

PHOTOREFINERIES CONFERENCE

2nd International Conference
on Novel Photorefineries
for Resource Recovery

2nd - 4th September 2026
Faculty of Tehnology Novi Sad
University of Novi Sad, Serbia



conference

PROGRAM



European COST Action
CA21146 - Fundamentals and applications of purple bacteria
biotechnology for resource recovery from waste (PURPLEGAIN)

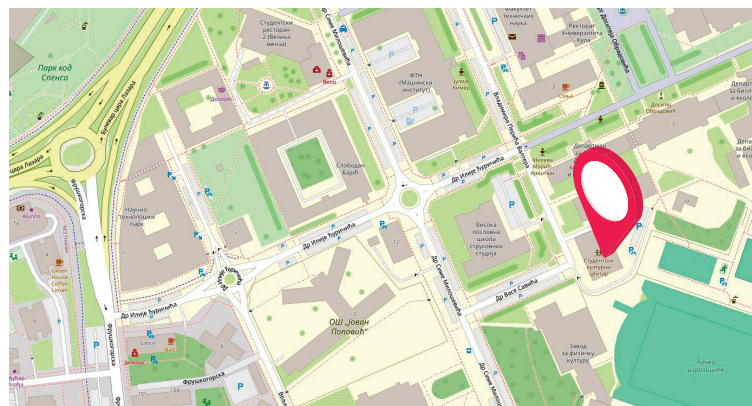


Student Cultural Centre Novi Sad (SKC)

2nd September (1st Conference Day)

WiFi SSID: skcns

Pass: open network/no password



Located within the University Campus
Address: Vladimira Perića Valtera 5, Novi Sad



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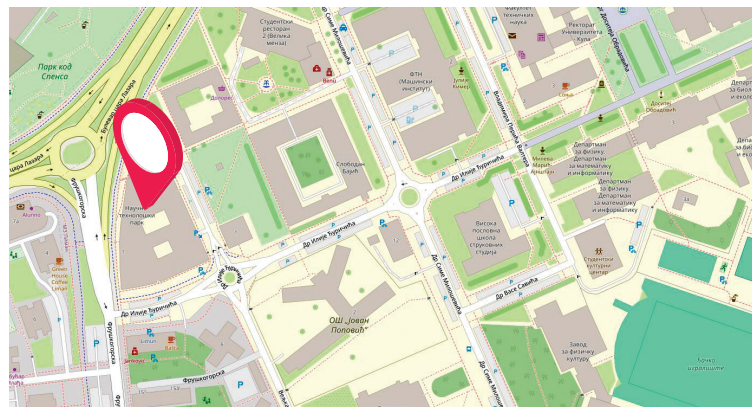


Science and Technology Park Novi Sad

3–4 September (2nd and 3rd Conference Days)

WiFi SSID: guestwifi

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Located within the University Campus
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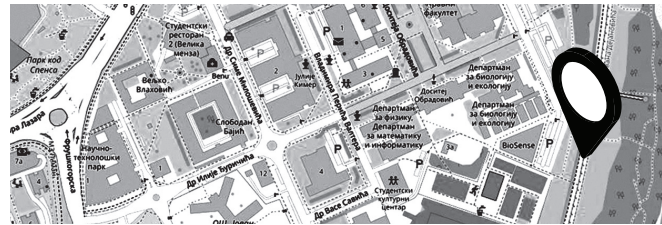
2ND PHOTOREFINERIES CONFERENCE AGENDA PER DAYS

FIRST DAY: 2ND SEPTEMBER 2026

LOCATION: STUDENT CULTURAL CENTRE NOVI SAD - SKC NS; **WiFi SSID:** skcns **Pass:** open network/no password

Registration	8.00-9.00 Location: SKC NS MAIN ENTRANCE HALL
Opening	9.00-9.20 Location: SKC NS MAIN AUDITORIUM
Keynote Lectures	9.20-11.00 Location: SKC NS MAIN AUDITORIUM <i>Session Chairs: Luis Diaz Allegue, Antwerp University, Belgium, and Ioanna Vasiliadou, University of Western Macedonia, Greece</i>
	9.20-10.10 <u>Keynote Lecture</u> Daniel Puyol , University Rey Juan Carlos, Spain PURPLEGAIN: CATALYSING PURPLE PHOTOTROPHIC BIOTECHNOLOGY IN EUROPE
	10.10-11.00 <u>Keynote Lecture</u> Gabriel Capson-Tojo , French National Research Institute for Agriculture, Food and Environment (INRAE-LBE), France THE QUEST FOR VALUE IN PNSB BIOTECHNOLOGY: FROM DIRECT RECOVERY TO HIGH-VALUE GAS
Coffee break:	11.00-11.30 Location: SKC NS SECOND-FLOOR CAFÉ
Session 1	11.30 – 13.10 Location: SKC NS MAIN AUDITORIUM Conference Topics: PHOTOREFINERIES BASED ON PURPLE PHOTOTROPHIC BACTERIA (PPB) <i>Session Chairs: Session Chairs: Daniel Puyol, University Rey Juan Carlos, Spain, and Ioanna Vasiliadou, University of Western Macedonia, Greece</i>
	11.30-12.10 <u>Plenary Lecture</u> Damien Batstone , Australian Centre for Water and Environmental Biotechnology, University of Queensland, Australia GROWING PHOTOTROPHS IN THE WORLD'S SUNNIEST CONTINENT: THE PPB JOURNEY AT UQ
	12.10-12.25 Ángel Robles , University of Valencia, Spain HEALTH-SAFE SINGLE CELL PROTEIN PRODUCTION THROUGH CUPRIAVIDUS NECATOR AND RHODOPSEUDOMONAS PALUSTRIS

Session 1	12.25-12.40 Haifeng Lu , China Agricultural University, China PPB-ENABLED BIOHYDROGEN PRODUCTION FROM HYDROTHERMAL LIQUEFACTION WASTEWATER FOR LOW-CARBON BIOCRUDE UPGRADING IN A SOLAR-ASSISTED PHOTOREFINERY
	12.40-12.55 Maria Del Rosario Rodero Raya , University of Valladolid, Spain DEGRADATION OF EMERGING MICROCONTAMINANTS BASED ON PHOTOSYNTHETIC SYSTEMS
	12.55-13.10 Eleonora Sforza , University of Padova, Italy DEGRADATION OF SOFTWOOD LIGNOSULFONATE BY PURPLE BACTERIUM RHODOPSEUDOMONAS PALUSTRIS
Lunch break:	13.10-14.00 Location: SKC NS SECOND-FLOOR CAFÉ
Session 2	14.00-16.00 Location: SKC NS MAIN AUDITORIUM Special Session: FROM LAB TO MARKET – PHOTOTROPHIC INNOVATIONS <i>Session Chairs: Senka Vidović, University of Novi Sad, Serbia, and Slađana Stašević, National Alliance for Local Economic Development - NALED, Serbia</i>
	14.00-14.45 <u>Plenary Lecture</u> Victor Monsalvo , FCC Aqualia S.A., Spain ANPHORA®: A UNIQUE PURPLE PHOTOTROPHIC BACTERIA-BASED PLATFORM FOR LOW-ENERGY URBAN WASTEWATER TREATMENT AND RESOURCE RECOVERY
	14.45-15.30 <u>Plenary Lecture</u> Baptiste Leroy , University of Mons, Belgium HARNESSING PURPLE PHOTOTROPHIC BACTERIA TO SHAPE THE NEW FOOD LANDSCAPE: FROM SPACE-INSPIRED CONCEPTS TO SMART, CIRCULAR NUTRITION AND BIOECONOMY
	15.30-16.00 INTERACTIVE EXPERIENCE: TASTE THE FUTURE – EXPLORING FOODS WITH MICROBIAL INGREDIENTS
Coffee break/ cocktail:	16.00-16.30 Location: SKC NS SECOND-FLOOR CAFÉ

Session 3	16.30 - 18.00 Location: SKC NS MAIN AUDITORIUM Conference Topics: • PHOTOREFINERIES BASED ON PURPLE PHOTOTROPHIC BACTERIA (PPB) • BIOREFINERIES BASED ON MICROALGAE OR CYANOBACTERIA <i>Session Chairs: Gabriel Capson-Tojo, INRAE-LBE, France, and Luisa Gouveia, LNEG, Portugal</i>
	16.30-16.45 Luis Diaz Allegue, Antwerp University, Belgium PURPLE BACTERIA IMPROVE GROWTH, BRIGHTNESS, AND PHYSIOLOGICAL PERFORMANCE IN ORNAMENTAL KOI CARP
	16.45-17.00 Joana Fradinho, NOVA University Lisbon, Portugal FROM MICROALGAE SIDE-STREAMS TO POLYHYDROXYALKANOATES: CLOSING THE BIOREFINERY LOOP
	17.00-17.15 Josue Gonzalez Camejo, BETA TC-University of Vic, Spain PHOTOREFINERIES TO INCREASE THE SUSTAINABILITY OF THE AGRI-FOOD SECTOR. CHALLENGES AND OPPORTUNITIES
	17.15-17.30 Guillaume Bayon-Vicente, University of Mons, Belgium REDEFINING MOLASSES AS A FEEDSTOCK FOR RHODOSPIRILLUM RUBRUM PROTEIN PRODUCTION: A TECHNO-ECONOMIC AND LIFE CYCLE PERSPECTIVE
	17.30-17.45 Víctor Galve Santacruz, Rey Juan Carlos University, Spain COUPLING WET AIR OXIDATION AND PPB PHOTO-BIOELECTROCHEMICAL SYSTEMS FOR REFINERY SLUDGE VALORIZATION
	17.45-18.00 Karla Estefanía Ibarra Munguía, Guanajuato University, Mexico VALORIZATION OF SLAUGHTERHOUSE WASTEWATER FOR PROTEIN RECOVERY VIA PURPLE PHOTOTROPHIC BACTERIA: COMPARISON OF RAW AND FERMENTED SUBSTRATES
PURPLE RUN	18.15 CONFERENCE DAY 1 NETWORKING ACTIVITY FOR ALL PARTICIPANTS Starting location: Danube Riverside Quay Promenade, in front of the BioSense Institute 

2ND PHOTOREFINERIES CONFERENCE AGENDA PER DAYS

SECOND DAY: 3RD SEPTEMBER 2026

LOCATION: SCIENCE AND TECHNOLOGY PARK NOVI SAD - NTP NS; **WiFi SSID:** guestwifi **Pass:** novisad2023

Keynote and Plenary Lectures	8.30-10.00 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN <i>Session Chairs: Session Chairs: Joana Fradinho, NOVA University Lisbon, Portugal, and Baptiste Leroy, University of Mons, Belgium</i>	
	8.30-9.20 <u>Keynote Lecture</u> Maria Barbosa , Wageningen University, AlgaePARC, The Netherlands TOWARDS DIGITAL TWINS IN MICROALGAE PRODUCTION	
	9.20-10.00 <u>Plenary Lecture</u> Koenraad Muylaert , KU Leuven University, Belgium FACILITATING HARVESTING OF MICROALGAE THROUGH FLOCCULATION	
Session 4	10.00-10.30 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN Special Session: MAKING SCIENCE VISIBLE: SCIENCE MEDIA AND VISUAL STORYTELLING <i>Session Chairs: Joana Fradinho, NOVA University Lisbon, Portugal, and Baptiste Leroy, University of Mons, Belgium</i>	
	10.00-10.20 Invited Talk Jose Luis Rubio-Tamayo , University Rey Juan Carlos, Spain BEYOND PUBLICATIONS: COMMUNICATING SCIENCE THROUGH VISUAL MEDIA	
	10.20-10.30 PRESENTATION OF THE BEST VIDEOS FROM THE VIDEO COMPETITION: MICROBIAL SUPERSTARS – PURPLE BACTERIA, CYANOBACTERIA & MICROALGAE LIGHTING THE PATH TO SUSTAINABILITY	If you would like to watch the Top 5 videos from the “MICROBIAL SUPERSTARS: Purple Bacteria, Cyanobacteria & Microalgae Lighting the Path to Sustainability” competition, scan this QR code 
Coffee break	10.30-10.50 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN FOYER	

Parallel Sessions: 5 and 6	SESSION 5	SESSION 6
	10.50-13.10 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN Topics: • PHOTOSYNTHETIC BIOTECHNOLOGY FOR WATER AND AIR TREATMENT • BIOREFINERIES BASED ON MICROALGAE OR CYANOBACTERIA <i>Session Chairs: Daniel Puyol, University Rey Juan Carlos, Spain, Portugal, and Milica Hadnađev-Kostić, Faculty of Technology Novi Sad, Serbia</i>	10.50 -13.05 Location: PRESENTATION ROOM GRAND FLOOR Topics: • ADVANCED CONTROL, MODELLING AND ASSESSMENT OF PHOTOACTIVATED PROCESSES • TECHNOLOGIES FOR POST-TREATMENT, EXTRACTION AND PURIFICATION OF BIOMASS AND BIOPROCESS RESIDUAL STREAMS <i>Session Chairs: Cristina Cavinato, Ca' Foscari University of Venice, Italy, and Tuba Hande Erguder, Middle East Technical University, Turkey</i>
	10.50-11.05 Spotlight on PHOTOREFINERIES sponsors	10.50-11.05 Germán Buitrón, Universidad Nacional Autónoma de México, Mexico OPTIMIZING BIOPRODUCT FORMATION FROM PURPLE PHOTOTROPHIC BACTERIA AND WASTEWATER USING MACHINE LEARNING
	11.05-11.25 Invited Talk Ivan Spasojevic, Institute for Multidisciplinary Research Belgrade, Liquid3, Serbia HOW TO PLANT A LIQUID TREE?	11.05-11.20 Ralph Erwin Franciscus Lindeboom, Delft University of Technology, The Netherlands UNDERSTANDING METABOLIC SWITCHING: MODELING RHODOSPIRILLUM RUBRUM GROWTH RATES
	11.25-11.40 Sharon Velasquez Orta, Newcastle University, United Kingdom BIOFILM PHOTO-CULTIVATION FROM ANAEROBIC SLUDGE USING ORGANIC OR INORGANIC CARRIERS	11.20-11.35 Ali Moradvandi, Delft University of Technology, The Netherlands SCENARIO-BASED MODEL PREDICTIVE CONTROL OF PURPLE BACTERIA CULTIVATION: SUBSTRATE CHARACTERIZATION FLUCTUATION, VARIABILITY IN LIGHTING CONDITIONS, AND MODEL PARAMETER UNCERTAINTY
	11.40-11.55 Luisa Maria Rodrigues Gouveia Silva, Laboratório Nacional de Energia e Geologia, Portugal CLEAN WATER, RICH SOILS, PIG DIET: A CIRCULAR MICROALGAE PATHWAY FOR PIG FARMS	11.35-11.50 Kvetoslava Burda, AGH-University of Krakow, Poland TOWARDS AN UNDERSTANDING OF THE MECHANISMS GOVERNING THE TRANSFER OF ELECTRONS AND PROTONS IN TYPE II PHOTOSYSTEMS

Parallel Sessions: 5 and 6	11.55-12.10 Georgina del Puerto Tañà , BETA Technological Centre, Spain ASSESSING THE BIODIGESTIBILITY OF DIGESTATE-GROWN MICROALGAL BIOMASS	11.50-12.05 Dengming Zhu , China Agricultural University, China DATA-DRIVEN OPTIMIZATION AND ADAPTIVE CONTROL OF PHOTOSYNTHETIC BACTERIA CULTIVATION IN OUTDOOR PHOTOBIOREACTORS USING MACHINE LEARNING
	12.10-12.25 Simone Krings , University of Valladolid, Spain CO₂ VALORISATION VIA IMMOBILISED PHOTOSYNTHETIC MICROORGANISMS	12.05-12.20 Rosaria Tizzani , University of Antwerp, Belgium OPTIMISING SPRAY DRYING TO MAXIMISE ANTIOXIDANT RETENTION IN PURPLE PHOTOTROPHIC BACTERIAL BIOMASS
	12.25-12.40 Kanae Hayashi , Soka University, Japan SOIL EXTRACTS FOR GROWTH PROMOTION OF SLOW-GROWING VALUABLE MICROALGAE: TOWARDS MEDIUM DEVELOPMENT	12.20-12.35 Workie Desalegn Tadesse , Soka University, Japan OPTIMIZATION OF MAGNETIC HARVESTING OF FRESHWATER AND MARINE MICROALGAE USING CHITOSAN-COATED MAGNETITE NANOPARTICLES
	12.40-12.55 Thalita Lacerda Dos Santos , São Paulo State University – UNESP, Brazil ASSESSING THE SYMBIOTIC ENHANCEMENT OF PPB SUPPLEMENTATION IN A MICROALGAL COLUMN PHOTOBIOREACTOR FOR HIGH STRENGTH WASTEWATER TREATMENT	12.35-12.50 Ertan Hosafci , Middle East Technical University, Turkey METABOLIC FLUX ANALYSIS OF RHODOBACTER CAPSULATUS ON PRETREATED VINASSE FOR ENHANCED BIOHYDROGEN PRODUCTION UNDER VARIABLE C/N CONDITIONS
	12.55-13.10 Patricia Mohedano Caballero , Ghent University, Belgium ECTOINE PRODUCTION FROM METHANOTROPH-MICROALGAE SYSTEMS: CO CULTURE VERSUS MONOCULTURE STRATEGIES UNDER SALINE AND BIOGAS FED CONDITIONS	12.50-13.05 Saqr Al-Muraisy , Delft University of Technology, The Netherlands WATER, ENERGY & OIL RECOVERY THROUGH A PALM OIL-BASED PHOTOBIOREFINERY APPROACH
Lunch break:	13.10-14.00 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN FOYER	



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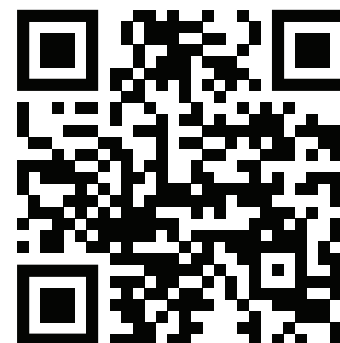


Parallel Sessions: 7 and 8	SESSION 7	SESSION 8
	14.00-16.00 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN Topics: PHOTOREFINERIES BASED ON PURPLE PHOTOTROPHIC BACTERIA (PPB) <i>Session Chairs: Kvetoslava Burda, AGH University of Krakow, Poland, and Maria del Rosario Rodero, Universidad De Valladolid, Spain</i>	14.00-16.00 Location: PRESENTATION ROOM GRAND FLOOR Topics: MICROBIAL ECOLOGY & PHYSIOLOGY OF PPB AND OTHER PHOTOTROPHS <i>Session Chairs: Raquel Lebrero, University of Valladolid, Spain, and Ioanna Vasiliadou, University of Western Macedonia, Greece</i>
	14.00-14.15 Luis Diaz Allegue , Antwerp University, Belgium BENCHMARKING NITROGEN FIXATION IN PURPLE BACTERIA FOR MICROBIAL PROTEIN PRODUCTION	14.00-14.15 Samarpita Roy , Delft University of Technology, The Netherlands HOW PNSB FATTEN UP?
	14.15-14.30 Elisa Huang-Lin , Institute of Sustainable Processes, University of Valladolid, Spain PURPLE PHOTOTROPHIC PLATFORMS BRIDGING CO₂ AND WASTE STREAMS TO HIGH-VALUE CHEMICALS	14.15-14.30 Haifeng Lu , China Agricultural University, China ECOLOGICAL POTENTIAL OF RHODOPSEUDOMONAS PALUSTRIS AS A PURPLE PHOTOTROPHIC DIAZOTROPH FOR SOIL FREE-LIVING NITROGEN FIXATION AND REDUCED-NITROGEN LETTUCE PRODUCTION
	14.30-14.45 Guillaume Bayon-Vicente , University of Mons, Belgium SHIFTING PARADIGMS FROM ENERGY DOWNCYCLING TO NUTRITIONAL UPCYCLING: OPTIMISATION OF BEET MOLASSES FOR RHODOSPIRILLUM RUBRUM BIOMASS AND HIGH-VALUE METABOLITES	14.30-14.45 Laura Toubreau , University of Mons, Belgium SHIFTS IN VOLATILE FATTY ACID CO-ASSIMILATION PATTERNS IN RHODOSPIRILLUM RUBRUM: REDOX CONSTRAINTS AND SUBSTRATE INTERACTIONS
	14.45-15.00 Marco Pezzuto , University of Verona, Italy COUPLING ELECTROCHEMICAL CO₂ REDUCTION TO FORMATE WITH PURPLE PHOTOTROPHIC BACTERIA FOR SINGLE-CELL PROTEIN PRODUCTION	14.45-15.00 María José García-López , Rey Juan Carlos University, Spain PHOTOELECTROSYNTHESIS OF COQ10 BY RHODOPSEUDOMONAS FIXING CO₂
	15.00-15.15 Kota Tsubame , University Soka, Japan SEWAGE TREATMENT AND BIOMASS RECOVERY USING FLUIDIZED CARRIERS WITH PURPLE PHOTOTROPHIC BACTERIA	15.00-15.15 Javier Llama Saus , Rey Juan Carlos University, Spain ENVIRONMENTAL STRESS AS A TOOL TO MODULATE CAROTENOID BIOSYNTHESIS AND STRESS RESPONSES IN RHODOBACTER CAPSULATUS

Parallel Sessions: 7 and 8	15.15-15.30 Francisco Roberto Chavez-Vega , Universidad Nacional Autónoma de México (UNAM), Institute of Engineering, Mexico WINERY WASTEWATER TREATMENT AND BIOPRODUCT GENERATION USING PURPLE PHOTOTROPHIC BACTERIA IN AN OPEN RACEWAY SYSTEM	15.15-15.30 Priscilla Zwiercheczewski , University of Mons, Belgium DECODING ADAPTIVE METABOLISM IN PURPLE NON-SULFUR BACTERIA THROUGH MUTANT LIBRARIES AND FATTY ACID-CENTERED PHENOTYPING
	15.30-15.45 José Ramón Lorenzo Llarena , University Santiago de Compostela, Spain FROM SUBSTRATE CONSUMPTION TO INTRACELLULAR STORAGE: SALINITY EFFECTS IN PPB MIXED CULTURES	15.30-15.45 Sarah Lee , Delft University of Technology, The Netherlands A BIOENERGETIC COMPARISON OF PHOTOTROPHS
	15.45-16.00 Guillermo Martín Atanes , Instituto Tecnológico de Galicia (ITG), Spain MOLYBDATE AS A SULPHATE REDUCING BACTERIA INHIBITOR DURING HYDROGEN PRODUCTION IN PNSB PHOTOBIOREACTORS	15.45-16.00 Rosa Edith Atayupanqui Dueñas , University of Vic - Central University of Catalonia, BETA Technology Centre, Spain STUDY OF DIGESTATE VARIABILITY ON PURPLE PHOTOTROPHIC BACTERIA GROWTH: EFFECTS UNDER DIFFERENT ORGANIC LOADS AND LIGHTING CONDITIONS
Poster Session Coffee break	16.00-17.00 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN	



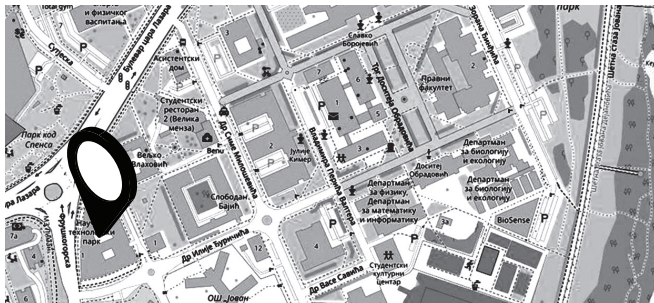
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Parallel Sessions: 9 and 10	SESSION 9	SESSION 10
	17.00-18.15 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN Topics: • PHOTOSYNTHETIC BIOTECHNOLOGY FOR WATER AND AIR TREATMENT • TECHNO-ECONOMIC AND LIFE CYCLE ASSESSMENT OF PROCESSES INVOLVING PHOTO-ACTIVATED PROCESSES IN PHOTOREFINERIES <i>Session Chairs: Ralph Lindeboom, Delft University of Technology, The Netherlands, and Vesna Vasić, Faculty of Technology Novi Sad, Serbia</i>	17.00-18.15 Location: PRESENTATION ROOM GRAND FLOOR Topics: BIOREFINERIES BASED ON MICROALGAE OR CYANOBACTERIA PHOTOREACTOR DESIGN: CHALLENGES AND FUTURE DIRECTIONS <i>Session Chairs: Luisa Gouveia, National Laboratory of Energy and Geology, Portugal, and Joanna Fiedor, AGH University of Krakow, Poland</i>
	17.00-17.15 Juan Sebastian Arcila Henao, Universidad de Caldas, Columbia MICROALGAL BIOFILMS TREATING LOW-STRENGTH WASTEWATER: INFLUENCE OF LIGHT INTENSITY AND SHORT RETENTION TIMES ON BIOMASS PRODUCTIVITY, TREATMENT PERFORMANCE AND BIODIESEL POTENTIAL	17.00-17.15 Gustavo Henrique Da Si, São Paulo State University – UNESP, Brazil REMOVAL OF PSEUDOMONAS AERUGINOSA AND E. COLI BY PHOTOGRANULES IN A BUBBLE COLUMN PHOTOBIOREACTOR
	17.15-17.30 Tuba Hande Erguder, Middle East Technical University, Turkey IMMOBILIZED MICROALGAE-BACTERIA CONSORTIA FOR NUTRIENT REMOVAL FROM REAL WASTEWATER: COMBINED EFFECTS OF N/P RATIO AND PHOTOPERIOD	17.15-17.30 Fabiana Passos, Universitat Politècnica de Barcelona, Spain EFFECT OF SUPPLEMENTING DIFFERENT VFA ON POLYHYDROXYALKANOATES CO-POLYMERS PRODUCTION USING CYANOBACTERIA
	17.30-17.45 Todor Ružić, National Institute of Applied Sciences of Toulouse, France CULTIVATION AND SELECTION OF ANOXYGENIC PURPLE SULFUR BACTERIA FROM WASTEWATER FOR H₂S REMOVAL AND CO₂ SEQUESTRATION	17.30-17.45 Arianna Ecça, Universitat Politècnica de Catalunya, Spain MICROALGAL EXTRACTS AS PLANT BIOSTIMULANTS: EVIDENCE OF HORMONE-LIKE ACTIVITY
	17.45-18.00 Belen Villarreal Toribio, Universitat politècnica de Catalunya, Spain OPTIMISATION AND SEMICONTINUOUS OPERATION OF SCENEDESMUS SP. FOR THE TREATMENT OF RAW BREWERY WASTEWATER	17.45-18.00 Ander Letamendi Azpiazu, Universidad de Cantabria, Spain VALORIZATION OF CHEESE WHEY THROUGH STEADY CULTIVATION OF PROTEIN-RICH MICROALGAE

Parallel Sessions: 9 and 10	18.00-18.15 Yolanda Lopez-Garabato , Universidade de Santiago de Compostela, Spain MINIMISING AERATION REQUIREMENTS IN A PHOTOGRANULAR SYSTEM FOR THE TREATMENT OF WASTEWATER AT SHORT HRT	18.00-18.15 Işıl Yücel , KU Leuven, Belgium 3D-PRINTED BIORECEPTIVE CLAY PANELS AS OPEN BIOREACTORS INFORMED BY ALGAL BIOFILM
SOUL TOUR NOVI SAD	Starts at 18 - join any time that suits you. We recommend starting no later than 19.15 CONFERENCE DAY 2 NETWORKING ACTIVITY, OPTIONAL - FOR REGISTERED PARTICIPANTS Starting location: NTP-NS	





2ND PHOTOREFINERIES CONFERENCE AGENDA PER DAYS

THIRD DAY: 4TH SEPTEMBER 2026

LOCATION: SCIENCE AND TECHNOLOGY PARK NOVI SAD - NTP NS; **WiFi SSID:** guestwifi **Pass:** novisad2023

Keynote and Plenary Lectures	8.30-10.00 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN <i>Session Chairs: Gabriel Capson-Tojo, French National Research Institute for Agriculture, Food and Environment (INRAE-LBE), France, and Daniel Puyol, University Rey Juan Carlos, Spain</i>	
	8.30-9.20 <u>Keynote Lecture</u> Paolo Fornasiero , University of Trieste and ICCOM-CNR, Italy BEYOND THE SURFACE: A PERSONAL JOURNY INTO SUSTAINABLE CATALYSIS	
	9.20-10.00 <u>Plenary Lecture</u> Damian Monllor-Satoca , University of Alicante, Spain MEDIATED PHOTOELECTROCHEMICAL SYSTEMS AS A PROXY FOR ARTIFICIAL PHOTOSYNTHETIC SCHEMES: A NEW PARADIGMA FOR PHOTOREFINEIRES	
Coffee break	10.00-10.20 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN FOYER	
Parallel Sessions: 11 and 12	SESSION 11 10.20-12.50 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN Topics: • PHOTOREFINERIES BASED ON PURPLE PHOTOTROPHIC BACTERIA (PPB) • PHOTOCATALYTIC PROCESSES AND ARTIFICIAL PHOTOSYNTHESIS • TECHNO-ECONOMIC AND LIFE CYCLE ASSESSMENT OF PROCESSESS INVOLVING PHOTO-ACTIVATED PROCESSES IN PHOTOREFINERIES <i>Session Chairs: Vasileia Vasilaki, Imperial College Longdon, United Kingdom, and Tatjana Vulić, Faculty of Technology Novi Sad, Serbia</i>	SESSION 12 10.20-12.50 Location: LECTURE ROOM FIRST FLOOR Topics: • PHOTOSYNTHETIC BIOTECHNOLOGY FOR WATER AND AIR TREATMENT • BIOREFINERIES BASED ON MICROALGAE OR CYANOBACTERIA <i>Session Chairs: Haifeng Lu, China Agricultural University, China, and Gustavo Henrique Da Si, São Paulo State University – UNESP, Brazil</i>

Parallel Sessions: 11 and 12	10.20-10.35 Konstantinos Christoforidis , Democritus University of Thrace, Greece PHOTOCATALYTIC ACTIVITY OF TiO₂/CARBON NITRIDE/MOF TERNARY COMPOSITES FOR CO₂ REDUCTION AND H₂ PRODUCTION	10.20-10.35 Antonio León Vaz , University of Valladolid, Spain DEVELOPING A MICROALGAL-BACTERIAL CONSORTIUM FOR THE REMOVAL OF POLLUTANTS FROM AGRO INDUSTRIAL WASTEWATER UNDER SEASONAL TEMPERATURE CONDITIONS
	10.35-10.50 Massimo Trotta , Istituto per i Processi Chimico Fisici - Consiglio Nazionale delle Ricerche, Italy NOVEL APPLICATION OF PURPLE BACTERIA	10.35-10.50 Anupreet Kaur Chowdhary , Soka University, Japan PHOTOPERIOD-DEPENDENT GROWTH OF CHROMOCHLORIS ZOFINGIENSIS USING DHS-TREATED EFFLUENT
	10.50-11.05 Elena Barbera , University Padova, Italy TAILOR-MADE LED ILLUMINATION FOR PURPLE BACTERIA-BASED PHOTOBIOREFINERIES: HYDROGEN PRODUCTION AND CO-PRODUCT POTENTIAL WITH TECHNO-ECONOMIC ASSESSMENT	10.50-11.05 Juana Beatriz Durán Vargas , Universidad de Guanajuato, Mexico BIOLOGICAL NITROGEN REMOVAL FROM AN ANAEROBIC DIGESTATE LIQUID FRACTION APPLYING CONSORTIA OF MICROALGAE AND NITRIFYING BACTERIA UNDER NATURAL IRRADIATION IN GUANAJUATO, MEXICO
	11.05-11.20 Massimo Sgarzi , Ca' Foscari University of Venice, Italy SECOND GENERATION BIOMASS-DERIVED COMPOSITE FILMS FOR CIPROFLOXACIN REMOVAL FROM WASTEWATER	11.05-11.20 Laura Gabriela Vargas Estrada , University of Valladolid, Spain OLIVE-MILL WASTEWATER PARTICLES AS EFFECTIVE BOOSTERS OF ARTHROSPIRA PLATENSIS METABOLISM DURING PHOTOSYNTHETIC BIOGAS UPGRADING
	11.20-11.35 Shervin Shahvi , Imperial College London, United Kingdom A MIXED-METHOD CONSUMER ACCEPTANCE AND STAKEHOLDER ENGAGEMENT FRAMEWORK FOR NOVEL PURPLE PHOTOTROPHIC BACTERIA (PPB)-BASED FOOD PRODUCTS	11.20-11.35 Samuel Stegman , University of Valladolid, Spain FROM GREENHOUSE GAS TO GOODS: PPB TREATING CARBON MONOXIDE & SYNTHESIS GAS
	11.35-11.50 Dieke Schelvis , Delft University of Technology, The Netherlands DUAL LAND USE FOR FOOD AND ENERGY: PHOTOVOLTAIC-INTEGRATED BIOPROCESSES FOR SINGLE-CELL PROTEIN PRODUCTION	11.35-11.50 Ana Sáenz Cenicerós , Universitat Politècnica de Catalunya, Spain FOOD INDUSTRY EFFLUENTS AS A CULTURE MEDIUM FOR CYANOBACTERIA

Parallel Sessions: 11 and 12	11.50-12.05 Konstantinos Pispas , Rey Juan Carlos University, Spain THE ROLE OF BIOCHAR IN MUNICIPAL WASTEWATER TREATMENT USING PURPLE PHOTOTROPHIC BACTERIA	11.50-12.05 Haymanot Yenesew Sewunet , Soka University, Japan SEMICONTINUOUS CULTIVATION OF AN ETHIOPIAN STRAIN LIMNOSPIRA FUSIFORMIS USING ANEROBIC DIGESTION EFFLUENT
	12.05-12.20 Noelia Álvarez Gil , Universidade de Santiago de Compostela, Spain ENHANCING PHA PRODUCTION IN PPB VIA pH-INDUCED STRESS BEYOND NUTRIENT LIMITATION	12.05-12.20 Tercan Çatakli , Middle East Technical University, Turkey INSIGHTS INTO THE IMMOBILIZATION BEHAVIOR OF MICROALGAL-BACTERIAL CONSORTIA (MBC) UNDER VARYING AERATION AND MIXING CONDITIONS
	12.20-12.35 Arianna Reolon , University of Antwerp, Belgium EFFECT OF ABIOTIC STRESS IN LATE EXPONENTIAL PHASE ON LIPIDS, COENZYME Q10 AND CAROTENOIDS PRODUCTION BY THE PURPLE BACTERIA CEREIBACTER SPHAEROIDES	12.20-12.35 Julieta Capuj , University of Alcala, Spain SCALING UP A BIOELECTROCHEMICAL BIOFACTORY CONCEPT FROM BREWERY WASTEWATER USING PURPLE PHOTOTROPHIC BACTERIA
	12.35-12.50 Elia Giovanni Marelli , University of Turku, Finland DEVELOPING PHOTOSYNTHETIC BIOCATALYST FOR SOLAR CHEMICAL PRODUCTION	12.35-12.50 Oktay Yerlikaya , Faculty of Agriculture, Turkey VALORIZATION OF CHEESE WHEY USING PURPLE PHOTOTROPHIC BACTERIA: APPLICATIONS AND STAKEHOLDER PERSPECTIVES
Lunch break	12.50-13.40 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN FOYER	
CLOSING CEREMONY	13.40-14.30 Location: AMPHITHEATRE MILEVA MARIC EINSTEIN	• Presentation of candidates for the Next PHOTOREFINERIES Conference Host • 2nd PHOTOREFINERIES Awards • Closing Remarks & Final Impressions
AUTHENTIC NORTHERN SERBIAN COUNTRY RETREAT WITH A GUIDED KAYAKING EXPERIENCE	14.30 CONFERENCE DAY 3 NETWORKING ACTIVITY, OPTIONAL - FOR REGISTERED PARTICIPANTS Starting location: In front of Faculty of Technology Novi Sad 	

2ND PHOTOREFINERIES CONFERENCE - POSTER PRESENTATIONS

Location: AMPHITHEATRE MILEVA MARIC EINSTEIN FOYER

1	Chiara Capelli	University of Florence	TRANSCRIPTOMIC CHARACTERIZATION OF RHODOPSEUDOMONAS PALUSTRIS 42OL IN BIO-ELECTROCHEMICAL SYSTEMS FOR OPTIMIZED RESOURCE RECOVERY	Italy
2	Mingze Shi	University of Galway	PURPLE FUTURES: QUANTIFYING MARKET ADOPTION BARRIERS FOR PPB COMMERCIALIZATION THROUGH BIOGAS INDUSTRY INSIGHTS	Ireland
3	Kenan Dalkilic	Hacettepe University	BEYOND REMEDIATION: TECHNICAL READINESS AND ECONOMIC FRONTIERS OF PHOTOTROPHIC PURPLE BACTERIA (PPB) BIOREFINERIES (2024–2026)	Turkey
4	Rosaria Tizzani	University of Antwerp	HIGH-THROUGHPUT ENRICHMENT OF HALOALKALIPHILIC PURPLE BACTERIA FOR MICROBIAL FOOD APPLICATIONS	Belgium
5	Carlos Lavesa de Pablo	Rey Juan Carlos University	DIFFUSE GAS FLOWS CONVERSION INTO HIGH-VALUE-ADDED COMPOUNDS BY THERMOPHILIC PHOTOTROPHIC BACTERIA IN THE POST-PURPLE PROJECT	Spain
6	Víctor Galve Santacruz	Rey Juan Carlos University	ANODIC POTENTIAL AS A CONTROL PARAMETER IN PPB PHOTO-BIOELECTROCHEMICAL VALORIZATION OF WAO-TREATED REFINERY SLUDGE	Spain
7	Akari Yoshida	Soka University	SELECTIVE CULTIVATION OF ARTHROSPIRA PLATENSIS USING NH ₃ TOLERANCE TO SUPPRESS MICROALGAL AND CYANOBACTERIAL CONTAMINANTS	Japan
8	Paula Alejandra Bautista Arcila	Nicolaus Copernicus University	MATCHING BIOMASS VALORIZATION AND BIOHYDROGEN PRODUCTION THROUGH PURPLE PHOTOTROPHIC BACTERIA	Poland
9	Joana Fradinho	NOVA University Lisbon	BIO-BASED COMPOUNDS FROM CHLOROFLEXUS AURANTIACUS: THE ROLE OF LIGHT INTENSITY AS STRESS CONDITION AND CARBON SOURCE	Portugal
10	Rubén Díez Montero	Universidad de Cantabria	BIOREMEDIATION AND RESOURCE RECOVERY FROM CHEESE WHEY THROUGH ROTEIN-RICH MICROALGAE CULTIVATION	Spain
11	Muazzez Gürkan Eser	Tekirdağ Namık Kemal University	EVALUATION OF WASTEWATER FROM CLOSED-SYSTEM TILAPIA FARMING AS A GROWTH MEDIUM FOR SPIRULINA	Turkey
12	Thalita Lacerda Dos Santos	São Paulo State University	EFFECT OF ACCLIMATION ON GROWTH AND NUTRIENT REMOVAL OF NATIVE MICROALGAE POLYCULTURE GROWN IN ANAEROBIC SANITARY WASTEWATER FROM DIFFERENT TREATMENT PLANTS	Brazil
13	Tamara Palanački Malešević	University of Novi Sad	PAN-LIFE-CARPET AS AN INTEGRATED BIOREFINERY STRATEGY FOR LANDRESTORATION	Serbia

14	Andrew Ward	University of Queensland	ANAEROBIC CO-DIGESTION OF WASTEWATER ALGAE FROM THREE WASTEWATER TREATMENT CONFIGURATIONS WITH FAT, OIL AND GREASE	Australia
15	Carla Cristina Mestre Verissimo Dias	Universidade Nova de Lisboa	WHITE LIGHT CULTIVATION OF CYCLOTELLA CHOCTAWHATCHEANA FOR EPS PRODUCTION AND APPLICATION IN CHITOSAN-BASED FILMS	Portugal
16	Carla Cristina Mestre Verissimo Dias	Universidade Nova de Lisboa	MICROALGAL EXOPOLYSACCHARIDES AS SUSTAINABLE FUNCTIONAL INGREDIENTS FOR BIODEGRADABLE FILMS: PRODUCTION, PROPERTIES AND APPLICATIONS.	Portugal
17	Joanna Fiedor	AGH University of Krakow	PHYSIOLOGICAL RESPONSE OF PURPLE PHOTOTROPHIC BACTERIA TO THE ELEVATED LEVEL OF MANGANESE IONS	Poland
18	Cristina Cavinato	Ca' Foscari University of Venice	BIOHYDROGEN PRODUCTION FROM ORGANIC WASTE IN A SPACE ENVIRONMENT: THE POTENTIAL OF PURPLE PHOTOTROPHIC BACTERIA IN THE BIOMOON PROJECT	Italy
19	Gustavo Henrique Ribeiro Da Si	São Paulo State University	PHOTOGRANULE PERFORMANCE UNDER OPTICAL LIMITATION IN REAL WASTEWATER STREAMS	Brazil
20	Ioanna Vasiliadou	University of Western Macedonia	CHARACTERIZATION OF RESIDUES FLOWS FROM THE URBAN WASTE TREATMENT PLANT IN WESTERN MACEDONIA LOOKING FOR BIOBASED SOLUTIONS	Greece
21	Oktay Yerlikaya	Ege University	BIOCONVERSION OF CHEESE WHEY USING PURPLE PHOTOTROPHIC BACTERIA: METABOLIC STRATEGIES, PROCESS CHALLENGES, AND FUNCTIONAL APPLICATIONS	Turkey
22	Gülşah Çalışkan Koç	Uşak University	MICROENCAPSULATION OF PPB-DERIVED BIOACTIVE COMPOUNDS BY SPRAY DRYING	Turkey
23	Michal Pudlak	Institute of Experimental Physics, Slovak Academy of Sciences	EXCITON AND ELECTRON TRANSFER IN BACTERIAL PHOTOSYNTHETIC UNIT	Slovakia
24	Jana Petrovic	University of Belgrade	COMPARATIVE STUDY OF Ag- AND Cu-MODIFIED g-C ₃ N ₄ PHOTOCATALYSTS FOR VISIBLE-LIGHT Cr(VI) REDUCTION	Serbia
25	Klemen Bohinc	University of Ljubljana	BACTERIAL ADHESION AND PHOTOCATALYTIC SURFACES	Slovenia
26	Joanna Fiedor	AGH University of Krakow	TEMPERATURE EFFECT ON PHOTOSYNTHETIC MEMBRANE ORGANISATION OF PURPLE BACTERIA STUDIED BY ATOMIC FORCE MICROSCOPY	Poland

27	Büşra Bayar	Universidade Nova de Lisboa	STUDIES OF EXTRACELLULAR ELECTRON TRANSFER IN RHODOPSEUDOMONAS PALUSTRIS TIE-1 AIMING TO IMPROVE BIOELECTROCHEMICAL APPLICATIONS	Portugal
28	Laura Toubeau	University of Mons	CAS9-ENABLED SINGLE-CELL ANALYSIS REVEALS NITROGENASE EXPRESSION HETEROGENEITY IN RHODOSPIRILLUM RUBRUM	Belgium
29	Muazzez Gürkan Eser	Tekirdağ Namık Kemal University	INVESTIGATION OF THE EFFECTS OF RHODOBACTER CAPSULATUS AND CEREIBACTER SPHAEROIDES ON THE GROWTH OF CALENDULA OFFICINALIS ON NICKEL-CONTAMINATED SOIL	Turkey
30	Nishitha Landgey	University of Mons	REDOX BALANCING MECHANISM IN PURPLE BACTERIA: FROM MACROMOLECULES TO METABOLIC GENE EXPRESSION	Belgium
31	Darko Dimitrovski	Ss Cyril and Methodius University	INFRARED LIGHT INTENSITY MODULATES CAROTENOID ACCUMULATION IN A NEWLY ISOLATED RHODOBACTER STRAIN	North Macedonia
32	Fabio Bracali	Università degli Studi di Firenze	SPATIAL PROFILING AND SAMPLING PROTOCOL VALIDATION IN A PPB-POWERED RACEWAY POND TREATING MUNICIPAL WASTEWATER	Italy
33	Jiang Kunrong	China Agricultural University	RHODOPSEUDOMONAS PALUSTRIS ENHANCES NITROGEN UTILIZATION EFFICIENCY AND LETTUCE PRODUCTIVITY UNDER REDUCED FERTILIZATION BY RCESTRATING RHIZOSPHERE MICROBIOME–METABOLOME NETWORKS IN ACIDIC LATOSOL	China
34	Etiele Greque de Morais	Universitat Politècnica de Catalunya	A CIRCULAR ECONOMY APPROACH: ASSESSING THE ENVIRONMENTAL PROFILE OF MICROALGAE-BASED FOOD AND FEED PRODUCED FROM INDUSTRIAL WASTEWATERS	Spain
35	Samiye Akın Adal	Afyon Kocatepe University	EXERGY-, EXERGoeconomic- AND LIFE-CYCLE-BASED EVALUATION OF PHOTO-ACTIVATED PROCESSES IN PHOTOREFINERIES	Turkey
36	Yasemin Celebi	Uşak University	AI-ASSISTED AND MODULAR PHOTOREACTOR DESIGN FOR SUSTAINABLE RESOURCE RECOVERY: CHALLENGES AND FUTURE PERSPECTIVES	Turkey
37	Caroline Autenrieth	Fraunhofer Institute for Manufacturing Engineering and Automation, IPA	CUSTOM-BUILT LED-ILLUMINATION SETUP FOR PURPLE BACTERIA	Germany
38	Rahman Nurkovic	University Sarajevo	LIFE CYCLE ASSESSMENT AND TECHNO-ECONOMIC ANALYSIS OF INDUSTRIAL WASTEWATER	Bosnia and Herzegovina
39	Branislava Tenjovic	Faculty of Pharmacy	ULTRASOUND-ASSISTED EXTRACTION AS A SUSTAINABLE TOOL FOR SPIRULINA PLATENSIS PIGMENTS RECOVERY	Serbia

40	Srđan Stanković	University of Belgrade,	EFFECTS OF RESIDUAL IONIC LIQUIDS IN SALT RICH AQUEOUS PHASES FROM BIPHASIC WASTEWATER TREATMENT SYSTEMS ON GREEN MICROALGAE UNDER MIXOTROPHIC CONDITIONS	Serbia
41	Nayil Dinkci	Ege Univesity	FROM WASTE TO VALUE: VALORISING CHEESE WHEY THROUGH PURPLE PHOTOTROPHIC BACTERIA FOR SINGLE - CELL PROTEIN PRODUCTION	Turkey
42	Zeinab Mousania/ Vasileia Vasilaki	Imperial College London	A LIFE CYCLE ASSESSMENT FRAMEWORK FOR QUANTIFYING ENVIRONMENTAL IMPACT IN PPB SYSTEMS	United Kingdom
43	Isabel Cristina Espinoza Pavón	CIEMAT - Plataforma Solar de Almería	ISOBUTANOL PRODUCTION BY GENETICALLY ENGINEERED CUPRIAUDUS NECATOR	Spain
44	Đurđica Karanović	Faculty of Technology Novi Sad	LAYERED DOUBLE HYDROXIDE-DERIVED MIXED OXIDES FOR PHOTOCATALYTIC DEGRADATION OF ORGANIC POLLUTANTS: LINKING STRUCTURE/TEXTURE TO PERFORMANCE	Serbia
45	Mirjana Sulejmanović	Faculty of Technology Novi Sad	GREEN AND INNOVATIVE NADES APPROACH FOR SPIRULINA PLATENSIS PIGMENT RECOVERY	Serbia
46	Slađana Krivošija	Faculty of Technology Novi Sad	FOOD-GRADE SUPRAS SYSTEM FOR SUSTAINABLE RECOVERY OF PIGMENTS FROM RHODOPSEUDOMONAS PALUSTRIS	Serbia

until we meet again...

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