Scientific Program

5th International Conference on
Green Chemistry and
Sustainable Engineering

Sciknowledge™

European Education Scientific Conferences

GreenCHEM-22 Welcoming Message

Dear Colleagues,

The **5th International Conference on Green Chemistry and Sustainable Engineering (GreenChem-22)** is organized by academics and researchers belonging to different scientific areas of the University Complutense of Madrid, University Carlos III of Madrid, University of Extremadura, University of las Palmas de Gran Canaria, Universidade de Tras-os-Montes e Alto Douro, University of Granada, University of Santiago de Compostela, and University of Jaen, with the technical support of **Sciknowledge European Conferences.**

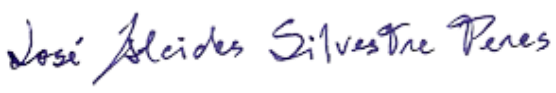
This event aims to create an international forum for academics, researchers and scientists worldwide to discuss worldwide results and proposals regarding the soundest issues related to **Green Chemistry and Sustainable Engineering.**

This event will include the participation of renowned keynote speakers, oral presentations, poster sessions, technical conferences related to the topics dealt with in the Scientific Program, and an attractive social and cultural program.

The papers will be published in the Abstracts E-book of the Conference. Those communications with enough quality can be further considered for publication in International Conference Journals. At the authors' choice, those works unsuitable for publication in any congress journals will be published in the Extended Abstracts E-book.

To finish, I hope that all of you will enjoy the Conference, and I wish our visitors from abroad will have an enjoyable stay in Rome.

Thank you



Prof. José Alcides Peres
Chemistry Department
University of Trás-os-Montes e Alto Douro,
Portugal, UE

ORGANIZING COMMITTEE GREENCHEM-22

Chairman

Prof. José Alcides Peres PhD
Chemistry Department
University of Trás-os-Montes e Alto Douro, Vila Real, Portugal

Co-Chairman

Prof. Avelino Nuñez-Delgado PhD
Department of Edafology and Agricultural Chemistry
University of Santiago de Compostela, Spain

Prof. Paulo Aloísio Edmond Reís da Silva Augusto PhD
Department of Chemical Engineering
University of Salamanca, Spain

Members

Prof. Raviraj M. Kulkarni, PhD
Department of Chemistry
Gogte Institute of Technology, Udyambag, Belgaum, Karnataka

Prof. Silvia Álvarez Torrellas PhD
Chemical Engineering Department
University Complutense of Madrid, UCM

Prof. Vahid Jabbari PhD
Chemistry Department
The University of Texas at El Paso

Prof. Elisenda Pulido Melián PhD
Chemical Department
University of Las Palmas de Gran Canaria

Prof. Juan García Rodríguez PhD
Chemical Engineering Department
University Complutense of Madrid, Spain

Prof. Marco Race PhD
Department of Civil and Mechanical Engineering
University of Cassino and Southern Lazio, Italy

Prof. Yaoyu Zhou PhD
College of Resources and Environment
Hunan Agricultural University, China.

Prof. Joaquín R. Domínguez Vargas PhD
Department of Chemical Engineering and Chemical Physics
University of Extremadura – UEx, Spain

GREENCHEM-22 PROGRAM (provisional)
Three-day event

Important Note

Conference attendees have accepted in the terms and conditions of their registration that their presentation will take place on any day and hour of the schedule established by the Conference Organization.

The day and order of presentation assigned by the Organization to speakers and poster-type presenters may not be altered by particular requests. Changes will only be accepted for reasons of ***delay in the visa or flight****, which must always be* ***previously accredited documentary.***

Presenters who are not in their place in the assigned time slot will lose the right to present the work and obtain their certificate.

Attention! The use of FFP2 mask is mandatory in the Niccolo Cusano University

Wednesday, 20th July 2022 (afternoon)

SCHEDULE	MAIN ROOM (Ground floor)	ROOM 1 (First floor)
13:30-14:30 Checking name and ID number	RECEPTION LUNCH	
14:30-15:30 (afternoon)	Documentation Delivery Only GREENCHEM attendees	
15:30-15:45	Opening session	
15:45-16:30	Plenary Talk 1 Green Processing Driven by Waste Recycling Prof. João Labrincha University of Aveiro Portugal	

	GREEN CHEMISTRY	SUSTAINABLE ENGINEERING
16:30 – 17:45	**Decision Making on Green Chemistry: Design & Optimization of Sustainable Approaches offered by CAS SciFinder-n** Sofiem Garmendia CAS Spain **Eco-friendly process for selective tantalum recovery using ionic liquids** Guilhem Arrachart Université Montpellier France **Magnetic Methods and Particles as Real Green and Sustainable Alternatives** Paulo Augusto University of Salamanca Spain **Augmenting the performance of eco-friendly greases using synergistic natural resources** Ankit Saxena Indian Institute of Technology Delhi India	**Phenanthrene removal from a spent sediment washing solution in a continuous flow stirred tank reactor** Francesco Bianco University of Cassino and Southern Lazio Italy **Degradation of organic matter from winery wastewater by a biologic-photo-Fenton system** Nuno Jorge UTAD Portugal **Additives for Improved Hydrothermal Carbon from Olive Mill Wastewater** Ruben Correcher University of Alicante Spain **Improved Electrochemical Performance of Zinc Anodes by EDTA in Near-Neutral Zinc–Air Batteries** Saul Said Montiel Guerrero Forschungszentrum Jülich GmbH Germany
17:45-18:15	**POSTER SESSION** **GreenCHEM-1** **COFFEE BREAK**	
18:15 -19:00	**GREEN CHEMISTRY** **Enzymatic biodiesel production from microalgae** Joana Rodrigues Quintas de Oliveira Universidade do Porto Portugal **Green Production of Lithium Sulfide for Solid State Batteries** Colin Wolden Colorado School of MInes USA	**SUSTAINABLE ENGINEERING** **Development of high quality lignin-based carbon fibres** Anne Beaucamp University Of Limerick Ireland **Degradation of organic contaminants in winery wastewater by coagulation-microfiltration-photo-Fenton process** Nuno Jorge UTAD Portugal

GREENCHEM-22

Thursday, 21st July 2022 (morning)

SCHEDULE	MAIN ROOM (Ground Floor)	ROOM 1 (First Floor)
08:45-09:30	**Plenary Talk 2** **Tackling emerging risks in wastewater through the use of sulfate radical-based AOPs** **Jorge Rodríguez Chueca** **Universidad Politécnica de Madrid** **Spain**	
09:30 – 11:30	**WATER TREATMENT** **Evaluation of an application for forecasting near real-time water requirements of apple orchards in the Western Cape, South Africa** Nompumelelo Mobe Council for Scientific and Industrial Research South Africa **WATER TREATMENT** **Directional outlyingness for the detection of functional outliers in water quality data** Xurxo Rigueira University of Vigo Spain **Assessment of Biofiltration Process for Removal of Trace Organic Pollutants from Secondary Treated Refinery Wastewater** Prashant Sinha IIT Bombay **India** **Performance of the Heterogeneous Copper Catalysts During Wet Oxidation of Biomethanated Spent Wash** Inderjeet Khatri Indian Institute of Technology India **Microplastics in salt production from Iberian Salt Mines** Maria del Mar Cledera-Castro UNIVERSIDAD PONTIFICIA COMILLAS Spain	**GREEN CHEMISTRY** **Aqueous-phase reforming of aqueous fraction of bio-oil derived from biomass pyrolysis** Francisco Heras Universidad Autonoma de Madrid Spain **GREEN CHEMISTRY** **A Novel Route for the Green and Easy Production of Thermochromic VO_2 Nanoparticles and Thin Films for Smart Windows** Francisco M. Morales University of Cadiz Spain **Affinity immobilization strategy as an alternative for the binding of formate dehydrogenase on a carbon felt support for carbon dioxide reduction to formic acid** Diego Maureira PUCV Chile **Synthesis of biobased oligomeric esteramides and esters by sustainable green pathways** Francisc Peter University Politehnica of Timisoara Romania **Influence of Selected Contaminants on the Rheological Behavior of Filtered Polypropylene Recyclates** Ines Traxler Competence Center CHASE GmbH Austria

	Dynamic Bayesian Network approach for prediction and knowledge extraction of anomalous water events Maria Pazo Rodriguez University of Vigo **Spain**	**Removal of phenolic compounds from winery and olive mill wastewater by NTA-photo-Fenton process** Jose Peres University of Tras-os-Montes and Alto Douro Portugal
11:30-12:00	**POSTER SESSION** **WWEM-2** **GreenCHEM-2** **COFFEE BREAK**	
12:00 – 14:00	**VALORIZATION & RECYCLING** **Biohydrogen production from food waste via lactate-driven dark fermentation: role of operational pH and solid content** Lois Regueira Marcos University of Valladolid Spain **Influence of culture parameters on hydrogen production from fruit and vegetable waste by lactate-driven fermentation** Leonardo Jose Martinez Fundación General de la Universidad de Valladolid Spain **Low- and mid-temperature pyrolysis of the anaerobic digestion solid by-product for pyro-oil and biochar generation** Panagiotis Basinas VSB Technical University of Ostrava Czech Republic **Improving the anaerobic digestion of food waste through pretreatments** Carlos Morales Polo UNIVERSIDAD PONTIFICIA COMILLAS Spain **Technology for optimal thermal treatment of automotive waste** Veronika Blahuskova VSB Technical university of Ostrava Czech Republic	**SUSTAINABLE ENGINEERING** **Biofuels production by the synergistic co-valorization of almond hulls and disposable face masks in seawater** Javier Remon Instituto de Carboquimica (ICB). Spanish National Research Council (CSIC) Spain **An Overview of Engineered Nano Materials: Regulation / Management, Fate and Toxicity** Alvaro Rodriguez Garcia University of Salamanca Spain **Cork as a synergistic additive in flame retardant systems** Farnaz Ghonjizadeh-Samani Universitat Politécnica de Catalunya Spain **MMF value-added commodity production by heterogeneous catalytic etherification of biomass building block** J. Requies UPV Spain **Heavy metals toxic effects on seeds germination, morphological traits, and early growth of three species of medicinal plants** Laura Hagiu Zaleschi eœIon Ionescu de la Brade Iasi University of Life Sciences Romania

	Optimization of olive mill wastewater sludge biodegradation (OMWS) by microbial inoculation methodology: Evaluation of the process efficiency on physicochemical, pollutants removal and microbial community succession BOUHIA Youness AgBS Marrakech	**Single and binary mixture of lead, cadmium and nickel phytotoxic effects caused to oregano (Origanum vulgare L.)** eœlon Ionescu de la Brade Iasi University of Life Sciences Romania
14:00-15:30	**LUNCH**	
15:30-20:30	**BUS TOURISTIC TOUR 1h:30m (when you wish, an individual ticket for each attendant)** **Ticket delivery for each registered attendant: Thursday, 21st July, from 9:30 to 13:15 at the Registration Desk**	
21:00-22:30	**NIGHT VATICAN TOUR, ALL TOGETHER (ASK FOR MEETING POINT at Registration Desk)**	

GREENCHEM-22

Friday, 22nd July 2022 (morning)

SCHEDULE	MAIN ROOM (Ground Floor)	ROOM 1 (First Floor)
08:45-11:30	**WWEM** **Compensating wastewater composition effects with reactor operation mode in an electrochemical Advanced Oxidation Process** Sara Feijoo KU Leuven Belgium **Optimization of electro-Fenton process applied to the treatment of brines in a context of industrial symbiosis** Luana Sarinho University of Aveiro Portugal	**GREENCHEM** **Effect of different washing conditions on the removal efficiency of selected compounds in biobased materials** Konstanze Kruta Competence Center CHASE GmbH Austria **Microalgal cultures for the bioremediation of effluents with different nitrogen to phosphorus ratios** Eva Salgado LEPABE Portugal

	IoT Instrumentation For Measurement and Modelling Of Wetting Front Propagation Dynamics Using Soil Electrical Impedance Data Jose Antonio Gutierrez Tecnologico Nacional de Mexico Mexico **Membrane photobioreactor as advanced treatment of anaerobic effluents: photoperiod influence on its performance** Luisa Vera Universidad de La Laguna **Magnetic Fenton and Photo-Fenton in Wastewater Treatment: Aiming Real Applications** Alvaro Rodriguez Garcia University of Salamanca **Spain** **VALORIZATION & RECYCLING** **Heterotrophic microalgae-based biofertilizer from agro-food industry** wastewater obtained by spray drying Lidia Garrote Fundación CARTIF Spain **Heterotrophic microalgae cultivation through the food processing industry wastewater treatment** Lidia Garrote Fundación CARTIF Spain	**Phenanthrene removal from a spent sediment washing solution in a continuous flow stirred tank reactor** Mar University of Cassino and Southern Lazio Italy **Greening the synthetic process by transfer of 1,2-debromination of tricyclic imides from solution to mechanochemistry** Davor Margetic Rudjer Boskovic Instittute Croatia **Highly efficient and regenerable ion exchange resin supported cobalt nanoparticle catalysts for hydrogen production via sodium borohydride hydrolysis** De Clercq Jeriffa Ghent University Belgium **GREEN CHEMISTRY** **New approach for production of energy sources from degradation of paraffin wax through ultrasonic supported photocatalysis** M.T. Zaky Egyptian Petroleum Research Institute (EPRI) Egypt **Kinetic, Equilibrium and Thermodynamic Studies of Cadmium (II) biosorption by microbial biomass from synthetic wastewater** Mihaela Rosca eœIon Ionescu de la Brade Iasi University of Life Sciences Romania
11:30-12:00	**POSTER SESSION** **WWEM-3** **GreenCHEM-3** **COFFEE BREAK**	
12:00 – 14:00	**Modeling Potential Suitable Sites for Rainwater Harvesting using GIS and Remote Sensing in Rwanda - A Case of Nyabugogo Catchment Area.** Adeline Umugwaneza Xinjiang Institute of Ecology and Geography China	**Optimization of the visible light driven system aimed to hydrogen generation in presence of Cu_2O/TiO_2 composite photocatalyst** Marica Muscetta Universite degli Studi di Napoli Federico II Italy

ENERGY & INFRAESTRUCTURE

A Systematic Approach to Enable Treading Lightly on the Environment for Water, Waste and Energy Infrastructure Projects
Martyn Phillips
Team Focus Group
Canada

Closing the loop through water and heat valorization
Muriel de Carvalho Iten
Instituto De Soldadura e Qualidade
Portugal

Energy analysis of apple peel drying in a solar-assisted heat pump dryer
Neslihan Colak Gunes
Ege University
Turkey

Two-dimensional kinematic waves over small watersheds of non-convex topography in Northern Iraq
Koichi Unami
Kyoto University
Japan

Chaotic Multi-Objective Self-Adaptive Differential Evolution Algorithm coupled with CERI for Water Distribution Network Design
Mohamed Hamouda
United Arab Emirates University
United Arab Emirates

ELECTROCHEMICAL SENSORS BASED ON CARBON FOR THE DETECTION OF MICROPOLLUTANTS
Lourhzal OUMAYMA
ICMN - Universite d'Orleans
France

Artificial neural networks and response surface methodological approach for modelling of Cd (II) biosorption by different microbial biomasses
Mihaela Rosca
eœIon Ionescu de la Brade Iasi University of Life Sciences
Romania

Comparative LCA analysis of Cr(VI) biosorption from wastewaters using microorganisms
I. M. Simion
Iasi University of Life Sciences (IULS)
Romania

Comparative enviromental impacts generated by the removal of Cd(II) from wastewaters by two types of microorganisms
I. M. Simion
Iasi University of Life Sciences (IULS)
Romania

Alcohol-based Ionic Liquid Analogues: A Molecular Dynamics Study
Elisabete S. C. Ferreira
Universidade do Porto
Portugal

Comparison of non-covalent interactions in ionic liquids mixtures and deep eutectic solvents: molecular dynamics study
Iuliia Voroshylova
REQUIMTE, LAQV
Portugal

14:00-15:30

CLOSING COCKTAIL

and

MUSIC CHAMBERT CONCERT

Flute and Piano Duet

POSTER SESSIONS
GreenCHEM-1
Wednesday, 20th July 2022 (afternoon) 17:45-18:15

TOPIC 1: GREENCHEMISTRY

TOPIC 2: SUSTAINABLE ENGINEERING

MOFs and Cellulose Acetate/MOFs Membranes for Efficient Removal of Organic Pollutants from Wastewater	Ana Sofia Figueiredo	94	1
Production and Isolation of Extracellular Bioactive Compounds from the Red Microalgae Porphyridium cruentum	Ana Sofia Figueiredo	96	1
Olive mill wastewater treatment by coagulation-flocculation-decantation and adsorption processes	Ana Teixeira	80	2
Production and Extraction Strategies for High-Value Bioactive Compounds from Porphyridium cruentum	Magda Semedo	97	1
Production and Evaluation of Extracellular Polymeric Substances from Chlorococcum amblystomatis	Magda Semedo	98	2
Quality Assessment of Coffee from Gorongosa: Polysaccharides and Acrylamide Analysis	Sónia Martins	99	2
Honey authentication using the emission-excitation matrices	Sorina Ropciu	123	2
Investigation of the palladium-catalyzed aminocarbonylation reactions in green solvents	Nuray Uzunlu	112	1
Marlite as supplementary cementitious material	Martin Bohac	59	2
High efficiency Violet phosphorus / Black phosphorus multi-structure photocatalyst for Hydrogen evolution	Rak Hyun Jeong	42	1
Pt-based bimetallic catalysts for aqueous-phase reforming of water-soluble fraction of biomass pyrolysis bio-oil	Francisco Heras	138	1

Enzymatic modification of phenolic rich extracts from green marine macroalgae Ulva sp. for the enhancment of its biological activity	HARALAMBOS STAMATIS	106	1
Evaluation and Characterization of High-Value Bioproducts Isolated from an Industrially Produced Microalgae	Patricia Barata	114	1
One-pot Microwave-assisted Synthesis of Bioactive Carbon Dotsfrom Tomato Industry Waste	Patricia Barata	117	1

POSTER SESSIONS
WWEM-2
Thursday, 21st July 2022 (morning) 11:30-12:00

TOPIC 1: WASTE

TOPIC 2: WATER

TOPIC 3: ENERGY ENGINEERING and CLIMATE CHANGE

Title	Name	ID	Topic
Bioelectricity generation using petroleum refineries wastewater	Sara Shebl	55	1
LCA evaluation of electrocoagulation fluoride removal the role of biogas for pH control and energy supply	Sonia Denise Ferreira Rocha	69	1
An Open-source tool for water, energy and waste management integrated assessment	Muriel de Carvalho Iten	52	1
Limitations in the design of an industrial wastes power plant: analysis of the instalation considering the turbine inlet steam pressure.	Francisco J. Gomez de la Cruz	63	1
Convective drying of mango stone pieces.	Francisco J. Gomez de la Cruz	64	1
Production of Boron-Doped PET POY Yarns Containing Boron Nanoclay Waste	Deniz Saavc	84	2
Copper ferrite nanospheres for electrochemical oxidation of cyanide	María Victoria Lopez Ramón	138	2
Silica xerogels doped with iron(III) as photocatalyst for pharmaceuticals degradation in water	Manuel Sánchez	152	2

	Polo		
Study of the photocatalytic degradation of ethylparaben using rGO-TiO2 composite under UV irradiation	M. Victoria López Ramón	153	2
Neonicotinoids Decontamination in Water from the Badajoz WWTP by BDD Electrochemical Oxidation.	Joaquin R. Dominguez	164	2
Removal of azole pesticides by advanced oxidation processes	Joaquin R. Dominguez	166	2
Emerging Contaminants Removal in Natural Waters and Wastewaters by BDD Electrochemical Oxidation.	Joaquin R. Dominguez	167	2
Effect of acetate feeding method on the effectiveness of bio-treatment of drainage from soilless tomato cultivation by a biofilm	Artur Mielcarek	65	
The influence of the organic carbon dose on nitrogen and phosphorus removal in a rotating electro-biological disc contactor (REBDC) treating wastewater from soilless tomato cultivation	Wojciech Janczukowicz	129	1
Nitrate removal from soilless tomato cultivation wastewater by solid-phase denitrification process	Joanna Rodziewicz	134	1
Effect of continuous or periodical supply of a electrobiological reactor with electrical current	Kamil Bryszewski	78	
The use of waste glycerin as an external carbon source fed to a bioelectrochemical reactor during treatment of wastewater from soilless tomato cultivation	Kamil Bryszewski	79	
Municipal Wastewater Concentration Device: Design and Optimization for the COVID-19 Sampling and Primary Concentration	Robert Ozols	76	

POSTER SESSIONS
GreenCHEM-2
Thursday, 21st July 2022 (morning) 11:30-12:00

TOPIC 1: GREENCHEMISTRY

TOPIC 2: SUSTAINABLE ENGINEERING

Biocatalytic Processes of Immobilized Hydrolases in Aqueous Choline Chloride-Based DESs Solutions	ANGELIKI POLYDERA	105	1
Prepared of molecular rearrangement glucan using pullulanase from Deinococcus wulumuqiensis	Eun-Jeong Kim	81	1
Aqueous-phase reforming of model compounds of pyrolysis bio-oils water-soluble fraction	Jessica Justicia	136	1
Thermodynamic characterization of soils	Nieves Barros Pena	62	2

Enzymatic synthesis of molecular rearrangement glucan using amylosucrase from Deinococcus geothermalis and its physicochemimcal properties.	Ye-Jin Kim	83	2
Immobilization of formate and glycerol dehydrogenase enzymes on mesoporous silica	Sara Garcia	126	1
Green-PADs@RGB detector for pH measurements	Dario Pistoia	130	2
Pollutants content in assorted recycled polyethylene samples	Juan A. Conesa	27	1
Recycled plastic waste incorporation in used oil for engine operation	Juan A. Conesa	28	1
Sustainable synthesis of carbohydrate-based surfactants in reactive natural deep eutectic solvents	Francisc Peter	58	1
Green-PADs@RGB detector for pH measurements	Bianca Maria Pazzi	60	2
Toxic Metals Detection by Green Fluorescent Carbon Dots	Alexandra Isabel Martins Paulo da Costa	79	2

POSTER SESSIONS
WWEM-3
Friday, 22nd July 2022 (morning) 11:30-12:00

TOPIC 1: WASTE

TOPIC 2: WATER

TOPIC 3: ENERGY ENGINEERING and CLIMATE CHANGE

Title	Name	ID	Topic
Photo-activated catalytic peroxidation for the enhanced removal of pharmaceuticals from water matrices	André Torres-Pinto	162	2
Electrocoagulation with aluminum anode for synthetic produced wastewater treatment: effect of the operating parameters on the removal of oil and grease, and turbidity	Andrea Cubillos	187	1
Sustainable management of sewage sludge generated in the petroleum industry	Andrea Cubillos	188	1
Compatibility study of chitosan/alginate/pectine-anthocyanin films as food packaging	Veronica Saucedo Rivalcoba	94	1
Detecting the presence of Cyanobacteria in water based on the Aptamer Binding to the Bacterial Cells and Development of an Electrochemical Biosensor	Elahe Askarzadmohassel	144	2
A preliminary testing of a corona discharge plasma on microbial treatment of tertiary stage of a municipal wastewater	Mohammad Reza Ghomi	62	1

“Green farming": technology of the future	Yeugeniy Gusev	59	1
ZnAl/Sn(OH) composite photocatalyst for emerging contaminants degradation in water	Angeles Mantilla	116	2
Dual adsorption-photocatalytic effect for removal of Cr(VI) using ZnO/Cu2O heterojunction as photocatalyst	Angeles Mantilla	133	2
Water quality monitoring through bioindicators: the use of fish as ecological indicator of environmental pollution	Concepción Azorit Casas	193	2
Ethylenediamine assisted solvothermal synthesis of ZnS/ZnO photocatalytic heterojunction for high efficiency hydrogen production	Angeles Mantilla	93	2
Salinization of Shallow Groundwater in the Eastern Coastal Region of Saudi Arabia. Assessment and Management Approach	Mohammed Benaafi	180	3
Removal of endocrine disruptors from wastewater and production of biogas using Chlorella vulgaris	Noelia Garcia Vazquez	96	2
Analysis of hydrodynamic cavitation efficiency in a wastewater treatment system	Pawel Karpinski	195	1
Impact of color of light and nitrogen concentration on Povlova sp. Biomass, cells size and biochemical composition	M. Slaoui	200	1

POSTER SESSIONS
GreenCHEM-3
Friday, 22nd July 2022 (morning) 11:30-12:00

TOPIC 1: GREENCHEMISTRY

TOPIC 2: SUSTAINABLE ENGINEERING

Sustainable recovery of phenolic antioxidants from real olive vegetable water with natural hydrophobic eutectic solvents and terpenoids	Marcos Larriba	61	1
Continuous multicomponent extraction of antibiotics from hospital wastewater using terpenoids as natural green solvents	Marcos Larriba	118	1
Life cycle assessment of a textile dyeing activity in the tunisian coastal area	malika ghazi	134	2
A comparative assessment of Cd(II) and Cr(VI) bioaccumulation by microbial biomass of Trichoderma viride	Catalina Filote	4	1
Environmental impacts of Cd(II) removal from wastewaters by applying Arthrobacter viscosus A life cycle assessment perspective	Catalina Filote	5	1
Dependence viscosity of temperature and shear rate for vegetable oil used as biodegradable lubricant	Ioana Stanciu	24	1

Phthalates diesters occurrence in microplastics from marine feed and food (Mediterranean Sea)	Stefania Squadrone	50	1
Toxicity of Cd and Ni on seed germination and seedling growth of aromatic plants (Origanum vulgare L.)	Apostol Maria	56	1
Inhibitory effects of two heavy metals on Lavandula angustifolia L. germination and seedling growth	Apostol Maria	57	1
Regulation of cell growth and ascorbate-glutathione cycle by binary combinations of atrazine-isoproturon in Saccharomyces cerevisiae	Rui Manuel Alves Ferreira	69	1
SrTiO3 Perovskites as photocatalyst for the synthesis of imines	Joana C. Lopes	92	1
Report on a project to improve the efficiency of freeze-drying of fish products	Guntis Strautmanis	196	1
High efficiency hydroxyapatite photocatalyst for chromium photoreduction	Yolanda Jimenez-Flores	118	1
Monitoring Water Quality Based on a Multisensors Expert System to Maintain the Drinking Water Distribution System (DWDS)	Ina Nasto	191	1