Production of Bacterial Cellulose: Preliminary Results towards an Integrated Circular Biorefinery Fernando Moises Mamani Sanca^{1,2}, Iago Rodrigues Blanco², Alicia Paz¹, Ricardo Pinheiro de Souza Oliveira², <u>José Manuel Domínguez</u>¹ ¹Industrial Biotechnology and Environmental Engineering Group “BiotecnIA”, Chemical Engineering Department, University of Vigo, Galicia, Spain; ²Biochemical and Pharmaceutical Technology Department, Faculty of Pharmaceutical Sciences, São Paulo University, São Paulo, Brazil
011	Optimization of a deep eutectic solvent-based biorefinery for barley straw valorization and bioethanol production <u>Andreína Román-Chipantiza</u>, Andrés Moure, Gil Garrote Universidade de Vigo, Departamento de Enxeñería Química, Facultade de Ciencias, Ourense, Spain
012	Techno-Economic and Stochastic Assessment of Isoamyl Acetate Production from Fusel Oil in Sugarcane Biorefineries Adiánez Sánchez-González¹, Erenio González Suárez¹, <u>Eulogio Castro</u>² ¹Departamento de Ingeniería Química, Facultad de Química y Farmacia, Universidad Central “Marta Abreu” de Las Villas, Santa Clara, Villa Clara, Cuba; ²Department of Chemical, Environmental and Materials Engineering and Institute of Biorefineries Research, Universidad de Jaén, Jaén, Spain.
013	High-Value Valorization of <i>Cytisus striatus</i> Wood through Integrated Bioethanol and Bioproduct Production Rebeca Esteban-Lustres^{1,2}, Pablo G. del Rio^{1,2}, Gil Garrote^{1,2}, <u>Pedro Ferreira-Santos</u>^{1,2} ¹Department of Chemical Engineering, Faculty of Science, ²Instituto de Agroecoloxía e Alimentación. University of Vigo, As Lagoas, Ourense, Spain
014	Moderate electric field-assisted subcritical water processing of <i>Cytisus striatus</i> branches: a sustainable and energy-efficient first step in a cascading lignocellulosic biorefinery <u>Joana S. Gomes-Dias</u>¹, Catarina Fernandes¹, Ricardo N Pereira^{1,2}, Cristina MR Rocha^{1,2}, José A. Teixeira^{1,2} ¹CEB - Centre of Biological Engineering, ²LABELS - Associate Laboratory, University of Minho, Braga, Portugal

015	Valorization of agroforest residues: from cascade fractionation to lignin-based cosmetic ingredients <u>Catarina Fernandes</u>¹, Joana S. Gomes-Dias¹, Carla Varela², Bruno Medronho^{3,4}, Luís Alves², M. Graça Rasteiro², Cristina MR Rocha^{1,5}, José A Teixeira^{1,5} ¹CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ²University of Coimbra, CERES, Department of Chemical Engineering, Coimbra, Portugal; ³MED – Mediterranean Institute for Agriculture, Environment and Development & CHANGE – Global Change and Sustainability Institute, Universidade do Algarve, Faculdade de Ciências e Tecnologia, Faro, Portugal; ⁴FSCN, Surface and Colloid Engineering, Mid Sweden University, Sundsvall, Sweden; ⁵LABBELS - Associate Laboratory, Braga, Guimarães, Portugal
016	Solid State NMR and ATR-FTIR characterization of Croatian Wine Grape Pomace <u>Jelena Parlov Vuković</u>¹, Marina Tišma², Predrag Novak³, Tomislav Jednačak³ ¹Ruđer Bošković Institute, NMR Centre, Zagreb, Croatia; ²Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek, Osijek, Croatia; ³University of Zagreb, Faculty of Science, Department of Chemistry, Zagreb, Croatia
017	Extraction and characterization of apple pomace pectin with potential for agricultural gel capsule formulation <u>M. Ramírez-Pérez</u>¹, A Robledo-Olivo², S González-Morales³, AV Charles-Rodríguez², JA González-Fuentes⁴, RM Rodríguez Jasso⁵, MA Cerqueira⁶ ¹Protected Agriculture Postgraduate Program, ²Fermentations and Biomolecules Lab, Food Science and Technology Department, ³Secretaría de Ciencia, Humanidades, Tecnología e Innovación, ⁴Department of Horticulture, Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila, Mexico; ⁵Biorefinery Group, Food Research Department, School of Chemistry, Universidad Autónoma de Coahuila, Saltillo, Coahuila, Mexico; ⁶INL–International Iberian Nanotechnology Laboratory, Braga, Portugal
018	From Microalgal Biomass to Bioactives: Integrating Green Approaches for the Recovery of Added-Value Compounds <u>Marisa Cristo</u>¹, Gonçalo Espírito Santo², Carlos Gamarano³, Bernardo Carvalho³, Hugo Pereira³, José A Teixeira^{1,4}, Cristina MR Rocha^{1,4} ¹Centre of Biological Engineering, University of Minho, Braga, Portugal; ²Allmicroalgae - Natural Products, S.A, Pataias, Portugal; ³GreenCoLab – Green Ocean Technologies and Products Collaborative Laboratory, Faro, Portugal; ⁴LABBELS – Associate Laboratory, Guimarães/Braga, Portugal
019	Production of innovative food ingredients from food waste by precision fermentation Eduardo Coelho^{1,2}, Mariana Martins^{1,3}, Catarina Souza¹, Rodrigo Ledesma-Amaro^{4,5,6}, Rúben M. Buey⁷, Alberto Jiménez⁷, <u>Lucília Domingues</u>^{1,2} ¹CEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABBELS – Associate Laboratory, Guimarães, Braga, Portugal; ³Federal University of Paraná, Palotina, Brazil; ⁴Department of Bioengineering and Imperial College Centre for Engineering Biology, Imperial College London, ⁵Bezos Centre for Sustainable Protein, ⁶UKRI Engineering Biology Mission Hub on Microbial Food, Imperial College London, London, UK; ⁷Metabolic Engineering Group, Department of Microbiology and Genetics, Universidad de Salamanca, Salamanca, Spain
020	Integrated Strategies for the Extraction of Carotenoids from <i>Rhodotorula mucilaginosa</i> and Their Incorporation into Food-Grade Nanoemulsion Systems <u>Mariana B. N. Alves</u>^a, Miguel A. Cerqueira^b, Jorge FB Pereira^a ^aUniversity of Coimbra, CERES, FCTUC, Department of Chemical Engineering, Pólo II - Pinhal de Marrocos, Coimbra, Portugal; ^bInternational Iberian Nanotechnology Laboratory, Braga, Portugal

021	Integrated extraction strategy to obtain bioactive fractions from Gorse flower (<i>Ulex europaeus</i> L.) with potential food and nutraceutical applications <u>Rebeca Esteban-Lustres</u>^{1,2}, Filipa Mandin³, Rossana V.C. Cardoso³, Gil Garrote^{1,2}, Lillian Barros³, Pedro Ferreira-Santos^{1,2} ¹Department of Chemical Engineering, Faculty of Science; ²Instituto de Agroecoloxía e Alimentación, University of Vigo, As Lagoas, Ourense, Spain; ³CIMO, LA SusTEC, Instituto Politécnico de Bragança, Bragança, Portugal
022	Optimization of <i>Lactobacillus crispatus</i> submerged culture for probiotic production Letícia Santos Abrunhosa, Ana Luisa Leôncio Rodrigues, Yris Maria Fonseca Bazzo, Damaris Silveira, Yanna Karla Medeiros Nobrega, <u>Pérola Oliveira Magalhães</u> University of Brasília, Health Science School, Brazil
023	Layer-by-layer Coatings Applied by Ultrasonic Atomization on PLA Films: Surface, Morphological and Barrier Characterization for Sustainable Food Packaging <u>Dennise Anahí Carrillo Lomelí</u>^{1,2}, Miguel Cerqueira³, Diana Jasso de Rodríguez², Ana I. Bourbon³, Victor G.L. Souza⁴, Antía Lestido-Cardama⁵, Francisco Daniel Hernández-Castillo² ¹SECIHTI-Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila, Mexico; ²Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila, Mexico; ³International Iberian Nanotechnology Laboratory, Braga, Portugal; ⁴MEtRICs, Departamento de Química, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Caparica, Portugal; ⁵Area of Toxicology, Faculty of Pharmacy, University of Seville, Seville, Spain
024	Evaluation of Lipase Production by <i>Penicillium sizovae</i> Carolina Castello Branco Rangel Helbourn, Marina Borges Guimarães, Pérola de Oliveira Magalhães, Damaris Silveira, <u>Yris Maria Fonseca Bazzo</u> Health Science Faculty, University of Brasilia, Brazil
025	Production of 2,3-butanediol by <i>Bacillus amyloliquefaciens</i> from sugar beet pulp <u>Juan Carlos López-Linares</u>^{1,2}, Alicia Pérez-Millán^{1,2}, Susana Lucas^{3,4}, Mónica Coca^{3,4}, M. Teresa García-Cubero^{3,4}, Inmaculada Romero^{1,2}, Eulogio Castro^{1,2} ¹Department of Chemical, Environmental and Materials Engineering, ²Institute of Biorefineries Research (I3B), University of Jaén, Jaén, Spain; ³Department of Chemical Engineering and Environmental Technology, ⁴Institute of Sustainable Processes, Department of Chemical Engineering and Environmental Technology, University of Valladolid, Valladolid, Spain
026	Integrated Computational and Experimental Solvent Screening for Hydroxytyrosol Recovery from Olive-Derived Extracts <u>Érica Mendes</u>¹, Joaquim F. Pinto¹, Alexandre M. S. Jorge¹, Paulo Vilaça², Jorge F. B. Pereira¹ ¹University of Coimbra, CERES, Department of Chemical Engineering, Coimbra, Portugal; ²Silicolife, S.A. Rua do Parque Poente, Braga, Portugal
027	Ohmic heating assisted extraction of value-added compounds from waste streams of wine and olive oil industries <u>Eduardo Coelho</u>^{1,2}, Rui Rodrigues^{1,2}, Ricardo Pereira^{1,2}, José A Teixeira^{1,2} ¹CEB – Centre of Biological Engineering, University of Minho, Campus de Gualtar, Braga, Portugal; ²LABBELS – Associate Laboratory, Guimarães, Braga, Portugal
028	Combined Membrane Filtration and Flash Pasteurization Improve the Microbial and Physicochemical Stability of Craft Beer

	<u>Nandara Gabriela Mendonça Oliveira</u>¹, Valéria França de Souza², Rafael Henrique de Almeida Ferreira³ ¹Department of Chemistry, Nova School of Science and Technology, Nova University Lisbon, Caparica, Portugal; ²Federal Rural University of Rio de Janeiro, Rio de Janeiro, Brazil; ³Federal Institute of Education, Science and Technology of South-East Minas Gerais, Barbacena, Brazil
029	Hybrid Yogurt with Fava Bean Protein as a Sustainable Alternative Protein Source Eleni Sakadani, Panagiotis Kandyliis, <u>Dimitra Dimitrellou</u> Department of Food Science and Technology, Ionian University, Argostoli, Kefalonia, Greece
030	Transforming Rice Okara into a Functional Alternative Protein Ingredient for Future Food Applications <u>María Emilia Brassesco</u>^a, Daniela Magalhães^a, João D. Calixto^b, Tiago Duarte^b, Daniela Correia^c, Presentación García^d, Manuela Pintado^a ^aUniversidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Porto, Portugal; ^bSimpliYeast, Póvoa de Varzim; ^cMC Shared Services S.A Lugar do Espido, Maia, Portugal; ^dCentro Tecnológico Nacional de la Conserva, CTNC, Molina de Segura – Murcia - Spain
031	Exploring Natural Supports for the Immobilization of Beneficial Bacteria in Functional Food Applications C Pavlatou, E Dimoula, G Nelios, I Prapa, <u>Y Kourkoutas</u> Laboratory of Applied Microbiology and Biotechnology, Department of Molecular Biology and Genetics, Democritus University of Thrace, Dragana, Alexandroupolis, Greece
032	Biotechnological upcycling of local Portuguese kiwifruit Faustine Leleu^{1,2}, Lígia Rodrigues^{1,3}, Sara C. Silvério^{1,3}, <u>Nuno R. da Silva</u>^{1,3} ¹Centre of Biological Engineering, University of Minho, Portugal; ²École Nationale Supérieure d'Agronomie et des Industries Alimentaires, Université de Lorraine, Nancy, France; ³LABBELS – Associate Laboratory in Biotechnology, Bioengineering and Microelectromechanical Systems, Braga/Guimarães, Portugal
033	Isolation and Functional Characterization of Wild-Type Lactic Acid Bacteria Exhibiting Antidiabetic and Cholesterol-Lowering Potential <u>Dimoula Elisavet</u>¹, Christakoudi Anastasia¹, Pavlatou Chrysoula¹, Stylianopoulou Electra², Prapa Ioanna¹, Grigoriou Maria², Kourkoutas Yiannis¹ ¹Laboratory of Applied Microbiology and Biotechnology, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece; ²Laboratory of Developmental Biology & Molecular Neurobiology, Department of Molecular Biology and Genetics, Democritus University of Thrace, Alexandroupolis, Greece
034	Chitosan, Selenium, and Nickel Complexes Enhance the Accumulation of Bioactive Compounds in Cabernet Sauvignon Grape Skins <u>Alma Rosa Margarita Lee Chibli</u>¹, Norma Paola Melendez-Rentería¹, Lluvia de Abril Alexandra Soriano-Melgar², Hortensia Ortega-Ortiz³, Jorge Luis Guia-García¹ ¹Centro de Estudios e Investigaciones Interdisciplinarios, Universidad Autónoma de Coahuila; ²Facultad de Ciencias Químicas, Universidad Autónoma de Coahuila. ³Centro de Investigación en Química Aplicada.
035	Evolution of phenolic compounds during inoculated fermentation of cv. Kalamata natural black olives in reduced-sodium brine

	Despoina Langari¹, Chrysafenia Oxynoudi¹, Nikolaos Nenadis^{1,2}, Melina Gkoutzi³, Efstathios Z. Panagou³, Maria Xenaki⁴, Leandros Skaltsounis⁴, Panagiotis Stathopoulos⁴, Fani Th. Mantzouridou^{1,2} ¹Laboratory of Food Chemistry and Technology, School of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; ²Natural Products Research Center of Excellence, Center for Interdisciplinary Research and Innovation, Thessaloniki, Greece; ³Laboratory of Food Microbiology and Biotechnology, Department of Food Science and Human Nutrition, School of Food and Nutritional Sciences, Agricultural University of Athens, Athens, Greece; ⁴Division of Pharmacognosy and Natural Products Chemistry, Department of Pharmacy, National and Kapodistrian University of Athens, Athens, Greece
036	Deep eutectic solvent-mediated fractionation of vine pruning residues for multiproduct recovery Alba Pérez-Pérez^{1,2}, Beatriz Gullón^{1,2}, Pablo G del Río^{1,2} ¹Universidade de Vigo, Departamento de Enxeñaría Química, Facultade de Ciencias, Ourense, Spain; ²Instituto de Agroecoloxía e Alimentación, Universidade de Vigo, Ourense, Spain
037	Sustainable Furfural Production from <i>Paulownia</i> Wood through Green and Emerging Technologies Beatriz Rodríguez-Martínez, Fernando Rodríguez-Rebelo, Aloia Romani, Beatriz Gullón Universidade de Vigo, Departamento de Enxeñaría Química, Facultade de Ciencias, Lagoas
038	Polyhydroxybutyrate production in integrated biorefineries – a comparative study in the Brazilian context Clara Matte Machado-Breckenfeld, Mateus Seleme Brehmer, Viviane Gonçalves de Farias, Carlos Ricardo Soccol, Luciana Porto de Souza Vandenberghe Department of Bioprocess Engineering and Biotechnology, Centro Politécnico, Federal University of Paraná, Curitiba, PR, Brazil
039	From Waste to Future Foods: Scalable Mycoprotein Production for Cultivated Meat and Hybrid Protein Innovation Carlos Ricardo Soccol, Ricardo Luiz Vieira Bioprocess Engineering and Biotechnology Department, Federal University of Paraná, Curitiba, Paraná, Brazil
040	Thyme Essential Oil as a Natural Antimicrobial System for Enhancing Food Safety and Shelf-Life of Future Food Products David Šilha University of Pardubice, Faculty of Chemical Technology, Czech Republic
041	Development of polymeric nanocapsules containing quinoa oil (<i>Chenopodium quinoa</i> Willd.) Bruna Lorena Meneses Marques¹, Francisco Canindé de Sousa Júnior¹, Francisco Humberto Xavier Júnior², Cristiane Fernandes de Assis¹ ¹Federal University of Rio Grande do Norte, Brazil; ²Federal University of Paraíba, Brazil
042	Sustainable valorization of <i>Himanthalia elongata</i> through cascading extraction of antioxidant and antidiabetic compounds A Alvarado-López-Vizcaíno^{1,2}, P.G. Del-Río^{1,2}, B. Gullón^{1,2}, P Ferreira-Santos^{1,2} ¹Departamento de Ingeniería Química, Facultad de Ciencias, Universidad de Vigo, Ourense, España; ²Instituto de Agroecología y Alimentación, Universidad de Vigo, Ourense, España

Date: 11th September 2026

Time 1300-1500h

043	Effect of Submerged Liquid Fermentation Conditions on the Nutritional and Technological Potential of Fungal Biomass from <i>Rhizopus delemar</i> and <i>Rhizopus microsporus</i> var. <i>oligosporus</i> <u>Henrique Lentulo-Araújo</u>¹, Andreia FR Silva², José A. Teixeira^{1,3}, Cristina MR Rocha^{1,3}, Eduardo Coelho^{1,3} ¹CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ²Colab4food - Collaborative Laboratory for Innovation in the Agri-Food sector, Vairão, Vila do Conde, Portugal; ³LABBELS - Associate Laboratory, Braga, Portugal. Presenting authors' email: id10483@uminho.pt
044	From White Grape Pomace to FDCA: Integrated Microwave-Assisted Dehydration and Whole-Cell Biocatalysis of 5-HMF <u>Cristiana Martins</u>^{a,b}, Alexandre Rubira^{a,b}, Lucilia Domingues^{c,d}, Beatriz Gullón^{a,b}, Aloia Romaní^{a,b} ^aUniversidade de Vigo, Departamento de Enxeñaría Química, Facultade de Ciencias, 32004 Ourense, Spain; ^bInstituto de Agroecoloxía e Alimentación. Universidade de Vigo, Ourense, Spain; ^cCEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ^dLABBELS – Associate Laboratory, Braga/Guimaraes, Portugal
045	Integrated cascade valorization of apple pomace to 5-hydroxymethylfurfural and lactic acid <u>Alexandre Rubira</u>^{1,2}, Javier Caamaño¹, Cristiana Martins^{1,2}, Aloia Romaní^{1,2}, Beatriz Gullón^{1,2} ¹Departamento de Enxeñaría Química, ²Instituto de Agroecoloxía e Alimentación, Universidade de Vigo – Campus Auga, Ourense, Spain
046	Development of emulsions with added candelilla wax for food enrichment in livestock Francisco Javier Enríquez-Medrano¹, Dennise Anahí Carrillo-Lomelí², Gabriela González-Moreno², Omar Fabela-Sánchez¹, <u>J. Omar Díaz-Rivas</u>^{2,3} ¹Centro de Investigación de Química Aplicada, Saltillo, Coahuila, México; ²Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila, Mexico; ³Instituto de Investigación y Transferencia de Tecnología en Zonas Áridas, Parras de la Fuente, Coahuila, México
047	Development of biodegradable films incorporated with <i>Monascus</i> pigments, used as active packaging for sunflower oil preservation Jairo Ribeiro de Souza, Girlaine Estefane Cansanção de Almeida, Glêce Milene Santana Gomes, José Erick Galindo Gomes, Keila Aparecida Moreira, <u>Daniele Silva Ribeiro</u> Federal University of Agreste of Pernambuco, Garanhuns - PE, Brazil
048	Predictive Modelling for β-Lactoglobulin Crystallisation in an Oscillatory Flow Reactor Based on Design of Experiments <u>Diana Machado</u>¹, José António Teixeira^{1,2}, Filipa Castro^{1,2} ¹Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABBELS - Associate Laboratory, Braga, Guimarães, Portugal
049	Engineering regenerable biochar and hydrochar from residual biomass for sustainable pollutant removal Nuria Bernárdez-Rodas, Marta Pazos, Emilio Rosales, <u>María Ángeles Sanromán</u> CINTECX, Universidade de Vigo, Bioengineering and Sustainable Process Group, Department of Chemical Engineering, Vigo, Spain

050	Hybrid deep modelling of monoclonal antibody glycosylation by CHO cells <u>José Pinto</u>, Leonor Gündersen, Rui Oliveira Systems Biology & Engineering Group, Chemistry Department, School of Sciences and Technology, NOVA School of Science and Technology), Associação para a Inovação e Desenvolvimento da FCT NOVA, Lisbon, Portugal. Presenting authors' email: jmm.pinto@fct.unl.pt
051	Application of Physics-Informed Neural Networks for Nutrient Requirements Prediction in Microalgae Cultivation Systems <u>Geovani R Freitas</u>^{a,b,c,d}, Sara Badenes^c, Diana IC Gomes^c, Luís Costa^c, Fernando G Martins^d, Rui Oliveira^{a,b} ^aUCIBIO, Department of Chemistry, ^bAssociate Laboratory i4HB - Institute for Health and Bioeconomy, NOVA University Lisbon, Caparica, Portugal; ^cA4F – Algae for Future, Campus do Lumiar, Lisbon, Portugal; ^dLEPABE – Laboratory for Process Engineering, Environment, Biotechnology and Energy, ALiCE – Associate Laboratory in Chemical Engineering, Faculty of Engineering, University of Porto, Porto, Portugal. Presenting authors' email: geovani.freitas-ext@algafuel.pt
052	Deep hybrid modelling of CHO platforms: addressing multiple development campaigns across different antibody products <u>Leonor Gündersen</u>, José Pinto, Rui Oliveira Systems Biology & Engineering group, Chemistry Department, School of Sciences and Technology, NOVA School of Science and Technology, Associação para a Inovação e Desenvolvimento da FCT NOVA, Lisbon, Portugal. Presenting authors' email: leonorgundersen@gmail.com
053	A PINN ensemble framework for bioprocess development: the case of PHA production by <i>Cupriavidus necator</i> <u>Monesh Kumar Thirugnanasambandam</u>^{1,2}, Bruno Serafim^{1,2}, José Pinto^{1,2}, Diana Araújo^{1,2}, Filomena Freitas^{1,2}, Maria AM Reis^{1,2}, Rafael S Costa^{1,2}, Rui Oliveira^{1,2} ¹Associate Laboratory i4HB - Institute for Health and Bioeconomy; ²UCIBIO - Applied Molecular Biosciences Unit, Department of Chemistry, NOVA School of Science and Technology, Universidade NOVA de Lisboa, Caparica, Portugal. Presenting authors' email: mokuth@campus.fct.unl.pt
054	Bioguided Isolation of Myricitrin and Mearnsitrin from <i>Syzygium malaccense</i> Leaves Fernanda Caroline Knob, <u>Tatiane Luiza Cadorin Oldoni</u> Department of Chemistry, Federal Technological University of Parana, Pato Branco, PR, Brazil. Presenting authors' email: tatiameoldoni@utfpr.edu.br
055	Bioremediation of diesel in artificial seawater supplemented with sugarcane molasses <u>Francisco Bruno Ferreira de Freitas</u>, Nathalia Saraiva Rios, Everaldo Silvino dos Santos Laboratory of Biochemical Engineering, Department of Chemical Engineering, Federal University of Rio Grande do Norte, Natal – Brazil. Presenting authors' email: brunoferreirafrei@gmail.com
056	Continuous production of biohydrogen from cheese whey in bioreactor : Lactose vs. Lactate <u>Sara El Abyad</u>, Emeric Vignigbe, Christian Larrche, Christophe Vial, Samir Taha, Jean-Sébastien Guez Université Clermont Auvergne, Clermont Auvergne INP, CNRS, Institut Pascal, Clermont-Ferrand, France. Presenting authors' email: Sara.el_abyad@doctorant.uca.fr

057	Effect of Different Preservation Methods on the Microbiological Stability of Olive Pomace for Its Potential Use in Plant-Based Food Formulations <u>Catarina Nunes</u>, Andreia Mendes, João Nunes BLC3 Association - Technology and Innovation Campus - Centre R&D, Lagares, Oliveira do Hospital, Portugal. Presenting authors' email: catarina.nunes@blc3.pt
058	Bioactivity of Portuguese <i>Cistus</i> spp. <u>Sofia Santos</u>, Carolina Nunes, Eliana FC Simões, Rafael Mamede, João Nunes Associação BLC3 – Campus de Tecnologia e Inovação, Centre Bio R&D Unit, Oliveira do Hospital, Portugal. Presenting authors' email: sofia.santos@blc3.pt
059	Development of Functional Biodegradable Films from Marine-derived Biopolymers <u>Gabriela Sousa</u>^{1,2}, Vítor Alves^{1,3}, Carla Tecelão², Suzana Ferreira-Dias^{1,4} ¹Instituto Superior de Agronomia, LEAF—Linking Landscape, Environment, Agriculture and Food Research Centre, Universidade de Lisboa, Portugal; ²MARE—Marine and Environmental Sciences Centre, ARNET—Aquatic Research Network, Politécnico de Leiria, Peniche, Portugal; ³Associate Laboratory TERRA, Instituto Superior de Agronomia, ⁴Laboratório de Estudos Técnicos, Instituto Superior de Agronomia, Universidade de Lisboa, Lisboa, Portugal. Presenting authors' email: gabriela.spsousa@gmail.com
060	Circular Valorization of Orange-Peel Biomass into Reusable Biochar for Simultaneous Remediation of Acidic Multi-Metal Wastewater Prabhakar Choudhary Indian Institute of Technology Guwahati, India. Email: prabh174104123@iitg.ac.in
061	Integrated Process Optimisation for Bitterness Reduction and Protein Recovery from Brewer's Spent Yeast <u>Ana Isabel Paupério</u>^a, María Emilia Brassesco^a, Vasco Coelho^b, João D Calixto^b, Tiago Duarte^b, Manuela Pintado^a ^aUniversidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Porto, Portugal; ^bSimplYeast, Póvoa de Varzim, Portugal
062	Hydrothermal fractionation of <i>Sargassum muticum</i> for the production of oligosaccharides, bioethanol and succinic acid <u>Álvaro Lobato-Rodríguez</u>^{a,b}, Beatriz Rodríguez-Martínez^{a,b}, Pablo G. Del Río^{a,b,c}, Gil Garrote^{a,b}, Beatriz Gullón^{a,b} ^aDepartamento de Enxeñaría Química, Facultade de Ciencias; ^bInstituto de Agroecoloxía e Alimentación (IAA). Universidade de Vigo, Ourense, España; ^cCICECO – Aveiro Institute of Materials and Department of Chemistry, Universidade de Aveiro, Aveiro, Portugal. Presenting authors' email: alvaro.lobato@uvigo.es
063	Development of a Low-Sugar Prebiotic Strawberry Preparation by <i>In Situ</i> Enzymatic Fructo-Oligosaccharide Synthesis: Functional and Sensory Evaluation <u>Daniela A. Gonçalves</u>¹, José A Teixeira^{1,2}, Clarisse Nobre^{1,2} ¹CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABELS – Associate Laboratory, Braga, Guimarães, Portugal. Presenting authors' email: daniela.goncalves@ceb.uminho.pt
064	Metabolite production by lactic acid bacteria on carob jus medium CJM2 using experimental design approaches

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065	Extraction of Fluorescent Lignin from Brewer's Spent Grain for Sustainable Functional Biomaterial Applications <u>Joana Lopes</u>^a, Cristiana Pereira^a, Pedro Silva^c, José A. Teixeira^{a,b}, Miguel A. Cerqueira^c, Michele Michelin^{a,b} ^aCEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ^bLABELLS – Associate Laboratory, Braga, Guimarães, Portugal; ^cInternational Iberian Nanotechnology Laboratory, Braga, Portugal. Presenting authors' email: mimichelin@ceb.uminho.pt
066	Valorization of Oat Okara for the Development of a Synbiotic Plant-Based Beverage <u>Ana Marta Rebelo Vieira</u>^a, José António Teixeira^{a,b}, Catarina Teixeira^a, Clarisse Nobre^{ba} ^aCEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ^bLABELLS –Associate Laboratory, Braga, Portugal
067	Upcycling Carob Pulp Sugars into Fructo-Oligosaccharides: Bioconversion Efficiency and Gastrointestinal Tolerance of a Novel Functional Ingredient <u>Sofia M Amoedo</u>^a, Daniela A. Gonçalves^a, José A. Teixeira^{a,b}, Clarisse Nobre^{a,b} CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ^bLABELLS – Associate Laboratory, Braga, Guimarães, Portugal
068	From Gut to Brain: Effects of Inulin Supplementation in Obesity <u>Clara Guimarães</u>¹, Abigail González¹, Catarina Gomes³, Catarina Pereira¹, Eduardo López-Caneda¹, José A. Teixeira^{1,2}, Pedro Moreira³, Eva Conceição⁴, Adriana Sampaio³, Natividade S Couto Pereira³, Clarisse Nobre^{1, 2} ¹CEB - Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABELLS - Associate Laboratory, Braga, Guimarães, Portugal; ³CIPsi – Psychology Research Centre, University of Minho, Braga, Portugal; ⁴Faculty of Psychology and Education Sciences, University of Porto, Porto, Portugal
069	Ultrasound–Deep Eutectic Solvent Processing of Spent Coffee Grounds: Delignification, Lignin Recovery, and Antioxidant Properties <u>Shismany Araújo</u>^a, José A. Teixeira^{a,b}, Michele Michelin^{a,b}, Clarisse Nobre^{a,b} ^aCEB – Centre of Biological Engineering, University of Minho, Portugal; ^bLABELLS – Associate Laboratory, Braga, Guimarães, Portugal. Presenting authors' email: id10947@uminho.pt
070	Incorporation of CDW in Cement Blocks and Development of Bio-Based Functional Coatings <u>A Santos</u>¹, F Figueiredo^{1,2}, J Nunes^{1,2} ¹CECOLAB Association – Collaborative Laboratory Towards Circular Economy, Portugal; ²Centre Bio R&D Unit BLC3 Association – Technology and Innovation Campus, Portugal. Presenting authors' email: adriana.santos@cecolab.pt
071	Green Engineered Multilayer Panels for Sustainable Coating Applications <u>RP Rodrigues</u>¹, F Figueiredo^{1,2}, J Nunes^{1,2} ¹CECOLAB Association – Collaborative Laboratory Towards Circular Economy, Portugal; ²Centre Bio R&D Unit BLC3 Association – Technology and Innovation Campus, Portugal. Presenting authors' email: rafaela.rodrigues@cecolab.pt

072	Sustainable lipid and carotenoid production from wood hydrolysate by <i>Rhodospiridium toruloides</i>-7191 under fed-batch cultivation <u>Lachi Wankhede</u>¹, Bridget Signe Price², Carlos Saúl Osorio-González¹, Rahul Saini¹, Satinder Kaur Brar¹ ¹Department of Civil Engineering, Lassonde School of Engineering, York University, North York, Toronto, Ontario, Canada; ²School of Chemical, Biological and Environmental Engineering, Oregon State University, Corvallis, Oregon, United States
073	Optimisation of Natural Dyeing Processes through Fibre Cationisation <u>Inês M. Figueiredo</u>, Alexandre MS Jorge, Ana MA Dias, Jorge FB Pereira CERES, FCTUC, Department of Chemical Engineering, University of Coimbra, Coimbra, Portugal. Presenting authors' email: inesmfig@gmail.com
074	Lactic Acid Fermentation as a Strategy for Agri-Food Waste Upcycling <u>Catarina Souza</u>¹, Eduardo Coelho^{1,2}, Luís Abrunhosa^{1,2}, Ana Sofia Pires³, Joana Vieira³, Susana Soares³, Elsa Brandão³, Lucília Domingues^{1,2} ¹CEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABELS – Associate Laboratory, Braga/Guimarães, Portugal; ³LAQV-REQUIMTE, Departamento de Química e Bioquímica, Faculdade de Ciências da Universidade do Porto, Portugal. Presenting authors' e-mail: pg55708@uminho.pt
075	From Wine Industry Residues to Value: Furfural Valorisation into Furfuryl Alcohol by a Whole-Cell Biocatalyst <u>João Paulo Carvalho</u>¹, Henrique Lima¹, Lucília Domingues^{1,2} ¹CEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ²LABELS – Associate Laboratory, Braga/Guimarães, Portugal. Presenting authors' email: jpcarvalho215@gmail.com
076	Precision fermentation by engineered <i>Kluyveromyces marxianus</i> for resveratrol bioproduction <u>Joana Araújo</u>¹, Eduardo Coelho^{1,2}, Lucília Domingues^{1,2} ¹CEB – Centre of Biological Engineering, University of Minho, 4710-057 Braga, Portugal; ²LABELS – Associate Laboratory, Braga/Guimarães, Portugal. Presenting authors' email: b13144@uminho.pt
077	Screening of Greener Solvent Systems for Carotenoid Extraction from Microbial Biomass <u>Jessica Alves</u>^{1,2}, Alexandre MS Jorge¹, Ana MA Dias¹, Bruno Ferreira², Jorge FB Pereira¹ ¹University of Coimbra, CERES, Department of Chemical Engineering, Coimbra, Portugal; ²GRA Nutra, Cantanhede, Portugal. Presenting authors' email: jessica-alyne@hotmail.com
078	From Agro-Waste to Color: Onion Peel Valorization through Eutectic Solvents and Sustainable Dyeing <u>Helena F Ribeiro</u>, Alexandre MS Jorge, Ana MA Dias, Jorge FB Pereira University of Coimbra, CERES, FCTUC, Department of Chemical Engineering, Coimbra, Portugal. Presenting authors' email: helenaribeiro270@gmail.com
079	Development of Sustainable Wool Dyeing and Finishing Processes using Phycocyanin and Bio-Based Additives <u>TCD Kolb</u>, AMS Jorge, JFB Pereira CERES, FCTUC, Department of Chemical Engineering, University of Coimbra, Coimbra, Portugal. Presenting authors' email: timokolb111@gmail.com

080	Microencapsulation of Natural Dye Extracted from <i>Jacaratia spinosa</i> Peel by Spray Drying: Physicochemical, Structural and Thermal Characterization <u>Edimir Andrade Pereira</u>¹, Sirlei Dias Teixeira¹, Idemir Citadin², Fernanda Caroline Knob¹, Lucas Eduardo Savinski³, Sara Pâmela Kapazi¹ ¹Postgraduate Program in Chemical and Biochemical Process Technology, ²Department of Agronomy, ³Department of Chemistry, Federal Technological University of Paraná, Pato Branco, PR, Brazil. Presenting authors' email: edimir@utfpr.edu.br
081	Bacterial Cellulose: A promising biodegradable polymer for sustainable future <u>Baneeprajnya Nayak</u>, Rabibrata Mukherjee, Rintu Banerjee Department of Agricultural and Food Engineering, Indian Institute of Technology Kharagpur, West Bengal, India. Presenting authors' email: baneeprajnya16@gmail.com
082	Sugarcane Bagasse Derived Nano-biochar for Enhanced Bio-methane Production: Process Intensification through Direct Interspecies Electron Transfer <u>Devalina Khamaru</u>, Rintu Banerjee Agricultural and Food Engineering Department, Indian Institute of Technology Kharagpur, India. Presenting authors' email: devalina.khamaru@gmail.com
083	Bio-Based HPMC Films Reinforced with Cellulose Nanocrystals as Sustainable Alternatives for Food Packaging <u>Ana Isabel F Fernandes</u>^a, José A Teixeira^{a,b}, Miguel A Cerqueira^c, Michele Michelin^{a,b} ^aCEB – Centre of Biological Engineering, University of Minho, Braga, Portugal; ^bLABBELS – Associate Laboratory, Braga, Guimarães, Portugal; ^cInternational Iberian Nanotechnology Laboratory, Braga, Portugal. Presenting authors' email: pg51662@alunos.uminho.pt
084	Extraction and characterization of apple pomace pectin with potential for agricultural gel capsule formulation <u>M Ramírez-Pérez</u>¹, A Robledo-Olivo², S González-Morales³, AV Charles-Rodríguez², JA González-Fuentes⁴, RM Rodríguez Jasso⁵, MA Cerqueira⁶ ¹Protected Agriculture Postgraduate Program, ²Fermentations and Biomolecules Lab, Food Science and Technology Department, ³Secretaría de Ciencia, Humanidades, Tecnología e Innovación (SECIHTI), ⁴Department of Horticulture, Universidad Autónoma Agraria Antonio Narro, Saltillo, Coahuila, Mexico; ⁵Biorefinery Group, Food Research Department, School of Chemistry, Universidad Autónoma de Coahuila, Saltillo, Coahuila, Mexico; ⁶INL–International Iberian Nanotechnology Laboratory, Braga, Portugal