

THE THIRD INTERNATIONAL MEETING ON ENVIRONMENTAL BIOTECHNOLOGY AND ENGINEERING (3IMEBE)

SUNDAY, 21 SEPTEMBER

18.30-21.00 h.
Welcome Reception. Welcome cocktail in Bellver Castle.

MONDAY, 22 SEPTEMBER

8.30 -9.30 Registration (Guillem Cifre Building, UIB)

9.30-10.00 Inaugural Opening of 3IMEBE

10.00-11.15 Oral Session:

I RISK ASSESSMENT AND ENVIRONMENTAL IMPACT

11.15-11.45 . Coffee break

11.45-13.45 . Oral session:

I RISK ASSESSMENT AND ENVIRONMENTAL IMPACT

II WASTEWATER AND SOLID WASTE MANAGEMENT

13.45-15.30 h. Meal (Jovellanos Building)

15.30-17.00 h. Poster Session (Topic I and II)

17.00-19.00 h. Oral session:

II WASTEWATER AND SOLID WASTE MANAGEMENT

TUESDAY, 23 SEPTEMBER

9.00-11.15 h. Oral session:

II WASTEWATER AND SOLID WASTE MANAGEMENT

11.15-11.45 h. Coffee break

11.45-13.45 h. Oral session:

II WASTEWATER AND SOLID WASTE MANAGEMENT

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL

ENVIRONMENTS

13.45-15.30 h. Meal (Jovellanos Building)

15.30-17.00 h. Posters section (Topic II and III)

17.00-18.00 h. Roundtable

II WASTEWATER AND SOLID WASTE MANAGEMENT

18.00-18.15 h. Poster evaluation. Presentation of the best poster.

18.15-21.30 h. Free time

21.30-23.30 h. Dinner. Bahía Mediterráneo Restaurant.

WEDNESDAY, 24 SEPTEMBER

9.00-11.15 h. Oral session:

II WASTEWATER AND SOLID WASTE MANAGEMENT

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL
ENVIRONMENTS

IV MICROBIAL ECOLOGY

11.15-11.45 h. Coffee break

11.45-13.30 h. Oral session:

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL
ENVIRONMENTS

IV MICROBIAL ECOLOGY

V ENVIRONMENTAL EDUCATION AND LEGISLATIVE ASPECTS

VI New Perspectives

13.30-15.30 h. Meal (Jovellanos Building)

15.30-17.00 h. Posters session (Topic III, IV, V and VI)

17.00-17.45 h. Oral session:

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL
ENVIRONMENTS

IV MICROBIAL ECOLOGY

VI NEW PERSPECTIVES

17.30-17.45 h. Poster evaluation. Presentation of the best poster.

17.45-19.00 h. Free time

19.00-21.00 h. Guided tour to historic downtown of Palma



The Third International Meeting on Environmental Biotechnology and Engineering (3IMEBE)



THURSDAY, 25 SEPTEMBER

9.00-11.15 h. Oral session:

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

IV MICROBIAL ECOLOGY

VI NEW PERSPECTIVES

11.15-11.45 h. Poster evaluation. Presentation of the best poster

11.45-12.15 h. Coffee break

12.15-13.15 h. Oral session:

IV MICROBIAL ECOLOGY

VI NEW PERSPECTIVES

13.15-13.45 h. Roundtable

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

13.45-16.30 h. Meal (TIRME)

16.30-18.00 h. Roundtable and Closing to 3IMEBE



The Third International Meeting on Environmental
Biotechnology and Engineering
(3IMEBE)



PROGRAMME



The Third International Meeting on
Environmental Biotechnology and Engineering



(3IMEBE)



The Third International Meeting on Environmental
Biotechnology and Engineering
(3IMEBE)
Palma de Mallorca, SPAIN,
21-25 september 2008



SUNDAY 21 SEPTEMBER 2008

18:30- 21:00

WELCOME RECEPTION

WELCOME COCKTAIL IN BELLVER CASTLE

<http://www.mallorcawebsite.com/htmls/bellver.htm>
<http://www.baleares.com/promo.php?id=421&elem=n&canal=128&lang=en>

The castle sits high on a hill above Palma and commands great views. It's very interesting and includes an exhibition of the history of Palma de Mallorca



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Monday 22 September Oral Communications

8:30-9:30 Registration on site

9:30-10:00 INAUGURAL OPENING OF 3IMEBE

START SECCIONS IN Guillem CIFRE BUILDING

(Ctra Valldemossa, Km 7,5) (10:00 hours in the morning)

I RISK ASSESSMENT AND ENVIRONMENTAL IMPACT

	Pollution of the Aquatic ecosystems	Land degradation processes	Air pollution, Global Climate change and other subjects
	Chairperson (10:00-12:30): Dr. Claude Charpy-Roubaud and Dr Anne Maria Romani	Chairperson (10:00-12:30): Dr. Isabel Sastre and Dr. Jose Luis Rubio	Chairperson (10:00-12:30): Dr. Carlos Lucho Constantino
10:00-10:30	2896 MEASURING BIOLOGICAL PARAMETERS IN RIVERS: RELEVANCE OF THE SPATIAL SCALE. Romani A.M. (Spain)	SOIL THREATS AND SOIL PROTECTION: THE ROLE OF BIOTECHNOLOGY Jose Luis Rubio CIDE (SPAIN)	10:00-10:45 METEOROLOGY AND CLIMATE. CHANGES AROUND THE WORLD. AIR POLLUTION Jonathan Kahl University of Wisconsin-Milwaukee (USA)
10:30-10:45	2402 AN INTEGRATED APPROACH TO AQUATIC HEALTH ASSESSMENT: WATER QUALITY INDEX AND MULTIBIOMARKER RESPONSE Elías Sedeño-Díaz J., López-López E., Jiménez-Trujillo P., Tejada-Vera R., Espinal Carrión T. (Mexico)	2360 ASSESSMENT OF METAL CONCENTRATIONS AND TOXICITY IN THE GARDEN SOILS AND TAILING SAMPLED FROM TWO MINING AREAS IN SOUTH MOROCCO. El Hamiani O., El Khalil H., Bitton G., Boularbah A. (Morocco).	
10:45-11:00	2563 VALVE MOVEMENT RESPONSE OF THE MUSSEL, <i>Mytilus Galloprovincialis</i> TO CYPERMETHRIN (PYRETHROID – INSECTICIDE) Ait Ayad M., Ait Fdil M., Mouabad A. (Morocco)	2434 IMPACT OF AMBIENT AND ELEVATED LEVELS OF OZONE ON GROWTH, REPRODUCTIVE DEVELOPMENT AND YIELD OF TWO CULTIVARS OF RICE (<i>Oryza Sativa</i> L.) Agrawal S.B., Sarkar A. (India)	2610 INDOOR-OUTDOOR RELATIONSHIP OF FUNGAL AEROSOLS IN DOMESTIC HOMES SITUATED IN HUMID-WARM CLIMATE Cerón Palma I.M., López Pacheco M., Pérez Sánchez M.M, Ponce Caballero C.(Mexico)
11:00-11:15	2499 SALINITY LEVELS AS A FACTOR OF PHYTOPLANKTONIC STRUCTURE AND DIVERSITY REMEDIATION IN A LAGOON IMPACTED BY HUMAN ACTIVITIES (BOLMON LAGOON, MEDITERRANEAN COAST, FRANCE). Fayolle S., Charpy-Roubaud C., Ollivier A., Maasri A., Franquet E. (France).	2691 EFFECT OF METHYLPARATHION ON NITROUS OXIDE PRODUCTION IN “CHINAMPA” SOIL OF XOCHIMILCO, MEXICO Rojas-Oropeza M., Márquez S., Ruiz U., Cabirol N. (Mexico)	2413 PHYSICAL-CHEMICAL ANALYSIS OF RAIN WATER AND IT USE TO EVALUATE AIR QUALITY IN MONTERREY'S METROPOLITAN AREA. Ramírez Lara E., Miranda Guardiola R., Bravo H., Alarcón A., Sosa R., Sánchez P., Kahl J. (Mexico).



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11:15-11.45	COFFEE BREAK		
11:45-12:00	2217 RESPONSES AND STRUCTURAL RECOVERY OF PERIPHYTIC DIATOM COMMUNITIES AFTER SHORT-TERM DISTURBANCE IN SOME RIVERS <u>Duong T. T., Feurtet-Mazel A., Coste M., Dang Dinh K. (Vietnam)</u>	2514 USE OF RADIONUCLIDE TECHNIQUES (¹³⁷Cs, ²¹⁰Pb^{EX} AND ⁷Be) TO ASSESS SOIL EROSION IN MOROCCAN AGRICULTURE LANDS <u>Nouira A., Benmansour M., Benkedad A., Bouksirate H. (Morocco)</u>	2320 A MODELLING APPROACH FOR TROPICAL PIG MANURE NITROGEN UTILISATION AND EVALUATION AT THE LANDSCAPE SCALE <u>Tee, T.P., T.H. Hilger, I.J. Lean and G. Cadisch (Malaysia)</u>
12:00-12:15	2403 PRIMARY PRODUCTION AND ALGAE DIVERSITY vs. POLLUTION IN XOCHIMILCO WET-LANDS <u>Pedroza-Pichardo R., Hernández-Delgadillo R., Boll-Argüello G (Mexico)</u>	2549 EFFECTS OF ENVIRONMENTAL CONDITIONS ON SOIL SALINITY IN ARID REGION IN TUNISIA <u>Ben Ahmed C., Ben Rouina B., Boukhris M. (Tunisia)</u>	1892 FAST DEVELOPMENT AND IMPROVED PERFORMANCE OF ENVIRONMENTAL IMMUNOASSAYS USING PHAGE BORNE PEPTIDES. <u>González-Techera A., Umpierrez M., Carlomagno M., González-Sapienza G. (Uruguay).</u>
12:15-12:30	2505 SELECTIVE GRAZING FROM PROTIST OVER ENTERIC BACTERIA IN AN AQUATIC SYSTEM. <u>Domínguez M.S., Escalante A.H., Folabella A.M., Zamora A.S. (Argentina).</u>	2510 HEAVY METAL CONTAMINATION IN THE ENVIRONMENT <u>Ben Guirat S., Ben Aissa N., M'hiri A. (Tunisia)</u>	2492 MODELLING OF AN INDUSTRIAL NGL –RECOVERY UNIT CONSIDERING ENVIRONMENTAL AND ECONOMIC IMPACTS <u>Sharratt P.N., Hernández-Enríquez A., Flores-Tlacuahuac A. (United Kingdom)</u>

II WASTEWATER AND SOLID WASTE MANAGEMENT

	Treatment technologies	Treatment Technologies	Solid Waste
	Wastewater Biological treatment (Industrial and domestic wastewaters)	Wastewater and waste Physicochemical & membrane processes	Waste Treatments, Codigestion of waste
	Chairperson (12:30-13:30): Anuska Mosquera and Adrianus van Haandel	Chairperson (12:30-13:30): García- Encncina and Hervé Macarie	Chairperson (12:30-13:30): Colin Burton and Ana Elías
12:30-12:45	2245 AEROBIC GRANULAR SBR SYSTEMS APPLIED TO THE TREATMENT OF INDUSTRIAL EFFLUENTS. <u>Val del Río A., Figueroa M., Arrojo B., Mosquera-Corral A., Campos J.L., García-Torriello G., Méndez R. (Spain).</u>	2327 SUNLIGHT INACTIVATION OF FAECAL BACTERIA IN WASTE STABILIZATION PONDS IN A SAHELIAN REGION (OUAGADOUGOU, BURKINA FASO). <u>Maïga Y., Denyigba K., Wethe J., Ouattara A.S. (Burkina Faso).</u>	2268 AIR FILLED POROSITY IN COMPOSTING PROCESSES <u>Ruggieri L., Gea T., Artola A., Sánchez A. (Spain)</u>
12:45-13:00	2448 OPTIMIZATION OF THE DO CONCENTRATION IN ACTIVATED SLUDGE SYSTEMS TREATING PETROCHEMICAL EFFLUENTS. <u>van Haandel A., Cavalcanti P.F.F., Medeiros U.T.P (Brazil).</u>	1841 LIGNIN DEGRADATION IN WASTE WATER OF PAPER MILL INDUSTRY BY OZONE. <u>de los Santos W., Poznyak T., Chairez I.(Mexico).</u>	2334 EXCESS SLUDGE REDUCTION IN ACTIVATED SLUDGE PROCESSES BY INTEGRATING ULTRASOUND TREATMENTS. <u>Pérez-Elvira S., Fdz-Polanco M., Plaza F.I., Garralón G., Fdz-Polanco F. (Spain)</u>



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13:00 13:15	2406 EVALUATION OF THE VINYL ACETATE ELIMINATION PROCESS IN METHANOGENIC SLUDGE WITH OXYGEN. <u>Durán U.</u> , Monroy O., Rendón B., Gómez J., Ramírez, F. (Mexico).	2352 ANTIBIOTIC ABATEMENT IN DIFFERENT ADVANCED OXIDATION PROCESSES COUPLED WITH A BIOLOGICAL SEQUENCING BATCH BIOFILM REACTOR Esplugas M. , González O., Benito J., <u>Sans C.</u> (Spain)	2365 STABILITY MEASUREMENTS OF COMPOST THROUGH ELECTROLYTIC RESPIROMETRY. Sánchez-Arias V., Fernández F.J., Rodríguez L. Villaseñor J. (Spain).
13:15 13:30	2303 THE EFFECT OF OPERATIONAL CONDITIONS ON THE SLUDGE SPECIFIC METHANOGENIC ACTIVITY AND SLUDGE BIODEGRADABILITY. <u>Leitão R.C.</u> , Santaella S.T., van Haandel A.C., Zeeman G, Lettinga G. (Brazil/The Netherlands).	1835 ELECTROCHEMICAL TREATMENT OF PHARMACEUTICAL AND INDUSTRIAL WASTEWATER BY ANODIC OXIDATION. <u>Menapace H.M.</u> , Fellerer M., Treschnitzer M.	2368 MICROBIAL ACTIVITIES IN A VERTICAL- FLOW WETLAND SYSTEM TREATING SEWAGE SLUDGE WITH HIGH ORGANIC LOADS. Wang R-Y, Perissol C., Baldy V., Bonin G., Korboulewsky N. (France).
13:30 15:30	MEAL (JOVELLANOS BUILDING)		
15:30 17:00	Posters Section TOPIC I and II (See Programme on pages 9 to 16)		

Continuation of Oral Communication in the afternoon of Monday

II WASTEWATER AND SOLID WASTE MANAGEMENT

	Treatment technologies Wastewater Biological treatment (Industrial and domestic wastewaters)	Treatment Technologies Wastewater and waste	Solid Waste Waste Treatments, Codigestion of waste
	Chairperson (17:00-19:00): Jose Luis Sanz and Ramón Mendez	Chairperson (17:00-19:00): Luis Fernandez Linares	Chairperson (17:00-19:00): Sami Sayadi and Hector Poggi
17:00 17:15	2246 START UP AND OPERATION OF A PILOT SCALE AEROBIC GRANULAR SBR. <u>Morales N.</u> , Figueroa M., Val del Río A., Mosquera-Corral A., Campos J.L., Méndez R. (Spain).	2144 PHOTOCATALYTIC DEGRADATION OF METHYL TERT-BUTYL ETHER (MTBE) FROM CONTAMINATED WATER: COMPLETE MINERALIZATION <u>Eslami A.</u> , Nasserli S., Maleki A., Aghvami T. (Iran)	2386 A DOUBLE STAGE DRY-WET-FERMENTATION PROCESS FOR A FAST AND SAFE DIGESTION OF DIFFERENT KINDS OF ORGANIC MATERIAL. Busch G., <u>Sieber M.</u> , Buschmann J., Burkhardt M. (Germany).
17:15 17:30	2482 KRAFT PULP AND PAPER MILL WASTEWATER TREATMENT USING FIXED BED ANAEROBIC REACTORS. Damianovic M.H.R.Z., Ruas D., <u>Pires E.C.</u> , Foresti E. (Brazil).	2152 REMOVAL OF TEXTILE DYES WITH BIOPOLYMERS XANTHAN AND ALGINIC ACID <u>Lozano-Alvarez J.</u> , Jáuregui-Rincón J., Mendoza-Díaz G., Rodríguez-Vázquez G., Frausto-Reyes C.	2504 SEPARATION OF INERTS BY DIFFERENTIAL SEDIMENTATION AS PREVIOUS STAGE TO ANAEROBIC DIGESTION OF ORGANIC FRACTION FROM MUNICIPAL SOLID WASTE. <u>González C.</u> , Martínez V., Esplugas P. (Spain).



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17:30 17:45	2494 STUDY OF BIOLOGICAL TREATMENT OF UNHAIRING WASTEWATER. <u>Mlaik N.</u> , Bouzid J., Baccar R., Mechichi T. (Tunisia).	2262 REMOVAL OF MICROPOLLUTANTS DURING PHYSICO-CHEMICAL PRETREATMENT OF HOSPITAL WASTEWATER. <u>Suarez S.</u> , Omil F., Lema J.M. (Spain).	2355 USE OF PETRI NETS FOR THE DEVELOPMENT OF A NEW CONTROL SOFTWARE FROM THE IN-VESSEL COMPOSTING PROCESS Perez D., Leston I., Armesto I., Mato S., Sole-Mauri F., Paulet D. (Spain)
17:45 18:00	2508 APPLICATION OF AN ADVANCED BIOLOGICAL TECHNOLOGY FOR THE EFFICIENT TREATMENT OF MUNICIPAL AND INDUSTRIAL WASTEWATER. <u>di Laconi C.</u> , Del Moro G., Ramadori R., Lopez A. (Italy).	2155 COAGULATION-FLOCCULATION PROCESS APPLIED TO WASTEWATERS GENERATED IN HYDROCARBON-CONTAMINATED SOIL WASHING. <u>Torres L.G.</u> , Belloc C., Iturbe R., Bandala E. (Mexico).	2540 BIO-GAS PRODUCTION FROM MUNICIPAL SLUDGE WASTE USING ANAEROBIC MEMBRANE BIOREACTOR. <u>Lee Y.H.</u> , Lee S. (South Korea).
18:00 18:15	2307 AEROBIC BIOFILTERS WITH SMALL SYNTHETIC GRAINS FOR DOMESTIC WASTEWATER TREATMENT: KINETICS, EFFICIENCY AND MICROBIAL DIVERSITY. Mijaylova Nacheva P., Moeller-Chávez G., Hornelas-Orozco Y., Bustos C. (Mexico).	2329 BIOREMEDIATION OF ACID MINE DRAINAGE IN A URANIUM DEPOSIT BY MEANS OF A PASSIVE TREATMENT SYSTEM Groudev S., Spasova I., Nicolova M., Georgiev P. (Bulgaria).	2618 OCCURRENCE OF HIGH-TONNAGE ANIONIC SURFACTANTS INTO SPANISH SEWAGE SLUDGE. Cantarero S., <u>Prieto C.A.</u> , López I., Berna J.L. (Spain).
18:15 18:30	2325 EFFECT OF APPLICATION RATES AND MEDIA TYPES ON NITROGEN AND SURFACTANT REMOVAL IN TRICKLING FILTERS APPLIED TO THE POST-TREATMENT OF EFFLUENTS FROM UASB REACTORS. <u>de Almeida P.G.S.</u> , Tavares F.V.F., <u>Chernicharo C.A.L.</u> , (Brazil)	2430 ELECTROKINETIC REMEDIATION OF COPPERMINE TAILINGS. <u>Hansen H.K.</u> , Rojo A., Ottosen L.M. (Chile)	2391 COMPARISON BETWEEN CHEMICAL AND MECHANICAL DISINTEGRATION ON SLUDGE ANAEROBIC DIGESTION PERFORMANCE. <u>Braguglia C. M.</u> , Mininni G., Gianico A. (Italy).
18:30 18:45	2444 REMOVAL OF CARBAZOLE FROM WASTEWATER BY INTEGRATING BIODEGRADATION AND ADSORPTION Wangliang Li, Qingfen Liu, Jianmin Xing, Qiang Li, Huang Tang, Dan Wang, Maohua Yang, Huizhou Liu (China).	2592 DETERMINATION OF THE HYDRAULIC CHARACTERISTICS BY MEANS OF INTEGRAL PARAMETERS IN A MODEL OF WETLAND WITH SUBSURFICIAL FLOW. <u>Giácoman Vallejos G.</u> , Ponce Caballero C., Quintal Franco C., Méndez Novelo R. (Mexico).	2333 OPTIMISING INPUTS AND OUTPUTS FROM ANAEROBIC DIGESTION PROCESSES BY CO-DIGESTION OF MUNICIPAL WASTE STREAMS WITH WASTES FROM INDUSTRIAL AND AGRICULTURAL SECTORS <u>Zhang Y.</u> , Banks C.J. (United Kingdom)
18:45 19:00	2392 HETEROTROPHIC, NITRIFYING AND DENITRIFYING ACTIVITY OF BIOMASS FROM FLUIDIZED BED REACTOR OPERATED WITH AERATION CYCLES. Martín Martín A., Damianovic M., <u>García-Encina P.A.</u> (Spain)	1813 WASTEWATER RECYCLING BY THE COUPLING OF BIOLOGICAL AND MEMBRANE TREATMENTS: CASE OF DENIM TEXTILE MILL. Kechaou N., Ben Amar N., Deratani A., Palmeri J., Sghaier A. (Tunisia/France)	2248 ANAEROBIC CO-DIGESTION OF ANIMAL WASTE: SWINE MANURE AND TUNA FISH WASTE Otero L., <u>Álvarez J.A.</u> , Lema J.M. (Spain)



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POSTER COMMUNICATION (Monday 22 September)

See pages 9 to 16

I RISK ASSESSMENT AND ENVIRONMENTAL IMPACT

Pollution of the Aquatic ecosystems

CODE OF ABSTRACT	TITLE	AUTHORS AND COUNTRY	NUMBER OF POSTER
1833	Analysis of captropil in surface waters by differentials pulse voltammometry method	<u>Baranowska L.</u> , Markowski P., Wilk K. (Poland)	1
1852	Enzymatic and bacterial indicators of water and sediment pollution	<u>Muntean V.</u> , Keul Anca L. (Romania)	2
1853	Dermination of vulnerability's areas to pollution: case of alluvial water table of Tebessa (East Algeria).	<u>Jabri L.D.</u> , Hani A., Assassi F., Djprfi S. (Algeria)	3
2154	The ecological evaluation of debed rivers waterhed basin in Armenia by hydrophisical, hydrochemical and hydrobiological parameters.	<u>Danielyan A.</u> (Armenia)	4
2157	Distribution of polycyclic aromatic hydrocarbons between water, sediment and common eels (<i>Anguilla anguillae</i>) in the urban stretch of Tevere river.	<u>Patrolecco L.</u> , Ademollo N., Capri S., Pagnotta R. (Italy)	5
2253	Occurrence of Environmental Mycobacteria in Water from the Central Zone of the Chihuahua, Mexico.	Salinas-Baeza, A.D., Ballinas-Casarrubias, M.L., Nevárez-Moorillón, G.V., <u>Rivera-Chavira, B.E.</u> (Mexico)	6
2266	Evaluation of the pollution of the surface waters in the basin of west Algeria by organochlorine and organophosphorus pesticides.	<u>Hadjel M.</u> , Berkok N. (Algeria)	7
2344	Physico-Chemical and biological research on water from Aries river.	<u>Butiuc-Keul, A.</u> , Momeu, L., Craciunas, C., Dobrota, C., Cuna, S., Balas, G (Romania)	8
2372	Effect of antropic impact on "calore" River in south Italy.	<u>Bartoli G.</u> , Sagnella E., Papa S., Fioretto A. (Italy)	9
2433	Impact of human activities on the water quality of the red river (Vietnam). Present situation and variation trends in the next 50 years	Le Thi Phuong Q., Garnier J., Billen G., Duong T. T., Chau Van Minh (Vietnam)	10
2458.	Environmental impact assessment in an abandoned metal mine in Spain	Moreno-Jiménez E. ; Oropesa A; Esteban E. ; Haro A. ; Carpena R.O. ; Tarazona JV ; Peñalosa JM. ; <u>Fernández MD.</u> (Spain)	11
2619	Effect of cadmium on the on the growth of <i>Spirulina maxima</i> (<i>Arthrospira</i>)	Torres-Muñoz J.A. , Aguilar-López R., Hernández-Villagran D. , <u>Domínguez-Bocanegra. A.R.</u> (Mexico)	12



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2620	Effect of nickel on the growth of <i>Spirulina maxima</i> (<i>Arthrospira</i>).	<u>Rios</u> E.(Mexico)	13 I
2621	Effect of Lead on the growth of <i>Spirulina maxima</i> (<i>Arthrospira</i>).	Hernández – Villagran D., Torres-Muñoz J.A. , Ríos-Leal, E., Aguilar-López R. , <u>Domínguez-Bocanegra</u> A.R. _ (Mexico)	14 I
2270	Evaluation of the pollution of surface waters in the basin of west Algeria by organochlorine and organo-phosphorus pesticides.	Hadjel M. and Berkok N. (Algeria)	15 I
2476	Assessment of the genotoxicity of olive mill waste water (OMWW) with the <i>Vicia fabia</i> micronucleus test.	El Hajjouji H., Pinelli E., Revel J.-C., Hafidi M. (Morocco)	16 I
1889	Chemical quality of water in <i>Anopheles stephensi</i> habitats and its susceptibility to different insecticides in south eastern of Iran.	<u>Davari B.</u> , Vatandoost H. (Iran)	17 I
2469	Environmental risk assessment by mulil-biomarker responses in aquatic biota of three trophic levels in a lake of the mexican central plateau.	López-López E., Elías Sedeño-Díaz J. (Mexico)	18 I
2431	Impact of heavy metals in enzymatic activity of soils from Hidalgo, Mexico	<u>Reyes-Ortigoza A.L.</u> , Reyes-Solis I.E., Galicia-Palacios M.S., <u>Montiel-Arteaga</u> S. (Mexico)	19 I

Land degradation processes

1814	Soil organic matter as factor of carbon cycle in nature.	<u>Bielek P.</u> (Slovak Republic)	20 I
1839	Heavy metal characterization in soils under different wastewater irrigation patterns.	Maldonado, V.M., <u>Rubio, A.H.</u> , Quintana, R., Saucedo, T.R., Nevárez, G. V. (Mexico)	21 I
1883	Heavy metals in selected edible vegetables and their daily intake in Sanandaj, Iran.	<u>Alasvand Zarasvand M.</u> , Maleki A.(Iran)	22 I
2153	Toxic effect of four fabric softeners on the growth and carbon dioxide production of soil microorganisms.	Martínez-Gil D., Salgado-Brito R., <u>Pineda-Flores G.</u> (Mexico)	23 I
2220	Equivalent dose and activity concentration of radionuclides in soil and plants.	Bernasconi E.; <u>Moyano, A.</u> Charro, E., Peña V.; Gutierrez-Villanueva, J. L. (Spain)	24 I
2233	Soil erosion and runoff response in almond orchards under two shrub cover-crop strips in a high slope in semi-arid environment.	<u>Cárceles-Rodríguez B.</u> , Francia-Martínez J.R., Martínez-Raya A., Durán-Zuazo V.H., Rodríguez-Pleguezuelo C.R., Arroyo-Panadero L. (Spain)	25 I
2234	Comparison of the protective effect of two harvest intensities in the shrub <i>Santolina rosmarinifolia</i> in an area of the Spain Southeast.	<u>Cárceles-Rodríguez B.</u> , Francia-Martínez J.R., Martínez-Raya A., Durán-Zuazo V.H., Rodríguez-Pleguezuelo C.R., Casado-Mateos J.P. (Spain)	26 I



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2259	Advances in calibrating saltirsoil at plot scale: first results.	<u>de Paz, J.M.</u> , Visconti F. , Molina M.J., Ingelmo F. , Llinares J.V., Tellols L., Soriano P., Sánchez J. (Spain)	27 I
2285	Environmental impact of introducing aromatic-shrub strips in almond orchards under semiarid climate(se Spain): Implications for erosion and agricultural runoff control.	<u>Durán-Zuazo V.H.</u> , Rodríguez-Pleguezuelo C.R., Francia-Martínez J.R., Martínez-Raya A., Cárceles-Rodríguez B., Arroyo-Panadero L., Casado J.P. (Spain)	28 I
2286	Soil erosion and nutrient losses control by plant covers: environmental implications for subtropical agroecosystem (Se Spain).	Rodríguez-Pleguezuelo, C.R., <u>Durán-Zuazo, V.H.</u> , Martín-Peinado, F.J., Franco-Tarifa, D., Martínez-Raya, A., Francia-Martínez J.R., Cárceles-Rodríguez, B., Arroyo-Panadero L., Casado J.P. (Spain)	29 I
2460	Effect of rhizospheric bacteria on sunflower growth under abiotic stress conditions.	Shilev S, <u>Sancho E.D.</u> , Benlloch M. (Bulgaria / Spain)	30 I
2489	Influence of a phospho-potassic fertilizer solution on yield and quality of wheat crops.	Ordóñez C. , Tejada M. , González J.L. , <u>Benítez C.</u> (Spain)	31 I
2491	Influence of fertilizer materials on the physical and chemical properties of soils: cases of wine Stefanesti - Arges.	<u>Bejan C.</u> (Romania)	32 I
2533	Long-term effects of olive oil mill wastewater spreading on soil and olive trees.	<u>Ben Rouina B.</u> , Ben Ahmed C., Gargouri K., Abichou M., Taamallah H. (Tunisia)	33 I
2550	Environmental effects on proline accumulation and water potential in olive leaves (<i>Olea europaea</i> L. CV "CHEMLALI) under saline water irrigated field conditions.	Ben Ahmed C., Ben Rouina B., Boukhris M. (Tunisia)	34 I
2869	Residual sorption and leaching of the herbicide diuron following de-oiled two-phase olive mill waste adition to soil.	<u>López-Piñeiro, A.</u> , Albarrán, A., Cabrera, D., Rato, J. M., Muñoz, A., Flores, S., Fernández, S., Peña, D. (Spain)	35 I
2887	Study of toxicity and distribution of mine tailing in arid/semiarid clime.	<u>Melgar R.</u> , García I., González V., Sánchez J.A., del Moral F., Simón M. (Spain)	36 I
2888	Effects of heavy metals from amended biosolids soils sowed with forages on the abundance and biodiversity of edaphic arthropods.	Flores-Pardavé L., Flores-Tena F. J., <u>Hernández-Sánchez A. J.</u> (Spain)	37 I

Landfills

2581	Ecotoxicologic diagnosis of a sealed municipal district landfill.	<u>Hernández, A. J.</u> , Pérez-Leblic, M ^a I., Bartolomé, C. and Pastor, J. (Spain)	38 I
2582	Heavy metals, salts and organic residues in solid urban waste landfills and surface waters in their discharge areas: determinants for restoring their impact	Hernández, A. J., <u>Pastor, J.</u> (Spain)	39 I

Air pollution, Global Climate change and others subjects.



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2225	Volatile organic pollutants in iron and steel industry.	<u>Manea D.</u> , Dorina S., Popescu L., Stoian P. (Romania)	40 I
2280	Microbial ecology of artisanal italianl cheese: environment and working conditions	<u>Dioguardi L.</u> , Colombo E., Franzetti L.(Italy)	41 I
2321	Evaluation of the strategy designed to reduce the incidence of cases produced by the biocontaminant (<i>Legionella</i> serogroup I) in the city of Córdoba – Spain.	<u>Rubio García A.</u> , Miñarro Del Moral R.M., Guijarro Rodriguez J.L. (Spain)	42 I
2445	Heavy metals,PAHs contents and ecophysiological changes in leaves of holm-oak in urban area of Caserta (Italy).	<u>Papa S.</u> , Nacca F., D'Abrosca B., Bartoli G., Pellegrino A., Fiorentino A., Fuggi A., Fioretto A. (Italy)	43 I
2914	Elemental composition of the PM ₁₀ fraction in the Mezquital Valley Mexico	Beltrán-Hernández I., Martínez-Resendiz, G., Solis Rosales, C. Ramírez A., Sastre Conde, I., Del Razo, L.M., <u>Lucho-Constantino C.</u> (Mexico)	44 I

II WASTEWATER & SOLID WASTE MANAGEMENT, TREATMENT AND REUSE

Wastewater Physicochemical treatment

1793	Removal of Cu ²⁺ by modified activated carbon derived from chemical activation of a Tunisian agriculture by-product.	<u>Baccar R.</u> , Bouzid J., Feki M., Montiel A (Tunisia).	45 II
1854	Pretreatment of worn waters of the dairy industry by sand filtration process	<u>Bouzid H.</u> , Derriche Z. , Bettahar N. (Algeria)	46 II
1855	Adsorption of an acidic dye from aqueous solution by surfactant modified bentonite.	<u>Bouberka, Z.</u> Khenifi, A. Belkaid, N. Ait mahamed H., Haddou, B. Derriche Z. (Algeria)	47 II
1867	Batch system for study of Cr (VI) biosorption by dried waste activated sludge.	<u>Farzadkia M.</u> , Gholami M., Darvishi Cheshmeh Soltani R., Yaghmaeian K., Shams Khorramabadi Gh. (Iran)	48 II
1887	Photo-oxidation of phenol aqueous solution toxicity of intermediate.	<u>Maleki A.</u> , Mahvi A.H., Eslami A. (Iran)	49 II
2191	Speciation relevance on the removal of chromium from aqueous solutions by a low-cost sorbent (Leonardite)	<u>Lao-Luque C.</u> , <u>Solé-Sardans M.</u> , Gamisans X., de las Heras F.X. (Spain)	50 II
2205	Elimination of the organic pollutants by Photodegradation in the presence of a catalyst	<u>Belkadi.F.</u> , Hadjel.M (Algeria)	51 II



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2210	Mineralization and discoloration of textile wastewater by TiO ₂ nanoparticles	<u>Mahvi A. H.</u> , Ghanbarian M., Nasser S., Khairi A. (Iran)	52 II
2212	Investigating the potential of using sonochemical reactors for decomposition of las from wastewater.	<u>Dehghani M. H.</u> , Reza Jahed G. R., Changani F., Azam K., Najafpoor A.A. (Iran)	53 II
2249	Use of polyglumatic acid PGA alpha21 in the treatment of vinasse from an alcohol distillery.	<u>Carvajal Zarrabal O.</u> , Nolasco Hipolito C., Robles Olvera V., Waliszewski S. (Mexico)	54 II
2263	The use of Algerian clay materials for the sorption of heavy metals from aqueous solutions	Dib S. and <u>Boufatit M.</u> (Algeria)	55 II
2276	Detoxification and biodegradability enhancement of aqueous solutions of four commercial pesticides along a Photo-Fenton treatment	Amat, A. M. Arques A., Domenech A., García-Ripoll A., <u>Vicente R.</u> (Spain)	56 II
2275	Effect of ozonation on the removal of colorants in vinasse from beet molasses fermentation.	Coca, M. Flores M., Peña M., Mato S., García M.T., González G. (Spain)	57 II
2277	Organic sensitizers as photocatalysts for the treatment of the commercial pesticide Methidathion	Amat A.M, A. Arques A., D. Mauricio D. Santos-Juanes L., R.F. Vercher R.F., <u>Vicente R.</u> (Spain)	58 II
2312	Adsorption of lead from aqueous solution by geomaterials	<u>Hamdi B.</u> , Ait Hamoudi S., Houari M., Kessaissia Z. (Algeria)	59 II
2313	Adsorption of p-nitrophenol (PNP) on new adsorbents prepared from diatomite and charcoal.	Hamdi B., Khelifa N., <u>Chernai-Hamdi S.</u> , Hadjari H. (Algeria)	60 II
2351	Aspects of activated carbon catalysis of azo dye reduction.	van der Zee F. P., <u>Pereira R.</u> , Alves M. M. (Portugal)	61 II
2394	Biosorption of zinc (Zn) and lead (Pb) by metal resistant bacterial isolate from mining tail.	Bautista Hernández D.A, Carranza Alvarado M., <u>Fernández Linares L.</u> , Ramírez Landy I. (Mexico)	62 II
2412	Removal of lead using natural and synthetic sorbents in aqueous solution.	Bonilla-Petriciolet A., Monroy-Figueroa J., <u>Mendoza-Castillo D.I.</u> , Tapia-Picazo J.C. (Mexico)	63 II
2429	Electrochemical generation of Fenton's reagent to treat spent caustic wastewater.	<u>Hansen H.K.</u> , Nuñez P., Rodriguez N., Guzman J. (Chile)	64 II



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2463	Treatment of pesticide containing solutions by photocatalysis.	Fares Al Momani (Jordania)	65 II
2472	Study of adsorbent derived from exhausted olive pomace for the removal of Pb ²⁺ and Zn ²⁺ from aqueous solution.	<u>Elouear Z.</u> , Bouzid, J., Boujelben N. (Tunisia)	66 II
2546	Wastewater treatment by adsorption onto micro-particles of dried Withania frutescens plant as new adsorbent.	<u>Chiban Mohamed</u> , Soudani Amina, Sinan Fouad, Persin Michel. (Moroco)	67 II
2683	Application of the natural cellulosic supports modified chemically for the treatment of the industrial effluents.	<u>Kassale A.</u> , Elbariji S., Lacherai A., Elamine M., Kabli H., Albourine A. (Moroco)	68 II
2684	Clays of the souar-formation in northeastern Tunisia: characterization, application in pesticides retention.	<u>Gharsalli J.</u> , Rkik R., Zouari H., Turki F., Jamoussi F., (Tunisia)	69 II

Wastewater nutrient removal

1837	Quantification of nitrous oxide emissions during biological nitrogen removal from waste water - a systems comparison	<u>Pahl O.</u> , Calvert T., Baird J. (United Kingdom)	70 II
1847	Phosphate removal from waste water by bacteria and organic bentonite.	Hrenovic J., Rozic M., <u>Ivankovic T.</u> , Farkas A. (Croatia)	71 II
2218	Phosphate removal from aqueous phase using iron impregnated natural clay: kinetic and equilibrium modeling.	<u>Anoop Krishnan K.</u> , Sreejalekshmi K.G., Haridas A. (India)	72 II
2250	Nutrient removal from wastewater using an UCT hybrid system with suspended biomass and biofilms.	Saldarriaga, J., <u>Garrido J.M.</u> (Spain)	73 II
2349	Nutrients removal using moving beds with aeration cycles.	Martín Martín A., Foresti E., <u>García-Encina P.A.</u> (Spain/Brazil)	74 II
2447	Use of respirometry for the determination of nitrification kinetics.	Cavalcanti P.F.F., Medeiros U d. P., <u>van. Haandel A.</u> (Brazil)	75 II

Wastewater Biological treatment

1810	Biological activated carbon effect in the anaerobic biodegradation of a textile azo dye	<u>González L.V.</u> , Escamilla E.M. (Mexico)	76 II
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1851	Software sensors design for the phenols contaminated water treatment by the combination of ozonation and biodegradation.	<u>García A., Poznyak T., Guerra P., García E.I., Chairez J.I., Poznyak A.</u> (Mexico)	77 II
2145	A pilot study to investigate the impacts of agro-food discharges on a domestic WWTP.	<u>Fernandez F.J., Villaseñor J., Rodriguez L.</u> (Spain)	78 II
2174	Evaluation of biodegradability and toxicity of phenol by respirometry.	<u>Pérez-Marín A.B., Aguilar M.I., Garcia-Flores C., Lloréns M., Sáez J., Ortuño J.F., Meseguer V.F.</u> (Spain)	79 II
2175	An innovative technology for wastewater treatment: a pilot-scale study.	<u>Lloréns M., Pérez-Marín A.B., Aguilar M.I., Sáez J., Ortuño J.F., Meseguer, V.F.</u> (Spain)	80 II
2176	Use of respirometric methods for estimation of heavy metal toxicity and inhibition on activated sludge activity.	<u>Aguilar M.I., Lloréns M., Fernández-Garrido J.M., Pérez-Marín A.B., Sáez J., Ortuño J.F., Meseguer, V.F.</u> (Spain)	81 II
2196	Biodegradation studies of oil sludge containing high hydrocarbons concentration.	<u>Olguín-Lora P., Muñoz-Colunga A., Castorena-Cortés G., Roldán-Carrillo T., Quej-Aké L., Reyes-Avila J., Zapata-Peñasco I., Marín-Cruz J.</u> (Mexico)	82 II
2201	Using natural zeolites to improve anaerobic abattoir wastewater treatment	<u>Diaz-Jimenez L., Herrera-Ramirez E., Carlos-Hernandez S.</u> (Mexico)	83 II
2208	Fluid bed porosity equation for an inverse fluidized bed bioreactor with particles grown biofilm.	<u>Campos Díaz K.E., Limas Ballesteros R.</u> (Mexico)	84 II
2215	Hexavalent chromium reduction by a <i>Hypocrea tawa</i> fungal strain.	<u>Morales-Barrera L., Guillén-Jiménez F.M., Cristiani-Urbina E.</u> (Mexico)	85 II
2216	Hexavalent chromium reduction by <i>Trichoderma inhamatum</i> .	<u>Morales-Barrera L., Cristiani-Urbina E.</u> (Mexico)	86 II
2247	A comparative study of wastewater treatment, from a fish canning factory, in a granular and a flocculent sludge SBR	<u>Sánchez Sánchez A., Garrido J.M., Méndez R.</u> (Spain)	87 II



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2251	Post-treatment of anaerobically digested swine slurry in algal-bacterial enclosed photobioreactors.	Muñoz R., González C., Villaverde S., <u>García Encina P.</u> (Spain)	88 II
2255	Effect of a reactivation strategy based on partial biocatalyst replacement on the performance of a fungal fluidized bed bioreactor.	<u>Ortega-Clemente A.</u> , <u>Robledo-Narváez P.</u> , Barrera-Cortés J., Poggi-Varaldo H.M. (Mexico)	89 II
2258	Biofilm formation on membranes used for membrane aerated biological reactors under different stress conditions.	Andrade-Molinar C., Ballinas-Casarrubias M.L., Solís-Martínez F.J., Rivera-Chavira B.E., Cuevas-Rodríguez G., <u>Nevárez-Moorillón, G.V.</u> (Mexico)	90 II
2264	Operation of a membrane bioreactor with a flat sheet membrane treating urban water.	Iglesias A., Barcón T., <u>Omil F.</u> , Garrido J.M. (Spain)	91 II
2278	Bioaerosol generation at wastewater treatment plants: identification of main bioaerosol sources.	Sánchez-Monedero M.A., <u>Aguilar M.I.</u> , Fenoll R., Roig A., (Spain)	92 II
2288	Phytoplankton as bioindicator for waste stabilization ponds.	<u>Amengual Morro C.</u> , <u>Moyà Niell G.</u> , Martínez Taberner A. (Spain)	93II
2296	Post-treatment of anaerobically digested dairy manure together with municipal wastewater	<u>García H.</u> , Rico C., Fernández J., Renedo J., Rico J. L. (Spain)	94 II
2297	Methanization of 2-chlorophenol (2CP) in presence of oxygen	<u>Beristain L.M.</u> , <u>Cuervo-López F. M.</u> , Ramirez F., (Mexico)	95 II
2304	Anaerobic treatment of coconut husk liquor for biogas production.	<u>Leitão R.C.</u> , Araújo A.M., Freitas Neto M.A., Rosa F.M., Santaella S.T. (Brazil)	96 II
2324	Influence of cosubstrates in the anaerobic biodegradation of 2,4,6-Trichlorophenol and methanogenesis.	<u>Puyol D.</u> , Mohedano A.F., Rodríguez J. J., <u>Sanz J. L.</u> (Spain)	97 II
2336	Feasibility of lead removal from industrial effluents by sulphate reducing bacteria.	Núñez L.A., Diez M.,Rodríguez F.J. (Spain)	98 II

Landfills

2211	Treatment of Tehran Aged Landfill Leachate	Mahvi A.H., Jamali H.A. (Iran)	99 II
2380	Nitrogen removal from landfill leachate in an anoxi-oxic system	Marigonla, A., Lopes D.D., Fernades F., Silva S.M.C.P. (Brazil)	100 II



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Tuesday 23 September Oral Communication

II WASTEWATER & SOLID WASTE MANAGEMENT, TREATMENT

Wastewater Biological Treatments		Soil application Solid waste management, treatment and reuse Strategies for the protection and remediation of natural environments	Solid Waste Treatment (continuation)
	Chairperson 9:00- 11:15 Xavier Flotats and Sara Pérez	Chairperson 9:00- 11:15 Carlos Rad and and Carlos Lucho Constatino	Chairperson 9:00- 11:15 Cristina León Cofreces and Mari Cruz García González
9:00-9:30	9:00-9:30 ANAEROBICS FOR WASTEWATER TREATMENT, ENERGY RECOVERY, AND GREEN HOUSE GAS EMISSION REDUCTION <u>Jules Van Lier</u> and Grietje Zeeman Wageningen University (The Netherlands)	9:00-9:15 2531 THE USE OF TREATED WASTEWATER FOR CHEMLALI OLIVE TREE IRRIGATION: EFFECTS ON SOIL PROPERTIES, GROWTH AND OIL QUALITY. Ben Rouina B., Bedbabis S., Ben Ahmed C., Boukhris M. (Tunisia).	9:00-9:30 2903 THE IMPORTANCE OF TEMPERATURE IN THE EFFECTIVE SANITIZATION OF AQUEOUS EFFLUENTS: A REVIEW OF THE CASE FOR A THERMAL TREATMENT THAT IS ENVIRONMENTALLY AND ECONOMICALLY CREDIBLE <u>Colin Burton</u> . Cemagref. Rennes. (France)
		9:15-9:30 2556 SOIL AMENDMENT WITH OLIVE MILL WASTEWATER: IMPACT OF STORAGE BEFORE SPREADING. Kachouri S., Ayed L., Assas N., Marouani L., <u>Macarie H.</u> , Hamdi M. (Tunisia/France).	
9:30-9:45	2357 EFFECT OF FEED STRATEGY AND COD/SULFATE RATIO ON THE REMOVAL OF SULFATE IN AN ANSBBR WITH RECIRCULATION OF THE LIQUID PHASE. Archilha N.C., Canto C.S.A., Ratusznei S.M., Rodrigues J.A.D., Zaiat M., Foresti E. (Brazil)	2559 SOIL DEGRADATION UNDER RECLAIMED WASTEWATER IN "ARENADOS" (LANZAROTE, CANARY ISLANDS, SPAIN). <u>Tejedor M.</u> , Jiménez C., <u>Hernández-Moreno J.M.</u> , Díaz F. (Spain).	2283 OCCURENCE AND FATE OF SELECTED PPCPs IN A CONVENTIONAL SEWAGE TREATMENT PLANT LOCATED IN NORTH WEST UK. <u>Reif R.</u> , Santos A., Judd S.J., Lema J.M., Omil F. (Spain).
9:45-10:00	2241 ANAEROBIC TRANSFORMATION OF 1,4-TYROSOL TO 4-HYDOXYPHENYLACETATE BY <i>Desulfovibrio</i> SPECIES. <u>Chamkh F.</u> , Imane El Bakouchi I, Ouazzani N., Eddarir S., Bennisse R., Qatibi A.I. (Morocco)	1875 SOIL MICROBIAL ACTIVITIES AND SOLID-STATE ¹³C NMR TO ASSESS ORGANIC MATTER TRANSFORMATION IN A REED -BED UNDER CHEESE-DAIRY FARM EFFLUENTS. <u>Farnet A.M.</u> , Prudent P., Ziarelli F., Domeizel M., Gros R. (France)	2354 COMPARISON OF THREE DISTINCT MANAGEMENT STRATEGIES FOR PIG SLURRY APPLIED TO THREE GROUPS OF FARMS. Arturo Daudén, A., Teresa M., <u>Siegler C.</u> , Bescos B., <u>Burton C.</u> (Spain/France).



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10:00-10:15	2151 IDENTIFYING ANAEROBIC DIGESTION MODELS USING SIMULTANEOUS BATCH EXPERIMENTS. <u>Flotats X.</u> , Palatis J., Fernández B., Colomer M.A., Illa J. (Spain).	10:00-10:30	2902 PILOT SCALE HYBRID PROCESSES FOR OLIVE MILL WASTEWATER TREATMENT, ENERGY PRODUCTION AND WATER REUSE: COMPARISON BETWEEN FUNGAL AND ELECTRO-COAGULATION PRE-TREATMENTS <u>Sami Sayadi.</u> Centre de Biotechnologie de Sfax (Tunisia)	2223 INFLUENCE OF ORGANIC MATTER TRANSFORMATIONS ON THE BIOAVAILABILITY OF HEAVY METALS IN A SLUDGE BASED COMPOST. <u>Molina M.J.</u> , Ingelmo F., Soriano M.D., Gallardo A., Lapeña L. (Spain).
10:15-10:30	2530 MODELING A FULL SCALE OXIDATION DITCH SYSTEM, COUPLING HYDRODYNAMIC AND BIOLOGICAL KINETICS USING ASM1 MODEL. Haouech L., Spérandio M., Cockx A., Shayeb H. (France/Tunisia)		1832 AMMONIA RELEASE AND CONVERSION IN BIOREACTOR LANDFILL SIMULATORS. Lubberding H., Valencia R., Salazar R., Lens P. (The Netherlands)	

Nutrient removal	Solid Waste Management, Treatment and Reuse Strategies for the Protection and Remediation of Natural Environments	Solid waste management, treatment and reuse
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10:30-10:45	2376 RECOVERY AND CONCENTRATION OF AMMONIA FROM SWINE MANURE USING ELECTRODIALYSIS COUPLED WITH AIR STRIPPING. <u>Ippersiel D.</u> , Mondor M., Lamarche F., Tremblay F., Dubreuil J., Masse L. (Canada).	2173 DESORPTION OF ORGANO PHOSPHOROUS PESTICIDES FROM SOIL WITH WASTEWATER AND SURFACTANT SOLUTION. Hernández-Soriano M.C., Mingorance M.D., <u>Peña A.</u> (Spain)	2688 SOLIDS AND NUTRIENT REMOVAL FROM FLUSHED SWINE MANURE USING POLYACRYLAMIDES. Pérez Sangrador M.P., <u>García González M.C.</u> , León Cofreces M.C., Acitores Benavente M. (Spain)
10:45-11:00	1834 N-REMOVAL FROM THE LIQUID FRACTION OF PIG SLURRY IN A LAB-SCALE SEQUENCING BATCH REACTOR CONSIDERING DIFERENT OPERATIONAL STRATEGIES. Magrí A., Guivernau M., Prenafeta-Boldú F.-X., Flotats X. (Spain)	2424 THE BIOTESTING OF OIL-OXIDIZING BACTERIA AND FUNGI ASSOCIATIONS FOR THE CERTIFICATION OF NEW BIOABSORBENTS AND WATER REMEDIATION CONTROLS. <u>Terekhova V.</u> , Botvinko I., Vinokurov V., Srebnyak E. (Russia)	2147 INTERACTION OF ORGANIC CONTAMINANT WITH NATURAL CLAY TYPE GEOSORBENTS: POTENTIAL USE AS GEOLOGIC BARRIER IN URBAN LANDFILL. <u>Sánchez Jiménez, N.</u> , Procopio, J.R., Sevilla, T., Cuevas, J., <u>Rodríguez, M.</u> (Spain).
11:00-11:15	2193 SHORT- AND LONG-TERM EFFECTS OF AMMONIA AND NITRITE ON THE ANAMMOX PROCESS. <u>Fernández I.</u> , Dosta J., Campos J.L., Mosquera-Corral A., Méndez R. (Spain).	2545 PHYTOBIOPESTICIDE: AN IMMUNORESTORER OF THE IMMUNOSUPPRESSED RESPONSE BY MALATHION: AN EXPERIMENTAL STUDY. <u>Aruna Bhatia</u> (India).	2606 BIOLOGICAL ANALYSIS OF ENDOCRINE DISRUPTING COMPOUNDS IN TUNISIAN SEWAGE TREATMENT PLANTS. <u>Mnif W.</u> , Dagnino S., Pillon A., Escande A., Fenet H., Gomez E., Casellas C., Duchesne M.J., Cavallès V., Balaguer P., Bartegi A. (Tunisia/France).

11:15-11:45	COFFEE BREAK	
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Nutrient removal	III Strategies for the protection and remediation of natural environments	II Solid waste management, treatment and reuse
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	Chairperon 11:45-13:30. Jules van Lier and Aboubakar Ouattara	Chairperon 11:45-13:30. Nikolae Dinev and Luis Gomez	Chairperon 11:45-13:30 Hervé Macarie and Ján Venglosky
11:45-12:00	2267 FROM PARTIAL NITRIFICATION TO CANON IN AN AEROBIC GRANULAR SBR. <u>Vázquez-Padín J.</u> , Figueroa M., Campos J.L., Mosquera-Corral A., Méndez R. (Spain).	2585 SOIL STRUCTURE AND ORGANIC CARBON RELATIONSHIPS FOLLOWING 3 AND 7 YEARS OF CROP RESIDUE MANAGEMENT IN NO-TILL IN SEMIARID AREA: TUNISIA. Jemai I., Ben Aissa N., Ben Guirat S., Ben Hamouda M., Gallali T. (Tunisia)	2378 GEOPHYSICAL TECHNIQUE AND GROUNDWATER MONITORING IN THE SURROUNDING AREA OF A SANITARY LANDFILL – LONDRINA (PR – BRAZIL). <u>Lopes D.D.</u> , Silva S.M.C.P., Fernandes F., Teixeira R.S., Celligoi A., Dall’Antônia L.H. (Brazil).
12:00-12:15	2150 KINETIC MODELS FOR AMMONIUM-OXIDISING BACTERIA INHIBITION BY FREE AMMONIA AND FREE NITROUS ACID. <u>Torà J.A.</u> , Baeza J. A., Lafuente J., Carrera J. (Spain).	2192 EVALUATION OF PHYTO-BIOREMEDIATION TECHNIQUES APPLIED TO DREDGED MARINE SEDIMENTS FOR THEIR REUSE AS TECHNO-SOILS. <u>Bianchi V.</u> , Masciandaro G., Ceccanti B., Giraldi D., Iannelli R. (Italy).	2370 BACTERIAL BIODEGRADATION OF MODIFIED POLYURETHANE FOAMS: COMPARISON OF SINGLE AND MIXED CULTURE. <u>Obruca S.</u> , Marova I., Vojtova L., David J., Ondruska V., Babak L. (Czech Republic).
12:15-12:30	1868 START-UP OF A BIOFILM AIRLIFT SYSTEM TO OBTAIN PARTIAL NITRIFICATION OF A HIGH-STRENGTH AMMONIUM WASTEWATER. <u>Bartroli A.</u> , Pérez J., Lafuente J., Carrera J. (Spain).	2485 INCENTIVES AND MARKET DEVELOPMENT TO ESTABLISH SUSTAINABLE BIOMASS SYSTEMS. <u>Matteson G. C.</u> (USA).	2506 AN INTEGRATED APPROACH TO NATURAL AND GEOSYNTHETIC CLAY BARRIERS PERFORMANCE AGAINST THE DIFFUSION OF A POLLUTION PLUME FROM MUNICIPAL SOLID WASTE (MSW) LANDFILLS. <u>Cuevas J.</u> , Sevilla M ^a .T., Procopio J.R., Ruiz A.I., da Silva P., Gismera M ^a .J., Regadío M., Sánchez N., de Soto I.S., Rodríguez M., Leguey, S. (Spain).
12:30-12:45	1836 BIOLOGICAL ANOXIC PHOSPHORUS REMOVAL IN A CONTINUOUS-FLOW EXTERNAL NITRIFICATION ACTIVATED SLUDGE SYSTEM. <u>Kapagiannidis A. G.</u> , Aivasidis A. (Greece).	2158 POTENTIAL OF ORGANIC BIOPROCESSED MATERIALS FOR BIOREMEDIATION (BIOSTIMULATION) OF CHLORPYRIFOS CONTAMINATED SOIL FOR FOOD SAFETY. <u>Kadian N.</u> , Malik A., Satya S., Dureja P. (India).	CHARACTERIZATION PROGRAM IN THE FRAMEWORK OF THE NATIONAL PLAN IN SPAIN María Jose López López MINISTERIO DE MEDIO AMBIENTE, MEDIO RURAL Y MEDIO MARINO (SPAIN)
12:45-13:00	1848 PERLITE AS A CARRIER OF PHOSPHATE-ACCUMULATING BACTERIA. <u>Ivankovic T.</u> , Hrenovic J., Sekovanic L., Tofant A. (Croatia)	1888 ALMOND TREE FOR SOIL QUALITY IMPROVEMENT IN SOUTHERN ITALY. <u>Macci, C.</u> Doni, S. Peruzzi, E. Masciandaro, G. Ceccanti, B. Mennone C. (Italy).	2884 HIGH VALUE CO-PRODUCTS FROM WINE BYPRODUCTS, DIETARY FIBRE CONCENTRATES. WITH ANTIOXIDANT PROPERTIES González-Centeno M.R., Simal S., Eim V.S., Castell-Palou A., <u>Femenia A.</u> (Spain).



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13:00-13:15	<p>2438 ENRICHMENT OF DENITRIFYING PHOSPHORUS ACCUMULATING ORGANISMS (DPAOs) IN A CONTINUOUS FLOW LABORATORY SCALE PLANT. <u>Zafiriadis I., Kapagiannidis A.G., Aivasidis A. (Greece).</u></p>	<p>2377 <i>n</i>- ISOLATION, IDENTIFICATION AND SCREENING OF ECTOMYCORRHIZAL FUNGI FOR REFORESTATION PURPOSES. Sousa N.R., Oliveira R.S., Castro P.M.L. (Portugal)</p>	12:45-13:15	<p>1818-1819 EVALUATION OF FRUIT-VEGETABLE WASTES (FV) FROM A MARKET PLACE AS ALTERNATIVE FEEDSTUFFS IN DAIRY CATTLE DIETS. Angulo, J., Yepes S.A, Yepes, A.M. Bustamante G., Mahecha L. (Colombia)</p>
13:15-13:30	<p>2214 <i>p</i>-cresol MINERALIZATION BY A NITRIFYING CONSORTIUM. Silva-Luna C.D., Gómez J., Houbron E., Cuervo López F.M., Texier A.C. (Mexico)</p>	<p>2242 MEASURING BIODEGRADATION OF OIL PRODUCTS BY MEANS OF ENVIRONMENTAL FORENSIC METHODS. Gallego J.R., García-Mtnez M.J., Ortiz J.E., Ortega M. de Torres T., Llamas J.F. (Spain).</p>		
13:30-13:45	<p>2551 CONTRIBUTION OF QUINONE-REDUCING MICROORGANISMS TO THE ANAEROBIC BIODEGRADATION OF ORGANIC COMPOUNDS UNDER DIFFERENT REDOX CONDITIONS. Cervantes F.J., Gutierrez C.H., López K.Y., <u>Estrada-Alvarado M.I.</u>, Meza-Escalante E.R., Texier A.C., Cuervo F., Gómez J. (Mexico).</p>	<p>2496 SLURRY BIOREACTORS WITH SIMULTANEOUS ELECTRON ACCEPTORS FOR BIO REMEDIATION OF AN AGRICULTURAL SOIL POLLUTED WITH LINDANE. <u>Robles-González I.V.</u>, Ríos-Leal E., Galíndez-Mayer J., Sastre-Conde I., Poggi-Varaldo H.M. (Mexico).</p>		
13:45-15:45	<p>MEAL JOVELLANOS Building</p>			
15:45-17:45	<p>Posters Session Topic II and Topic III See Pages 22 to 30</p>			



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17:45-
18:45

ROUNDTABLE

WASTE, WASTEWATER TREATMENT

Biological, Physical and chemical treatments

WASTE, WASTEWATER MANAGEMENT

NEW RESOURCES (Nutrients, news products)

SOIL APPLICATION

Jules, Van Lier, Pedro García Encina, Ramón Méndez, Xavier Flotats, Sami Sayadi, Colin Burton, Cristina León, Carmen Lobo, Carlos Rad, TIRME

18:45-
19:15

POSTER EVALUATION

PRESENTATION OF THE BEST POSTER

(POSTER SECTION OF MONDAY 22 SEPTEMBER)

(5 minutes each presentation, total 6 poster)

FREE TIME in MALLORCA or PALMA de Mallorca

<http://www.illesbalears.es>;

<http://maps.google.es>

<http://www.palmademallorca.es>

<http://www.catedraldemallorca.org>

<http://www.playadepalma.net>

21:30-
11:30

DINNER

Bahia Mediterraneo Restaurant

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Paseo Marítimo 33-5º piso Pza Mediterráneo 2 (Palma de Mallorca)



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Tuesday 23 September POSTER COMMUNICATION See pages 22 to 30

II Wastewater & solid waste management, treatment and reuse

Wastewater Biological treatment

2337	Low-cost swine manure biodegradation using algal-bacterial systems (HRAP)	De Godos I., Muñoz R., <u>García P.A.</u> , Bécares E. (Spain)	101 II
2339	Metal removal and organic compound degradation by biomass of <i>Aspergillus niger</i> .	<u>Suárez-Herrera M.A.</u> , Fernández-Delgado S., Cerino-Córdova F., Gómez-Treviño J.A. (Mexico)	102 II
2346	Stability of "Anaerobic reactors " under-micro aeration conditions.	<u>Fdz-Polanco M.</u> , <u>Perez S.</u> , Diaz I., Fdz-Polanco F.(Spain)	103 II
2347	The dairy wastewater experimental constructed wetland in a cold climate.	<u>Comino E.</u> , Riggio V., Rosso M., Galliani C. (Italy)	104 II
2356	Mechanically stirred AnSBBR applied to organic matter and sulfate removal: Effect of feed strategy and sulfate load.	Friedl G. F., Mockaitis G., <u>Rodrigues J.A.D.</u> , Ratusznei S.M., Canto C.S.A., Zaiat M., Foresti E. (Brazil)	105 II
2358	Microbial organic matter use and nutrient removal in a constructed wetland system.	<u>Vidal Aguilar G.</u> , Romaní A.M., Sala L., Marquéz E.(Spain)	106 II
2361	Biodegradation of phenol using an anaerobic EGSB reactor.	<u>Eguía A.</u> , Olvera M. E., Cerezo R. Kuppusamy I. (Mexico)	107 II
2398	Study of a nitrifying sequencing batch reactor in presence of m-Cresol.	González-Álvarez E., Steed E., <u>Ben-Youssef C.</u> , <u>Zepeda A.</u> (Mexico)	108 II
2457	Aerobic biological treatment of municipal waste waters and pig slurry and the associated bacteriological and parasitological risks.	<u>Venglovský J.</u> , Sasáková N., Juriš P., Papajová I., Vargová M., Ondrašovièová O., Ondrašoviè M. (Czech Republic)	109 II
2512	Production of manganese peroxidase (MnP) from <i>Anthracoophyllum discolor</i> for lignin degradation	<u>Rubilar O.</u> , Tortella G., Acevedo F., Cuevas R., Bornhardt C., <u>Diez M.C.</u> (Chile)	110 II
2519	Use of 4-amino-naphtalen sulfonic acid as the sole carbon, nitrogen and sulphur source, by a microbial community.	Velázquez-García, A., Salazar-Huerta A., de los Cobos-Vasconcelos D., Santoyo-Tepole F., <u>Juárez-Ramírez C.</u> , Ruiz-Ordaz N., Galíndez- MayerJ. (Mexico)	111 II
2524	Experimental design of copper biosorption from aqueous solution by <i>Aspergillus terreus</i> .	<u>Cerino-Córdova F.J.</u> , García-León A.M., García Avalos B.C., Lozano Ramirez T. (Mexico)	112 II
2534	Effect of temperature on the anaerobic degradation of phenol and the microbial community.	<u>Leven L.</u> , Schnürer A. Sweden	113 II



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2537	Continuous biodegradation of sulfanilic acid in a multi-stage packed bed reactor.	Salazar-Huerta A., Velázquez-García A., de los Cobos-Vasconcelos D., <u>Juárez-Ramírez C.</u> , Ruiz-Ordaz N., Galíndez-Mayer J. (Mexico)	114 II
2542	Azo-dyes mixture degradation in a fixed bed biofilm reactor packed with volcanic porous rock.	Contreras-Blancas E., <u>de los Cobos-Vasconcelos D.</u> , Juárez-Ramírez C., Poggi-Valardo H.M., Ruiz-Ordaz N., Galíndez-Mayer J. (Mexico)	115 II
2604	Degradation of a monosulfonated azo dye by an integrated biosorption and anaerobic system.	<u>Gonçalves I.C.</u> , Campos R., Pinheiro H.M., Lopes A., Ferra M.I. (Portugal)	116 II
2611	Effect of temperature increments in septic tank efficiency	Chi-Tec M, Caballero-Arzápalo N., Giacomán Vallejos G., Méndez-Novelo R., <u>Quintal-Franco C.</u> (Mexico)	117 II
2686	Study of the sludge sedimentation dynamics by means of an optical system.	<u>Giacomán Vallejos G.</u> , Ponce Caballero C., Quintal Franco C., Pérez Cortés M. (Mexico)	118 II
2882	Effect of discontinuing sucrose in the feed on the performance of a bioreactor treating a mixture of 2,4,6-trichlorophenol and phenol.	<u>Bárcenas-Torres J.D.</u> , Ríos-Leal E., Garibay-Orijel C. (Mexico)	119 II
2904	Fluidized bed bioreactors coupled to zero-valent iron filters for removal of high concentrations of perchloroethylene	<u>Poggi-Valardo H.M.</u> , Herrera-López D. García-Mena , Ríos-Leal E. (Mexico)	120 II
2909	Biological treatment systems applied to the degradation of chlorinated organic compounds: Review of advances and perspectives	Bárcenas-Torres J.D., Garibay-Orijel, C., Macarie H., García-Mena J., Poggi-Valardo H.M. (Mexico/France)	121 II
Solid Wastes (organic including waste activated sludge & inorganic)			
1866	Study of the collection and disposal of hospital solid wastes in Karajcity (Iran)	<u>Farzadkia M.</u> , Sabily M, ., Ghanbary S. (Iran)	122 II
2231	Evolution of the stability parameters composting two.phase olive mill waste with grape marc and vine branches.	García-Gallego A., <u>López-Piñeiro A.</u> , <u>Albarrán A.</u> , Rato J. M., Barreto C., Cabrera D., Prieto M. H., Muñoz A., Almendro, J. P. (Spain)	123 II
2235	Hazardous fly ash: a discussion on the speciation and treatment of heavy metals	<u>Lima A.T.</u> , Ottosen L.M., Ribeiro A.B. (Portugal)	124 II
2269	Fungal treatment: A prospective process for eco-friendly bioremediation of wastewater sludge	<u>Molla A.H.</u> , Fakhru'l-Razi A. (Bangladesh)	125 II
2292	Rabbit manure under composting and vermicomposting process: a quemometric quality evaluation.	Campitelli P., Rubenacker A., Sereno R., <u>Ceppi S.</u> (Argentina)	126 II



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2348	Evolution dairy manure in a dungpit with regard to solid-liquid separation and methane production distribution.	Maza E., Muñoz N., Rico C., García H., <u>Rico, J.L.</u> , Tejero, I. (Spain)	127 II
2350	Anaerobic digestion of solid slaughterhouse waste chemically pretreated.	<u>Flores Juárez C.R.</u> , Montoya Herrera L., Rodríguez García A. (Mexico)	128 II
2359	Kinetics of forced aeration biodegradation of digested sewage sludge-reed mixtures at different temperatures.	Sánchez-Arias V., Fernández F.J., Rodríguez L., Stentiford E., <u>Villaseñor J.</u> (Spain/UK)	129 II
2363	Acid fermentation of municipal sludge: The effect of sludge type and origin on the production and composition of volatile fatty acids	<u>Ucisik A. S.</u> , Schmidt J. E., Henze M. (Denmark)	130 II
2364	Evaluation of biosolids quality generated by thermophilic anaerobic digestion.	Zafra Jiménez G., Olgún González L., Hernández Montoya M.A., <u>Vigueras Carmona S.E.</u> (Mexico)	131 II
2385	A comparison of the wet anaerobic digestion of food and garden waste ratios	<u>Lisk C.</u> , Banks. S C. J. (United Kingdom)	132 II
2389	Spectrofluorimetric detection of glutathione and thiol-containing compounds in various environmental matrices.	<u>Palacio-Barco, E.</u> , Robert-Peillard, F., Boudenne J.L., Dudal, Y., Coulomb, B. (France)	133 II
2426	Used battery collection campaign central Mexico: Statistics and metal content report, advances in recycling technology and legislative/regulatory situation analysis.	<u>Guevara-García J. A.</u> , <u>Montiel-Corona V.</u> , Juárez Galindo A., Mendoza Sarmiento G., Muñoz López F., Papalotzi Juárez S., de la Cruz Díaz R. (Mexico)	134 II
2439	Anaerobic WAS co-digestion with OMW and glycerol.	<u>Athanasoulia E.</u> , Melidis P., Aivasidis A. (Greece)	135 II
2449	Heavy metal sequestration by humic substances during phyto- treatment of sewage sludges.	Peruzzi E., Doni S., Macci. C., Ceccanti B., Masciandaro G. (Italy)	136 II
2462	A laboratory experiment on vermicomposting of winery residues and sewage sludge.	<u>Soriano M.D.</u> , Molina M.J., Llinares J., Pons V., Pallares L. (Spain)	137 II
2475	Nondurable management of household waste in algeria, a future threatened of our resource (Case of the town of Tatna).	Sefouhi L., Kalla M. (Algeria)	138 II
2538	Solar drying in greenhouse of mixture of olive mill wastewater and olive cake in Morocco	Lakhtar H., Ismaili-Alaoui M., Perraud-Gaime I., Macarie H., Roussos S. (Morocco/France)	139 II



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2560	Biogasification of industrial biowaste and sewage sludge-management of biogas quality.	<u>Kymäläinen M.</u> , <u>Lähde K.</u> , Kaarnakoski M., Pirttijärvi T., Arnold M., Kurola, J., Kautola, H. (Finland)	140 II
2623	The fate of helminth eggs in sewage treatment plant sludge on composting	<u>Khadra A.</u> , Hamdi H., Meddich A., Hafidi M. (Morocco)	141 II
Agronomic valorization			
2177	Effects of thermically-dry sewage sludge and municipal waste compost amendment on microbial biomass, dehydrogenase activity and CO ₂ fluxes in a degraded agricultural soil.	<u>Haller I.</u> , Garcia-Gil J.C., Soler-Rovira P.A., Polo A. (Spain)	142 II
2190	Agronomical use of sewage sludge from urban waste water treatment plan.	Motta S. (Italy)	143 II
2209	Wastewater reclaim for golf grass irrigation.	Mouhanni H., Hamdi H., Bendou A., Benzine L. (Morocco)	144 II
2222	Effects of long-term application of municipal solid waste compost on speciation and availability of heavy metals in soil	Benachiba W., Lakhdar A., Verloo M.G., Gabteni N., Jedidi N., Gallali T. (Tunisia)	145 II
2228	Impact of repeated two-phase two-phase olive mill waste application on phosphorus fractination in a degraded olive grove soil.	<u>López-Piñeiro A.</u> , Albarrán A., Flores S, Rato J. M., Muñoz A., Cabrera D., Peña D., Fernández S. (Spain)	146 II
2252	Microbial indicators of fecal contamination in soils under different wastewater irrigation paterns.	<u>Contreras-Godínez C.A.</u> , Palacios-López O.A., Muñoz-Castellanos L.N., Saucedo-Teran R., Rubio-Arias H., Nevarez-Moorillón G.V. (Mexico)	147 II
2265	Heavy metal risk assessment in the use of urban wastes for the restoration of a forest soil affected by fire.	<u>Fernández-Peña M.</u> , Rad C., Bustillo J.M., Ollalla C., González-Carcedo S. (Spain)	148 II
2322	Evaluation of plant available nitrogen in concentrated pig slurry	<u>Ramírez M.</u> , Comas J., Pujolá M. (Spain)	149 II
2331	Effect of pulp mill sludge on soil characteristics, microbial diversity and vegetal production of <i>Lolium perenne</i> .	<u>Gallardo F.</u> , Cea M., Diez M.C. (Chile)	150 II
2375	Comparison between secondary and tertiary treatment of waste waters effluents and their developments in irrigation applications.	Thabet I., Mkaddem M., El Ferjani E., Abichou T., Romdhane M. (Tunisia)	151 II



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2411	Application of pig slurry to soils. Effect of ammonia stripping over nitrogen and TOC lixiviation.	<u>Bolado Rodriguez S.</u> , Garcia Sinovas D., Alvarez Benedi J. (Spain)	152 II
2479	Foliar application effects of beet vinasse on rice yield and chemical composition	<u>Tejada M.</u> , García-Martínez A.M., Benítez C., González J.L., Bautista J., Parradob J. (Spain)	153 II
2498	Use of high-stability composts in recreational areas: assays on cold season turfgrasses	Gómez de Barreda-Ferraz D., <u>Albiach M.R.</u> , Pomares F., Ingelmo F, Canet R. (Spain)	154 II
2501	Use of hydroponic culture to assess nutrient supply by treated wastewater.	<u>Adrover, M.</u> , Moyà, G., Vadell, J. (Spain)	155 II
2557	Humus application, produced by organic waste transformation in growing lands.	<u>Gutiérrez Martínez M.G.</u> , Morales Osorio A., Gutiérrez Martínez R., Márquez Monsalvo J.J., Reyes Reyes G. (Mexico)	156 II
2583	Effect of heavy metals from amended biosolids soils sowed with forages on the abundance and biodiversity of edaphic arthropods.	Flores-Pardavé L., Flores-Tena F.J., <u>Hernández-Sánchez A.J.</u> (Spain)	157 II
2878	Effects of sewage sludge compost application over/on soil biological respiration in a <i>Festuca arundinacea</i> crop.	<u>Vera J.</u> , Colombás M.; Vadell J. (Spain)	158 II
2555-	High value co-products from wine byproducts (ii): polyphenols and antioxidant activity.	Femenia A., <u>González-Centeno M.R.</u> , Garau M.C., Sastre-Serrano G., Rosselló C. (Spain)	159 II

Microbiology

2379	Phenol and 4-chlorophenol removal by <i>Comamonas testosteroni</i> : cometabolism	<u>Tobajas M.</u> , Monsalvo, V.M., Mohedano, A.F., Rodríguez, J.J. (Spain)	160 II
2405	Microbial assessment for the treatment of Ni-V containing wastes.	Rodriguez-Luna W., Aburto-Anell J., Garcia-Mena J., <u>Rojas-Avelizapa N.G.</u> (Mexico)	161 II

Gaseous effluent (VOC) treatment

1840	MTBE and BTEX's mixture decomposition by ozone in gas phase	Franco M., de los Santos W., Poznyak T., Chairez I., Poznyak A. (Mexico)	162 II
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2340	Treatment of a gaseous emission from a leather industry in a suspended-growth bioreactor.	Carvalho M.F., Duque A.F., Moura S. C., Ferreira Jorge R.M. Castro P.M.L (Portugal)	163 II
2518	Adsorption of vapor-phase toluene on organic clay (OC-CPC) and its regeneration conditions.	Socorro López C., Guillermo Osorio R., Tzayhri Gallardo V. (Mexico)	164 II

TOPIC III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

Appropriate remediation technologies

2199	Study by dynamic light scattering of an O/W emulsion of an epoxy resin dispersed in water by means of a triblock copolymer of type PEO-PPO-PEO	Uscanga Hernández E., del Rió García J. M., Avendaño Gómez J. R. (Mexico)	165 III
2353	Selection of bioreactor operating policies for an optimal production of microbial poly(β -Hydroxybutyrate).	López-Jiménez J.A., Bucalá V., Villar M.A. (Argentina)	166 III
2481	A technology to mitigate the pesticide contamination into the water	Merli A., Trevisan M., Fait G., Capri E. (Italy)	167 III
2500	Strategies of bioremediation of a contaminated coastal ecosystem (Bolmon lagoon, South-easter Mediterranean coast)	Charpy-Roubaud C., Stéphanie F., Franquet E., Pietri L, Anselmet F., Brun L., Roux B. (France)	168 III
2309	Degradation of chlorinated compounds in an anaerobic-aerobic process.	Alfán-Guzmán R., Guerrero-Barajas C., García-Peña I. (Mexico)	169 III
2310	Vitamin B ₁₂ in enrichments of hydrothermal vents sediments supplemented with cobalt and methanol.	Gómez y Gómez Y., García-Peña I., Guerrero-Barajas C. (Mexico)	170 III
2156	Biodegradation of an oil-hydrocarbon contaminated soil, enhanced by surfactants: effect of the type and dose of surfactant.	Torres L.G., Galindo C., Rojas N., Iturbe R. (Mexico)	171 III
2236	Screening of bacteria for PAHs degradative genes and biosurfactant production.	Rodríguez-Conde S., Segura A. (Spain)	172 III
2272	Remediation of soils contaminated of PAHs using a sequential method: desorption with surfactant-electrochemical degradation.	Alcántara M. T., Gómez J., Pazos M., Longo M. A. , Sanromán M. A. (Spain)	173 III



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2274	Remediation technologies for treatment of PAH-contaminated soil and strategies to enhance process efficiency.	Gómez J., Alcántara M.T. , Pazos M., Longo M.A., <u>Sanromán M. A.</u> (Spain)	174 II
2299	Production of biosurfactant by <i>Rhodoccus</i> sp. and effect of shaking on bacterial growth and biosurfactant yield.	Holguin-Salas A., Ballinas-Casarrubias M.L., Rivera-Chavira B.E., Márquez-Meléndez R., <u>Nevárez-Moorillón, G.V</u> (Mexico)	175 III
2300	Degradation of phenanthrene by a chilean white rot fungus <i>Anthracoophyllum discolor</i> .	<u>Acevedo F.</u> , Cuevas R., Rubilar O., Tortella G., Diez M.C. (Chile)	176 III
2318	Lindane contaminated soil biostimulation with vegetable organic nitrogenated extracts: effects on soil biochemistry and biodiversity.	<u>García-Martínez A.M.</u> , Tejada M., Díaz A.I., Rodríguez-Morgado B., Bautista J., Parrado. J. (Spain)	177 III
2401	Effect of two phytohormone producer rhizobacteria on the Bermuda grass growth response and tolerance to phenanthrene.	Guerrero-Zúñiga A., Rojas-Contreras A., Rodríguez-Dorantes A., Montes-Villafán S. (Mexico)	178 III
2409	Total PAH and benzo(A)Pyrene removal by bioremediation treatments from clay soil contaminated with diesel oil.	Chagas-Spinelli A.C.O., Lima, E.S., Kato M.T., <u>Gavazza, S.</u> (Brazil)	179 III
2436	Benzo[a]Pyrene: biodegradation by different <i>Trametes versicolor</i> morphology and enzymatic studies.	<u>Hernández L.</u> , Gabarrell X, Vicent T. (Spain)	180 III
2442	TPH removal by microflora-ported by organic materials and humic acids as surfactant.	García Díaz C., Esparza García F., <u>Barrera-Cortés J.</u> (Mexico)	181 III
2493	Combined use of Mediterranean local resources for restoring TCE-Contaminated soils. The bioremediation effect of <i>Dittrichia viscosa</i> and vermicomposted olive wastes.	Moreno B., Benítez E. (Spain)	182 III
2586	Application of Single-Drop Microextraction combined with Gas Chromatography-Electron Capture Detector for the determination of gama-hexachlorocyclohexane in soil and sediment samples from bioremediation	<u>Ríos-Leal E.</u> , Cirino Rojas Chávez C., Castro-Ríos R., Chávez-Montes A.I., Robles-González I., Poggi-Varaldo H.M. (Mexico)	183 III
2681	Effect of liquid cow manure application on atrazine degradation in andisol.	<u>Palma G.</u> , Aguilera P., Briceño G., Mora M.L., Demanet R. (Chile)	184 III



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2692	2,4-Dichlorophenoxyacetic acid degradation by a mixed bacterial community isolated from pesticide contaminated soils.	<u>Torres-Arredondo N.</u> , Santoyo-Tepole F., Gómez-Acata R., Galíndez-Mayer J., Ruiz-Ordaz N. (Mexico)	185 III
2870	Degradation of diclorinated dibenzo-p-dioxin by a cell free extract from <i>Geobacillus midousuji</i> SH2B-J2	<u>Masaya Nakamura</u> , Yuichiro Otsuka, Yoshihiro Katayama, Atsushi Takahashi (Japan)	186 III
1785	Heavy metal accumulation in <i>Thlapsi caerulescens</i> on Pb-Zn mine tailing from mibladen and zaida (north west of morocco)	<u>Berrah El Kheir S.</u> , Oubbih J., Abdelhak Bouabdli A., Saidi N. (Morocco)	187 III
2240	Characterization of soil and plant -associated bacteria on metal contaminated site.	<u>Boulet, J.</u> , Weyens, N., Barac, T., Dupae, J., van der Lelie, D., Taghavi, S., Vangronsveld, J. (Belgium)	188 III
2243	Metal tolerant plant growth-promoting rhizobacteria affecting growth, symbiosis and seed yield of lentil grown in nickel and lead	<u>Saghir Khan M.*</u> , Zaidi A., Ahmad Wani P. (India)	189 III
2369	Radiocesium (¹³⁷ Cs) transfer and bioaccumulation In some vegetable crops	Raja Rajan A., <u>Janani T.</u> , Anu N., Kadambari S., Thilagaraj W.R. (India)	190 III
2373	The role of physiological active substances in plant adaptation to stress.	Voronina L., Morachevskaya E. (Russia)	191 III
2374	Use of urban composts for the regeneration of a burnt Mediterranean soil.	<u>Cellier A.</u> , Virginie Baldy V., Ballini C, Houot S., Francou C. (France)	192 III
2443	<i>Lycopersicum esculentum</i> roots: A model system for arsenic phytoremediation study.	<u>Alfárez-Chávez J.</u> , Araiza-Arvilla J., Hernández-Barnum N. Jáuregui-Rincón J. (Mexico)	193 III
2471	Influence of liming on the toxicity of lixiviates from soils contaminated by piryte tailings.	<u>Gonzalez V.</u> Diez M., García I. Martin I.F., Simón M. (Spain)	194 III
2474	Innovative approaches for the remediation of arsenic and mercury pollution via soil washing.	<u>C. Sierra F.</u> González-Coto R., Villa J.M., Menéndez-Aguado, J. R. Gallego (Spain)	195 III
2503	Use of native species from contaminated soils in phytoremediation.	Fernández R., Bertrand A., Casares, R., Sánchez Tamés R., <u>González.A.</u> (Spain)	196 III



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2507	Effects of short chain organic acids on Zn and Cu desorption from mining soils by column leaching	Pérez-Esteban J., Candela R., Martín-Ramiro A., Masaguer A., Moliner A. (Spain)	197 III
2513	Heavy metal content evaluation of species of <i>Spartina</i> schreb. genera (<i>Graminae</i>) from the tinto river estuary (Huelva, Spain)	Rufo L., Ortuñez E., Rodríguez N., Amils R., <u>Fuente V.</u> (Spain)	198 III
2521	Reclamation of a burnt forest soil with municipal waste compost. Effects on CO ₂ emission and soil carbon sequestration.	Turrión M.B., Lafuente F., <u>López O.</u> , Mulas R., Ruiperez C., Heras L. (Spain)	199 III
2522	Effect of different cultivation conditions for the production of ligninolytic enzymes by the white-root fungi <i>Anthracoxyllum discolor</i> .	<u>Bustamante M.</u> , Tortella G. R., Diez M. C. (Chile)	200 III
2525	Resistance to high level of Cu (Copper) by arbuscular mycorrhizal, saprobe fungi and <i>Eucalyptus globulus</i>	Arriagada C., Pereira G., Machuca A., Alvear M., Martin J., Ocampo J. (Chile)	201 III
2547	Effect of Pb and Zn on <i>Brassica fruticulosa</i> antioxidant systems.	<u>Farias L.</u> , Murcia M.M., Ferrer M.A., Calderón A.A. (Spain)	202 III
2548	Salicylic acid-mediated responses of <i>Teucrium carthaginense</i> antioxidant capacity to heavy metals.	Roca, R., <u>Farias L.</u> , Calderón A.A., Ferrer, M.A. (Spain)	203 III
2459	Transport and lixiviation in soils of the herbicides methyl-imazamethabenz and chlorsulfuron in soils at different scales.	<u>Bolado Rodríguez S.</u> , García Sinovas D., Isla Ortega T., Álvarez-Benedí J. (Spain)	204 III
2874	Comparison between Pb phytoextraction capacities of a Halophyte (<i>S. portulacastrum</i>) and a glycophyte (<i>B. juncea</i>)	<u>Zaier H.</u> , Ghnaya T., Abdelly C. (Tunisia)	205 III
2879	Evaluation of the capacity of <i>Tagetes foetidissima</i> to accumulate copper in vitro and greenhouse conditions	Sánchez Parajeles A., Romero, Rosaura M., Hernández Colorado, R. (Costa Rica)	206 III
2898	Influence of electrokinetic process on soil properties in a pilot scale assay.	<u>Lobo M.C.</u> , Perez-Sanz A., Martínez-Iñigo M.J., Gutierrez A., Vicente M.A., Plaza A. (Spain)	207 III



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Wednesday 24 September Oral communication

**II WASTEWATER & SOLID WASTE
MANAGEMENT, TREATMENT
Bioremediation of xenobiotics**

**III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL
ENVIRONMENTS**

	Chairperon 9:00-11:15. Jose Luis Sanz and Fons Stams	Chairperon 9:00-11:15:30. Carmen Lobo Bedmar and Margarita Martín	Chairperon 9:00-11:15. Aldo González and Alfredo Ortega
9:00 - 9:15	2528 EFFECT OF COMMUNITIES OF AMMONIA-OXIDIZING BACTERIA ON DEGRADATION OF 17-ALPHA-ETHYNYLESTRADIOL BY NITRIFYING ACTIVATED SLUDGE. <u>Limpiyakorn T.</u> , Sermwaraphan P., Kurisu F. (Thailand).	2311 SEARCH OF HEXACHLOROCYCLOHEXANE (HCH) DEGRADERS FROM CONTAMINATED TROPICAL SOILS. Durimel, A., Holliger C., C. Jean-Marius C., Gros O., Gaspard S. (Guadeloupe, France).	2454 SPECIFIC DEVELOPMENT FOR CATALYTIC EVALUATION OF CARBON MICRO-FIBERS COVERED WITH TiO ₂ -V ₂ O ₅ . <u>Tapia-Picazo, J.C.</u> , Medina-Valtierra J., Rico-de Lira Y.P., Bonilla-Petriciolet A. (Mexico).
9:15 - 9:30	2561 MOLECULAR IDENTIFICATION AND PHYSIOLOGICAL CHARACTERIZATION OF THE VINYL ACETATE ELIMINATION PROCESS IN AN AXENIC AEROBIC CULTURE ISOLATED FROM AN AEROBIC-METHANOGENIC SYSTEM. <u>Lara I.</u> , Durán U., Arana A, Ramírez, F. (Mexico)	2892 BIOREMEDIATION OF SEVERELY WEATHERED HYDROCARBONS: IS IT POSSIBLE? Gallego J.R., Villa R., Sierra C., Sotres A., Peláez A.I., Sánchez J. (Spain)	2473 DEGRADATION OF BENZO[A]ANTHRACENE AND BENZO[K]FLUORANTHENE BY <i>Trametes versicolor</i> . <u>Borràs E.</u> , Casas N., Hernández L., Marco-Urrea E., Moreno M., Vilaplana M., Blánquez P., Caminala G., Gabarrell X., Sarrà M., Vicent T. (Spain).
III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS			
9:30-10:00	2441 KINETICS PARAMETERS OF A SLURRY REMEDIATION PROCESS IN ROTATING DRUM BIOREACTORS. Esquivel-Ríos I., Rodríguez-Meza M. A., <u>Barrera-Cortés J.</u> (Mexico).	2381 CHARACTERIZATION OF BACTERIAL CONSORTIA FOR ITS USE IN BIOREMEDIATION OF GAS-OIL CONTAMINATED ANTARCTIC SOIL. Ruberto L., <u>Vázquez S.</u> , Mestre C., Nogales B., Christie-Oleza J., Bosch R.; Mac Cormack W.P. (Argentina)	2298 CHLOROPHENOLS DEGRADATION IN SOIL COLUMNS INOCULATED WITH THE WITE-ROT FUNGUS <i>Anthracyphyllum discolor</i> IMMOBILIZED ON WHEAT GRAINS. <u>Diez M.C.</u> , Tortella G., Navia R., Bornhardt C. (Chile)
10:00 - 10:15	2883 NITRIFICATION IN TRICKLING FILTERS APPLIED TO THE POST-TREATMENT OF EFFLUENTS FROM UASB REACTOR: CORRELATION BETWEEN AMMONIA REMOVAL AND THE RELATIVE ABUNDANCE OF NITRIFYING BACTERIA. <u>Missagia B.S.</u> , de Almeida P.G.S., Silva S.Q., Sanz J.L., Chernicharo C.A.L. (Brazil)	2515 INFLUENCE OF ORGANIC POLLUTANTS ON THE PHYTOEXTRACTION POTENTIAL OF <i>Halimiones portulacoides</i> . <u>Almeida C.M.R.</u> , Dias A.C.M., Mucha A.P., Vasconcelos M.T.S.D. (Portugal).	2552 CHASING HALORESPIRERS: HIGH THROUGHPUT MULTIPLEX DETECTION OF DECHLORINATING BACTERIA USING PRI-LOCK PROBES. <u>Maphosa F.</u> , van Doorn R., de Vos W.M., Schoen C., Smidt H. (The Netherlands).



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10:15 - 10:30	2446 ISOLATION AND CHARACTERIZATION OF AEROBIC CULTURABLE ARSENIC RESISTANT BACTERIA FROM DIFFERENT WATER SOURCES SUCH AS SURFACE WATER AND GROUND WATER IN RAUTAHAT, NEPAL. <u>Shakya S.</u> , Pradhan B., Smith L., Shrestha J., Tuladhar S. (Nepal).	2591 A FULL-SCALE REMEDIATION PROJECT USING A COMBINATION OF TREATMENT TECHNIQUES: SOIL FLUSHING, SOIL WASHING, THERMAL DESORPTION, LANDFARMING. Herreros Guerra F., <u>Martínez Dobalo F.</u> AG. Ambiental (Spain).	2452 OXIDATION OF ALKANES COUPLED TO CHLORATE REDUCTION BY <i>Pseudomonas chloritidismutans</i> AW-1T. <u>Mehboob F.</u> , Junca H., Schraa G., Stams A.J.M. (The Netherlands).
10:30 - 10:45	2178 A STUDY OF NATURAL RECOVERY IN AN AQUATIC ECOSYSTEM AFFECTED BY MINING: THE RODRIGATOS STREAM (EL BIERZO, LEON, SPAIN). <u>Lacal M.</u> , Vadillo L., Rodriguez V., Alberruche, E. (Spain).	2238 A ROLE FOR PLANT-ASSOCIATED BACTERIA TO IMPROVE IN SITU PHYTOREMEDIATION OF BTEX AND TCE: EVIDENCE FROM 2 FIELD EXPERIMENTS. <u>Weyens N.</u> , Barac T., <u>Boulet J.</u> , van der Lelie D., Taghavi S., <u>Vangronsveld J.</u> (Belgium).	2477 ANTHRACENE DECOMPOSITION IN SOLID PHASE BY SIMPLE OZONATION. <u>Gómez-Alvarez M.</u> , Poznyak T., Silva-Sánchez C., Ríos-Leal E. (Mexico)

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

IV MICROBIAL ECOLOGY

10:45 11:00	1876 BIODEGRADATION OF PHENOLIC COMPOUNDS WITH OXIDASES FROM SORGHUM AND NON-DEFINED MIXED BACTERIUM MEDIA. <u>Obamé C.E.L.</u> , <u>Savadogo P.W.</u> , Dicko H. M., <u>Dembélé R.H.</u> , Traoré A.S. (Burkina Faso).	1879 NATURAL ATTENUATION OF HYDROCARBON POLLUTED SOILS IN MEXICO. <u>Fernández-Linares L.</u> , Rojas-Avelizapa N., Roldán-Carrillo T., Islas-Ramírez M. (Mexico).	2281 MICROBIAL ECOLOGY OF ARTISANAL ITALIAN CHEESE: MOLECULAR MICROBIAL CHARACTERIZATION BY CULTURE-INDEPENDENT METHOD. <u>Colombo E.</u> , Scarpellini M., Franzetti L., Dioguardi L. (Italy).
11:00 11:15	2341 RESOLVING AND MODELLING TRACE METAL PARTITIONING IN FRESHWATER SEDIMENT. <u>Devallois V.</u> , Boyer P., Coulomb B., Boudenne J.L. (France).		2345 BACTERIAL AND FUNGAL INDOOR AIR CHARACTERIZATION IN TWO NEW BIOCLIMATIC BUILDINGS. Sánchez Muñoz M., Cobas Pupo G., Díaz Portuondo E., González Aldo E., Amils Pibernat R., Sánchez Cabrero B. (Spain).

COFFEE BREAK

11:15 11:45	Chairperon 11:45-13:30. Robbert Kleerebezem, Ana Elías, and Josefina Barrera	Chairperon 11:45-13:30 Anna Barracaracciolo and Jose Luis R Gallego	Chairperon 11:45-13:30 Jonathan Kahl, Jose Luis Rubio and Anne Marie Farnet
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11:45 12:00	2282 CONTROL OF BIOMASS ACTIVATION FOR VOC TREATMENT IN BIOFILTERS: INFLUENCE ON THE START-UP AND SUBSEQUENT OPERATION. <u>Elías A A*</u> , Barona A A., Gallastegi G A ., Rojo N A., Gurtubay L A., Ibarra-Berastegi G B., Fernández, N. C. (Spain)	2868 SOIL REMEDIATION: NEW STRATEGY BY THE COMBINE OF F.I.S.H. AND GEO-RADAR TELEDETECTION. Garbi C., Mengs G., González Montalvo D., Martín, M. (Spain) NATURALBIOTECH	2383 MICROORGANISMS INTERACTING IN A BIOFILTER. Barba-Ávila M.D., Flores-Tena F.J., Moreno-Terrazas R., <u>Ramírez-López E. M.</u> (Mexico).
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III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

V ENVIRONMENTAL EDUCATION AND LEGISLATIVE ASPECT

12:00 12:15	2526 TREATMENT OF VOLATILE REDUCED SULFUR COMPOUNDS IN BIOTRICKLING FILTERS OPERATING IN SERIES. Aroca G., <u>Cáceres M.</u> , San Martín R. (Chile).	2237 METAL ACCUMULATION IN PLANTS WITH ADDED ECONOMICAL VALUE GROWN ON METAL CONTAMINATED SOILS: SUSTAINABLE USE OF THESE SOILS FOR BIO-ENERGY PRODUCTION AND POSSIBILITIES FOR PHYTOEXTRACTION. <u>Vangronsveld J., Boulet J., Weyens N., Meers E., Meiresonne L., Colpaert J., Thewys T., van der Lelie D., Carleer R., Ruttens A.</u> (Belgium).	2529 TOPPS: AN EU-LIFE PROJECT TO PRESERVE THE WATER QUALITY: FROM THE SUSTAINABLE STRATEGY TO ENGINEERING SOLUTIONS, WITH TRAINING AS A MAJOR PILAR. <u>Gil E., Llorens J., Llop J., Queraltó M., Escolà A,</u> (Spain).
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IV MICROBIAL ECOLOGY

12:15 12:30	1885 BACTERIAL COMMUNITY SHIFTS CORRELATED WITH CHANGES IN PERFORMANCE IN A MESOPHILIC ANAEROBIC BIOREACTOR TREATING DAIRY WASTEWATER. <u>Lee C., Kim J., O'Flaherty V., Mahony T., Shin S., Hwang S.</u> (Ireland/Korea).	2427 MERCURY UPTAKE BY METAL TOLERANT <i>Silene vulgaris</i> GROWN ON Hg CONTAMINATED SOILS. <u>Pérez-Sanz, A., Lobo, M.C., Alarcón, R., Sierra, M.J., Millán R.</u> (Spain).	2877 INTEGRATED ENVIRONMENTAL MANAGEMENT OF WASTEWATER DISCHARGED FROM A CLUSTER OF FIVE TEXTILE FACTORIES. <u>El-Gohary F.A., Nasr F.A, Abdel Baset N., Shoush M., Ali H.I.</u> (Egypt)
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VI NEW PERSPECTIVES

12:30 12:45	2464 AMMONIUM TOLERANCE OF <i>Methanoculleus</i> sp. <u>Schnürer A., Broberg A.</u> (Sweden).	2490 COMBINED USE OF BACTERIAL COMMUNITY ANALYSIS TECHNIQUES AND GEOGRAPHIC INFORMATION SYSTEM (GIS) FOR THE EVALUATION OF ANTHROPOGENIC IMPACT IN COASTAL WATERS Bosch R., Aguiló M.M., Martín-Cardona C., Nogales B. (Spain)	2308 HYDROLYSIS OF RESIDUALS OF BARLEY STRAW USING WHITE-ROT BASIDIOMYCETES. Lázaro-Anell A.C., Arana-Cuenca, A., <u>Téllez-Jurado, A.</u> (Mexico).
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12:45 13:00	2388 IN SEARCH OF FUNCIONALITY-DIVERSITY RELATIONSHIPS IN ANAEROBIC MIXED CULTURE FERMENTATIONS. <u>Kleerebezem R.</u> , Temudo M., Muyzer G., Van Loosdrecht M.C.M (The Netherlands).	2239 MODIFIED ENDOPHYTES FOR IMPROVING PHYTOREMEDIATION OF MIXED CONTAMINATIONS OF HEAVY METALS (Ni) AND ORGANIC CONTAMINANTS (TOLUENE). Weyens N., Barac T., <u>Boulet J.</u> , van der Lelie D., Taghavi S., <u>Vangronsveld J.</u> (Belgium).	2465 APPLYING INDUSTRIAL ECOLOGY IN AN ORGANIC FARM. <u>Cervantes-Torre-Marin G.</u> , Robles-Martínez F., Calixto-Mosqueda M.C., Rodríguez-Herrera G., Sosa-Granados R-D. (Mexico/Spain).
13:00 13:15	2257 RAPID SCREENING AND OPTIMIZATION FOR 1,3 PROPANEDIOL PRODUCTION. <u>Supalak Sattayasmithstid</u> , Poonsuk Prasertsan , Pawadee Methacanon (Thailand).	13:00- 13:30	1882 INDIAN EXPERIENCE FOR TREATMENT OF LAND DEGRADATION PROBLEM OF SPAIN THROUGH BIOTECHNOLOGY. <u>Chouhan T.S.</u> (India).
13:15 13:30	2408 PHYLOGENETIC ANALYSIS OF BACTEROIDALES 16S rRNA GENES FROM HUMAN AND ANIMAL FECAL SAMPLES. <u>Gourmelon M.</u> , Mieszkin S., Yala J.F., Joubrel R., Pommepuy M. (France).	SOIL DEGRADATION FROM A GLOBAL PERSPECTIVE Juan José Ibáñez. CSIC-Universidad de Burgos, (Spain)	2455 EFFECT OF TYPE OF FUNGAL CULTURE, TYPE OF PELLETS AND pH ON THE SEMI-CONTINUOUS POST-TREATMENT OF AN ANAEROBICALLY-PRETREATED WEAK BLACK LIQUOR FROM KRAFT PULP INDUSTRY. <u>Robledo-Narváez P. N.</u> , Ortega-Clemente L. A., Ponce-Noyola M.T., Rinderknecht-Seijas N.F., Poggi-Varaldo H.M. (Mexico).
13:30 15:30	MEAL JOVELLANOS Building		
15:30 17:00	Posters Section See pages 36 to 44		

CONTINUATION TO ORAL COMMUNICATION

IV MICROBIAL ECOLOGY	III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS	VI NEW PERSPECTIVES
Chairperson 17:00-17:30 Colin Burton and Aboubakar Ouattara	Chairperson 17:00-17:30 Ileri Robles and Susana Vazquez	Chairperson 17:00-17:30 Xavier Flotats and Ramón Mendez



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17:00-17:15	<p>2407 ESTIMATION OF PIG CONTAMINATIONS IN CATCHMENT BY REAL - TIME PCR USING TWO PIG-SPECIFIC BACTEROIDALES 16S rRNA GENETIC MARKERS. Mieszkin S., Furet J.P., Corthier G., Gourmelon M. (France).</p>	<p>1786 AIR POLLUTION TRANSPORT TO THE EL TAJIN ARCHAEOLOGICAL ZONE IN VERACRUZ, MEXICO. Kahl J., Bravo H., Sosa R., Sanchez P., Alarcon A., Soto R. (USA).</p>	<p>2558 NITROGEN RECOVERY FROM CONCENTRATED AMMONIUM WASTE STREAMS THROUGH PARTIAL NITRIFICATION. Frediansyah R., Kleerebezem R., van Loosdrecht M. (The Netherlands).</p>
IV MICROBIAL ECOLOGY		VI NEW PERSPECTIVES	
17:15-17:30	<p>2332 AN ASSESSMENT OF SYNTHETIC LANDFILL LEACHATE ATTENUATION IN SOIL BENEATH A LANDFILL AND ITS SPATIAL AND TEMPORAL IMPACT ON BACTERIAL COMMUNITY DIVERSITY. Govender K., Hunter C.H. (South Africa).</p>	<p>1829 THE EXOTIC INVASIVE PLANT, <i>Amarantus viridis</i>, SUPPRESSES THE GROWTH OF NATIVE <i>Acacia</i> BY ALTERING SOIL MICROBIAL COMMUNITIES STRUCTURE AND FUNCTIONALITIES IN A SAHELIAN ECOSYSTEM Sanon A., Beguiristain T., Sylla S., Berthelin J., Duponnois R. (Senegal/France).</p>	<p>2317 SURFACE RENEWAL ANALYSIS FOR ESTIMATING TURBULENT SURFACE FLUXES. Castellví F. (Spain).</p>
17:30-17:45	<p>2393 EFFECTS OF ORGANOCCLAYS ON SOIL MICROBIAL POPULATION ASSESSED BY MOLECULAR APPROACHES. Abbate C., Arena M., Tabuani D., Gennari M. (Italy).</p>	<p>2396 MICROBIAL DIVERSITY OF A HIGH SALINITY OIL FIELD. Neria I., Galès G., Alazard D., Ollivier B., Borgomano J., Joulian C. (France).</p>	<p>1881 BIOCONVERSION INTO USEFUL COMPOUNDS WITH THE DISCOVERY OF NOVEL ENZYME AND GENE SYSTEMS. Kenji Aoki, Shinji Takenaka (Japan)</p>
17:45-18:00	<p>POSTER EVALUATION PRESENTATION OF THE BEST POSTER (POSTER SECTION OF TUESDAY 23 SEPTEMBER) (5 minutes each presentation, total 6 poster)</p>		



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POSTER SECTION WEDNESDAY 24 SEPTEMBER (3IMEBE)

See pages 36 to 44

III STRATEGIES FOR THE PROTECTION AND REMEDIATION OF NATURAL ENVIRONMENTS

Modelling and control of WW biological treatment systems

2194	Analyzing the biomass filter behavior in an anaerobic wastewater treatment plant.	Hernandez S.C. (Mexico)	208 III
2483	Algorithm for parallel control for an anaerobic reactor.	Velasco-Perez A., Alvarez-Ramirez J.J., Viguera Carmona S.E., Osorio-Miron A., Sanchez Bazan L.A., Cruz-Garrido V., Rodríguez Rivera A. (Mexico)	209 III

Techniques to prevent or reduce environment contamination

2219	Influence of pine or oak wood on the degradation of alachlor and metalaxyl in soil.	Rodríguez-Cruz M.S., Marín-Benito J.M., Ordax J.M., Azejjel H., Sánchez-Martín M.J. (Spain)	210 III
2221	Retention of pesticides in sandy soil columns modified with a wood barrier.	Sánchez-Martín M.J., Rodríguez-Cruz M.S., Ordax J.M., Arienzo M. (Spain)	211 III
2295	Effect of the increase of 2,4,6-trichlorophenol concentration on the performance of a fluidized bed bioreactor	.Bárcenas-Torres J.D., Rios-Leal E., García-Mena J., Poggi-Varaldo H.M. (Mexico)	212 III
2390	Preparation of new biodegradable materials by grafting of polycaprolactone onto starch and their biodegradability studies	Najemi L., Zerroukhi A., Jeanmaire T., Raihane M., Chamkh F., Abdel-illah Qatibi, Rhizlane Bennisse (Morocco)	213 III
2456	The action of selected disinfectants on canine endoparasite eggs.	Laciaková A., Laciak V., Máté D., Severa J., Venglovský J. (Slovakian Republic)	214 III
2605	Assessing the grass <i>Schizachyrium gracile</i> for capacity to ecologically restoration the polluted soils of ecosystems in a bauxite mining area.	Pastor J., Alexis S., Hernández A.J. (Spain)	215 III
2899	Determination of doramectin, an emergent veterinary contaminant, in soil and manure using HPLC with fluorescence detection	Gil-Díaz M, Martínez-Iñigo M.J, Urquía J.J., Martín M., Lobo M.C. (Spain)	216 III
2900	Effect of the addition of sand on the enzymatic activity of carbonated soils contaminated with metals	Ramírez Vera R., Martín Calvarro L., Rodríguez Fernández T., Ortiz Rosales M.A., López Lafuente A., González Huecas, C., Quintana Nieto. J.R., de Santiago Martín	217 III



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		A., Martín Gómez M.C. (Spain)	
2905	Anaerobic and aerobic slurry bioreactors for remediation of a heavy soil contaminated with lindane	Robles-González I.V., Ríos-Leal E., Galíndez-Mayer J., Sastre-Conde I., Poggi-Varaldo, H.M. (Mexico/Spain)	218 III
2912	Enhancement of heavy metals phytoextraction on an Industrial contaminated soil using EDTA and NTA	Gament E., Plopeanu G., Dumitru E., Vrinceanu N., Carabulea, V. (Romania)	219 III
2913	Strategies to reduce the environmental impact caused by the potential losses of N in soil amended with organic residues	López-López G., Ibáñez-Burgos A.M., Colombas M., Reolid, C., Lobo M.C., Sastre-Conde I. (Spain)	220 III
2916	Metals and metalloids accumulation by wild plants from a mining zone of Mexico	Juárez Santillán L.F., Lucho Constantino C.A., Blasco J.L., Beltrán Hernández R.I. (Mexico)	221 III
2918	Comparison of alternative methods for the control of potatoes nematodes (<i>Globodera rostochiensis</i> and <i>Globodera pallida</i>) in soils o Sa Pobla (Majorca)	Gomila I., Olmo D., Roselló M.I., Ibañez-Burgos A., López-López G., Nieto A., Sastre-Conde I., Rosell	222 III
Sustainable agriculture			
1791	Drought effect on growth, gas exchange and yield in two local barley localities under water deficit conditions in the south of Tunisia.	Thameur A., Lefi E. Ferchichi A. (Tunisia)	224 III
1816	«Antinutritional evaluation of the flour of the nipples of holm oak (<i>Quercus ilex</i>) and oak korc (<i>Quercus suber</i>) raw and pressure-sealed»	Fatima Zohra E. M. (Algeria)	225 III
1817	Biochemical and nutritional study of the nipples of algerian oak of algerian oaks for their use in the animal feeds.	Fatima Zohra E. M. (Algeria)	226 III
2195	Enzyme activities and microbial indices of Mexican volcanic soils under different managements.	Pajares S., Gallardo J.F., Masciandaro G., Ceccanti B., Etchevers J.D., Marinari S. (Spain)	227 III



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2224	Barley seeds coating with humates-phosphatase complexes in order to improve P uptake and plant growth.	Pilar M.C., Busto M.D., Ortega N., Perez-Mateos M. (Spain)	228 III
2289	Soil protection throws almond tree cultivation.	García C., Hernández T., Moreno J.L., Bastida F., Masciandaro G., Mennone C., Ceccanti B. (Spain/Italy)	229 III
2290	Ecological farming systems improve soil microbial quality and sustain prune tree productivity.	Hernández T., Chocano C., González D., Melgares de Aguilar J, García C (Spain)	230 III
2319	Conservation tillage influence on soil carbon and aggregation in semiarid rainfed agriculture (SW Spain)	López-Garrido R., López M.V., Madejón E., Moreno F., Murillo J.M. (Spain)	231 III
2397	Almond tree and land management practices for soil erosion protection in Mediterranean areas.	Doni S., Macci C., Peruzzi E., Masciandaro G., Ceccanti B., Mennone C., Garcia C., Hernandez M.T., Moreno-Ortega J.L. (Italy/Spain)	232 III
2893	Influence of green top cover for soil protection in Spanish olives trees. Root tensile strength.	González A., Casanova C., Soler, C., Sobrino E., Delgado M., Miralles H R., Martin S.J. (Spain)	233 III
2917	Equilibrium between energy saving and improvement o environmental quality versus agriculture productivity	Garau M.C., March, J., Espallardo C., Luna J.M., Ibañez-Burgos A., López-López G., Sastre-Conde I.(Spain)	234 III
2919	Management of organic residues as pools of nitrogen in tomato crop ("ramillete"), a variety commonly grown in Majorca.	March J., Garau C., López-López G., Luna, J. M. Ibáñez-Burgos, A., Martorell A., Sastre-Conde, I. (Spain)	235 III

Biodiversity screening for potential biotechnological applications

2206	Determination of enzymatic profile of the lignolytic fungi isolated from Mexico.	Cruz Ramírez M.G., Rivera-Ríos J.M., Medina Moreno S.A., Téllez-Jurado A., Maqueda Gálvez A.P., Mercado-Flores Y. Arana-Cuenca A. (Mexico)	236 III
2273	Potential of thermophilic microorganisms for the degradation of synthetic polymers.	Dominguez A., Deive F. J., Sanromán M. A., Longo M. A. (Spain)	237 III

IV MICROBIAL ECOLOGY

1815	Treating swine waste with anaerobic sequencing batch reactors at high ammonia levels: performance and microbial communities.	Garcia M.L., Angenent L.T.(USA)	238 IV
1831	PNT effect on diversity of <i>Rhizobia</i> associated with <i>Sesbania sesban</i>	Ousmane S., Yattara I.I., Tahir DIOP, Neyra M.(Mali)	239 IV
1877	Petroleum-influenced beach sediments of the Campeche bank, Mexico: diversity and bacterial community structure assessment.	Rosano-Hernández M. C., Ramírez-Saad H., Fernández-Linares L., Xoconostle B. (Mexico)	240 IV



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1884	Quantitative shifts in methanogenic community structures in anaerobic digesters treating various wastewaters	Lee C., Kim J., O'Flaherty V., Mahony T., Shin S., Hwang S. (Irlanda/Korea)	241 IV
1886	Molecular tracking of ubiquitous acidogens in anaerobic processes treating various wastewaters: qualitative and quantitative study	Kim J., Lee C., Lee S., Hwang S. (Korea/Irlanda)	242 IV
2148	Evaluation of the natural attenuation potential of s-triazine-contaminated soil-water systems using the gene atzB as a functional marker	<u>Martín M.</u> , Gibello A., Nande M., Vargas R., Fajardo C., Barra-Caracciolo A., Grenni P., Martínez-Iñigo M.J., Lobo C. (Spain)	243 IV
2159	Comparison of classical and molecular techniques for the determination of microbial biodiversity in Mediterranean crop soils.	<u>Muñoz A.</u> , López-Piñeiro A., Ramírez M. (Spain)	244 IV
2161	Considerations about the freeze storage of soil samples for future microbial analysis.	<u>Muñoz A.</u> , López-Piñeiro A., Ramírez, M. (Spain)	245 IV
2197	Rate growth comparison of basidiomycetous fungi isolated in Mexico.	<u>Rivera-Ríos J.M.</u> , Cruz Ramírez M.G., Cruz Madrid L.C., Medina Moreno S.A., Téllez-Jurado A., Mercado-Flores Y., Arana-Cuenca A. (Mexico)	246 IV
2198	Identification of lignionolytic fungi isolated in Mexico using its like molecular marker	<u>Rivera-Ríos J.M.</u> , Cruz Ramírez M.G., Cruz Madrid L.C., Medina Moreno S.A., Téllez-Jurado A., Arana-Cuenca A. Maqueda Gálvez, A.P. (Mexico)	247 IV
2200	Determination of enzymatic profile of the ligninolytic fungus isolated from Mexico.	Cruz Ramírez M.G., Rivera-Ríos J.M., Medina Moreno S.A., Téllez-Jurado A., Maqueda Gálvez A., Mercado-Flores Y., Arana-Cuenca A. (Mexico)	248 IV
2202	Ability of legumes to regenerate microbiological processes in soils of tunisian arid regions.	Fterich A., Mahdhi M., Mars M. (Tunisia)	249 IV
2256	A review on degradation of hexachlorocyclohexane and involved enzymes.	Camacho-Pérez B., Poggi-Varaldo, H.M.(Mexico)	250 IV
2260	Changes on the structure and functioning of a bacterial community of a soil amended with oak and pine residues and treated with linuron herbicide.	<u>Grenni P.</u> , Barra Caracciolo A., Falconi F., Rodríguez-Cruz M.S., Sánchez-Martín M.J. (Italy/Spain)	251 IV
2271	Potential biotechnological application of mycorrhizas and yeasts associated with <i>Nothofagus nervosa</i> (Rauli).	Fernández N., Fontenla S., Gallo, L., Marchelli, P. (Argentina)	252 IV
2279	Study of the natural attenuation of lindane contamination in soil microcosms.	<u>Martinez-Iñigo M. J.</u> , Lobo, M.C., Ortiz I., Nande M., Robla J.I., Vargas R., Fajardo C., Martín M., Gibello A. (Spain)	253 IV
2284	Ammonia tolerant syntrophic acetate-oxidizing-bacteria involved in the methanogenic degradation of protein-rich material	<u>Karlsson M.</u> , Roos S., Schnürer A. (Sweden)	254 IV



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2291	Cloning and expression of <i>lcc1</i> laccase gene promoter in <i>Aspergillus niger</i>	<u>Maqueda-Gálvez A.P.</u> , Loera Corral O., Xoconostle Cázares B., Téllez-Jurado A., Arana-Cuenca A. (Mexico)	256 IV
2294-	Two <i>Pseudomonas</i> strains isolated from a fluidized bed bioreactor are able to degrade 2,4,6-trichlorophenol as the only source of carbon.	<u>Bárceñas-Torres J. D.</u> , García-Mena J., Rodríguez-Casasola T., Esparza-García F., Poggi-Varaldo H.M. (Mexico)	257 IV
2302	Testing the tolerance and growth of eleven <i>Trichoderma</i> strains to crude oil, naphthalene and phenanthrene .	Argumedo-Delira R., <u>Alarcón A.</u> , Ferrera-Cerrato R., Peña-Cabriales J.J. (Mexico)	258 IV
2305	Effect of three polycyclic aromatic hydrocarbons on nodulation of <i>Rhizobium tropici</i> CIAT 899 on <i>Phaseolus vulgaris</i> .	González-Paredes Y., <u>Ferrera-Cerrato R.</u> , Alarcón A. (Mexico)	259 IV
2306	Microanalysis of causura, eucalyptus, pine tissue and myco-rhizal mycelium collected from mine soils.	<u>Sánchez-Viveros G.</u> , Zavaleta-Mancera H.A., Arenas-Alatorre J., Ruvalcaba-Sil J.L., González-Chávez C. (Spain)	260 IV
2326	Analysis of bacterial community in two wastewater treatment plants by denaturing gradient gel electrophoresis and fluorescent in situ hybridization.	Rodríguez Rodríguez E.M., Ferrero Infestas E.M, García Encina P.A. (Spain)	261 IV
2328	Molecular characterization of TEX (Toluene Ethylbenzene, and Xylene) degrading microbial communities from air biofilters.	Prenafeta-Boldú F.X., Viñas M., Guivernau M., Elías A., Barona A. (Spain)	262 IV
2338	DNA-based diagnostic tests for <i>Salmonella</i> strains targeting <i>hilA</i> , <i>agfA</i> , <i>spvC</i> and <i>sef</i> genes	<u>Crăciunaș C.</u> , Keul A-L, Flonta M., Cristea M. (Romania)	263 IV
2342	<i>Sedimentibacter</i> sp with corrosive capability, ferric-reducing, isolated from an oil separation tank.	López-Jiménez G., Loera O., <u>Ramírez F.</u> , Monroy O., <u>Fernández-Linares L. C.</u> (Mexico)	264 IV
2366	Changes in microbial communities in green waste and sewage sludge composts following maturity: competition and co-metabolism	Albrecht R., Ruaudel F., Le Petit J., Terrom G., Périssol C. (France)	265 IV
2428	Long-term fire effect on some chemical parameters and microbial diversity in a conifer forest soil.	<u>Iglesias T.</u> , Iglesias M., Ramírez, M., Fernández-Bermejo M.C. (Spain)	266 IV
2432	Influence of cultivation regime of an arbuscular mycorrhizal fungal isolate on its symbiotic efficacy in phytoremediation of disturbed ecosystems.	<u>Oliveira R.S.</u> , Vosátka M., Castro P.M.L, Dodd J.C. (Portugal / UK / Czech Republic)	267 IV
2435	Soil enzymes activities, bacterial biomass and bacterial community structure. Changes through soil profile due to different managements	Moreno, S., García-Rodríguez, S., Cañizares, R., Benítez. E. (Spain)	268 IV



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2451	Characterization of cell-free extracts of <i>Pseudomonas aeruginosa</i> MGP-1 that oxidizes n-alkanes.	<u>Salgado Brito R.</u> , <u>Pineda F.G.</u> , Díaz C.F., Wang E.H. (Mexico)	269 IV
2470	Cellular polymorphism and nitrogenase activity of <i>Azotobacter nigricans</i> during kerosene removal.	García-Esquivel G., Rodríguez-Casasola T., <u>Ferrera-Cerrato R.</u> , Rodríguez-Vázquez R., Calva-Calva G., Esparza-García F.. (Mexico)	270 IV
2488	Methanogenesis in an acid and high content of heavy metals environment.	Rodríguez N., Díaz EE., Amils R., <u>Sanz, J.L.</u> , (Spain)	271 IV
2502	Biological activity in long-term treated with wastewater irrigated soils of Mallorca	<u>Adrover, M.</u> , Moyá G., Vadell, J. (Spain)	272 IV
2509	Diversity of chromate resistant bacteria present in the tannery of Fez in Morocco.	<u>Essahale A.</u> , Malki M., Amils R., Moumni M., Marín I. (Spain)	273 IV
2517	Study of the population dynamics of a mixed bacterial culture able to degrade cyanuric acid in packed bed reactor, using RAPD (Random Amplification of Polyformic DNA) technique.	<u>Galíndez-Nájera, S.</u> , Llamas-Martínez M., Ahuatz-Chacón D., Ruiz-Ordaz N., Galíndez-Mayer C.J. (Mexico)	274 IV
2543	Diversity and community composition of tributyltin-resistant bacteria under different conditions.	<u>Lee Y.H.</u> , Park S., Park, H., Choi Y. (South Korea)	275 IV
2562	Characterization of <i>Pseudomonas nitroreducens</i> strain MHP41 and its application in bioremediation.	<u>Hernández M.</u> , Morgante V., Miralles P., González M., Rosselló-Mora R., Seeger, M. (Chile)	276 IV
2587	Relationship between microbial diversity and microbial xenobiotic pollution in soils from a municipal solid waste landfill.	Pérez-Leblic M.I. Turmero A., Hernández M., Hernández A.J. Pastor J., Rodríguez J., Arias M.E. (Spain)	277 IV
2682	Changes on soil microbial community by dairy cow manure and atrazine application in an agricultural soil.	Briceño G., Jonquera M., Demanet R., Mora M.L., <u>Palma, G</u> (Chile)	278 IV
2687	Isolation and identification of actinomycetes from a compost-amended soil as biocontrol agents.	García de la Fuente R. (Spain)	279 IV
2523	Glomalin in a Mediterranean ecosystem affected by mining activities and its contribution to heavy metals sequestration.	Cornejo P., Meier F., Borie G., <u>Borie F.</u> (Chile)	280 IV
2915	Plant biomass increase linked to biological activity in amended soils	Ibanez-Burgos A., Lopez-Lopez G., Vera J., Rovira J.M., Reolid C., Sastre-Conde I (Spain)	281 IV



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V ENVIRONMENTAL EDUCATION AND LEGISLATIVE ASPECT

2387	The development of transformation functions for the quantitative evaluation of environmental impacts in the agro-food industry.	Angosto J.M., Bayo J., Gómez-López M.D., García-Cascales M.S.(Spain)	282 V
2520	How does a wastewater treatment plant work? Didactic escheme on wastewater treatment in the framework of a spreading scientific's fair.	Fernández N., Diaz-Portuondo E. E., Lopez J. A., <u>Sanz J. L.</u> (Spain)	283 V
2584	Combined action of heavy metals in soils sustaining corn and sorghum: assessments methods, phytoremediation as an option and education strategies.	Hernández A.J., Alexis S., Pastor J. (Spain)	284 V
2590	Local habitats recreation in gardening as an environmental education tool.	<u>Contreras-López F.</u> , Victoria-Cos I.M., Cos J., Sotomayor. J.A. (Spain)	285 V
2486	Level of metals in human milk	Mahabbis, M.T..Elkubat,H.Kut M.S (Libya)	286 V
2897	Presence of Beryllium (Be) in urban soils: human health risk	Peña A, González MJ., <u>Lobo M.C</u> (Spain)	287 V

VI NEW PERSPECTIVES

Renewable energy and energy production from waste and wastewater

1790	Achieving sustainable biomass conversion to energy and bioproducts	Matteson G.C. (USA)	288 VI
2293	Energy production by anaerobic treatment of cheese whey.	<u>Comino E.</u> , Peano L., Ciccirelli R., Gard P.-A. (Italy)	289 VI
2399	Preliminary detection of native lipase producing microorganisms for biodiesel production.	<u>Ciudad G.</u> , Jorquera M., Briones R., Azócar L., Leal J., Navia R. (Chile)	290 VI
2404	Determining waste lipids stability and possible effects in biodiesel production.	<u>Azócar L.</u> , Ciudad G., Navia R. (Chile)	291 VI
2539	Improvement of anaerobic bio-hydrogen gas production from organic sludge waste.	Lee S., Lee Y.H.(South Korea)	292 VI
2541	MicroDrivE - a research program on sustainable bio-ethanol and biogas systems	Schnürer J., <u>Schnürer A.</u> (Sweden)	293 VI
2880	Solid substrate anaerobic fermentation of municipal and juice fruit industry solid wastes for the production of biohydrogen.	<u>Muñoz-Páez K.</u> , Pareja-Camacho J., Ríos-Leal E., Ponce-Noyola M.T., Esparza-García F.J., García-Mena J., Poggi-Varaldo H.M. (Mexico)	294 VI



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2881	Re-fermentation of spent solids from dark fermentation allows for a substantial increase of hydrogen production from the organic fraction of municipal solid waste.	<u>Muñoz-Páez K.M.</u> , Pareja-Camacho J., Ríos-Leal E., Valdez-Vazquez I., Poggi-Varaldo, H.M. (Mexico)	295 VI
2885	Microbial fuel cells a promising alternative for power generation and waste treatment.	<u>Vázquez-Larios A. L.</u> , Solorza-Feria O., Rinderknecht-Seijas N., Poggi-Varaldo H.M. (Mexico)	296 VI
2889	Effect of inoculum type on performance of a microbial fuel cell fed with acidogenic extracts from dark fermentation of wastes.	<u>Poggi-Varaldo H.M.</u> , Carmona-Martinez A., Solorza-Feria O. (Mexico)	297 VI
2894	Batch tests of a microbial fuel cell for electricity generation from spent organic extracts from hydrogenogenic fermentation of organic solid wastes	<u>Carmona-Martinez A.</u> , Solorza-Feria O., Poggi-Varaldo H.M. (Mexico)	298 VI
2906	An enrichment and acclimation procedure to obtain phototrophic cultures for H ₂ production from organic effluents	<u>Acevedo-Benítez J.A.</u> , Ponce-Noyola M.T, Poggi-Varaldo H.M. (Mexico)	299 VI
2907	A two-stage biohydrogen process for energy generation from municipal solid wastes	<u>Acevedo-Benítez J.A.</u> , Poggi-Varaldo H.M. (Mexico)	300 VI

High value products from wastes other than biofuels

2204	Production of ethanol and biomass starting to present lactose in the milk whey.	<u>Ramírez Kenia A.</u> , Cuenca Ainoa A., Téllez-Jurado A. (Mexico)	301 VI
2371	Use of several waste substrates for carotenoid-rich yeast biomass production.	<u>Marova I.</u> , Carnecka M., Halienova A., Dvorakova T., Haronikova A. (Czech Republic)	302 VI
2410	Development of a non conventional adsorbent from petroleum coke fly ashes.	Sáez J., Morales K., González A., <u>Navia R.</u> (Chile)	303 VI
2553	Agricultural and food processing byproducts from the balearic islands: Key and traditional production processes.	<u>Femenia A.</u> , González-Centeno M.R., Bujosa.G., Garau M.C., Rosselló C. (Spain)	304 VI
2589	Biotechnology for the production of cuaguayote (<i>Jacaratia mexicana</i>). Source of industrial proteases.	<u>Oliver-Salvador M. C.</u> , Cortés-Vázquez M. I., Briones-Martínez R. (Mexico)	305 VI
2872	Sludge valuation coming from waste water treatment plant and application to the ceramic industry.	Martínez García C., Iglesias Godino F.J., Eliche Quesada D., Pérez Villarejo L., Corpas Iglesias F. (Spain)	306 VI
2873	Preparation and properties of new ceramic products using ash from biomass-fired generation station in clay matrix.	<u>Pérez Villarejo I.</u> , -Eliche Quesada D., Iglesias Godino F.J., Martínez García C., Corpas Iglesias F. (Spain)	307 VI



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Others

2367	Environmental analysis of short chain aliphatic carboxylic acids by a semi-direct fluorimetric method.	<u>Robert-Peillard F.</u> , Coulomb B., Dudal Y., Boudenne J.L. (France)	308 VI
2437	The use of different concentrations of ginger root oil to improve the mating propensity of the Medfly sterile males	<u>Fadhli S.</u> (Tunisia)	309 VI
2467	A two-step electro-dialysis method for DNA purification from polluted metallic environmental samples.	<u>Dantán-González E.</u> , Rodríguez-Mejía J.L., Martínez-Anaya C., Folch-Mallol J.L. (Mexico)	310 VI
2511	Perspectives on the developments of biopesticides for vegetable protection.	<u>Pastor N.</u> , Carlier E., Andrés J., Rosas B., Rovera M. (Argentina)	311 VI
2544	<i>Ziziphus mauritiana</i> fruit pulp extract: an antagonist of the toxic effect of chemical pesticides	Mishra Tulika, Shankarjit Singh, Bhatia Aruna (India)	312 VI
2588	Sustainable agroindustrialization of Mexican plants.	<u>Briones-Martínez R.</u> , Cortés-Vázquez M.I. (Mexico)	313 VI



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Thursday 25 September Oral Communication

VI NEWS PERSPECTIVES		IV MICROBIAL ECOLOGY	
	Chairperson 9:00-12:45 Jim Yake, Aldo González,	Chairperson 9:00-11:15 Luis Fernández Linares and Luis G. Torres	Chairperson 9:00-10:00 Paul Savadogo and Susana Vazquez
9:00-9:15	2287 ELECTROCHEMICAL CHARACTERIZATION OF A MICROBIAL FUEL CELL (MFC) THAT UTILIZES COW MANURE AS ENERGY SOURCE. <u>Viñas M., Prenafeta F., Flotats X., Gerritse J.</u> (Spain)	2400. GROWTH RESPONSE AND TOLERANCE TO HEAVY METALS OF TWO SWAMP SPECIES INOCULATED WITH A PLANT GROWTH-PROMOTING RHIZOBACTERIA <u>Rodríguez-Dorantes A., Labra-Cardón D., Guerrero-Zúñiga A., Montes-Villafán S.</u> (Mexico)	2886 BACTERIAL COMMUNITY IN NATURAL GRASSLAND OF URUGUAY: ASSESSMENTS OF EFFECTS CAUSED BY CATTLE GRAZING. <u>Bajsa N., Azziz G., Coutinho H., Rosado A., Arias A.</u> (Uruguay)
9:15 - 9:30	2480 SCREENING OF DIFERENT STRAINS OF <i>Acidiphilium</i> spp. AND THEIR APPLICATION IN AEROBIC MICROBIAL FUEL CELLS. <u>Sánchez I., Malki M., De Lacey A.L., Amils R., Fernandez, V.M.</u> (Spain)	9:15-9:45 2911 MICROBIAL TREATMENT OF HEAVY METAL LEACHATES <u>María Teresa Álvarez Aliaga</u> Biochemical Institute (Bolivia)	2495 ASSESSMENT OF EFFECT OF PHOSPHATE FERTILIZATION INPUTS ON PLANT GROWTH PROMOTING MICROBIAL COMMUNITIES IN SOIL. <u>Chhabra S., Brazil D., Dowling D.N</u> (Ireland).
9:30-9:45	2895 MICROBIAL FUEL CELL DESIGN AND CHARACTERIZATION FOR ELECTRICITY PRODUCTION FORM WASTEWATERS <u>Poggi-Varaldo, H.M., Carmona-Martínez, Solorza-Feria, O.</u> (Mexico)		2162 EFFECT OF DISTANCE AND DEPTH ON SOIL MICROBIAL BIOMASS, N MINERALIZATION AND GENETIC DIVERSITY OF <i>Rhizobia</i> UNDER <i>Acacia</i> SENEGAL TREES. <u>Fall D., Faya A., Sall S.N., Diouf D.</u> (Senegal).
9:45-10:00	2487 COMBINED BIOGAS AND BIOETHANOL PRODUCTION IN ORGANIC FARMING. <u>Jens Ejbye Schmidt , Piotr Oleskowicz-Popiel, Mette Hedegaard Thomsen, Henrik Bangsø Nielsen & Anne Belinda Thomsen</u> (Denmark).	9:45-10:00	2323 SOIL MICROBES AND SOIL MICROBIAL PROTEINS: INTERACTIONS WITH CLAY MINERALS. <u>Spence A., Kelleher B.P.</u> (Ireland).
10:00-10:15	2254 BIOHYDROGEN FROM WASTES AND COMBINATION OF BIOLOGICAL PROCESSES FOR ENERGY YIELD IMPROVEMENT: A REVIEW. <u>Robledo-Narváez P., Escamilla-Alvarado C., Poggi-Varaldo H.M.</u> (Mexico)	2261 ASSESSMENT OF THE EFFECT OF THE HERBICIDE TERBUTHYLAZINE ON A GROUNDWATER BACTERIAL COMMUNITY. <u>Barra Caracciolo A., Grenni P., Saccà M.L., Falconi F., Amalfitano S., Martin M., Gibello A.</u> (Italy).	



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10:15-10:30	2343 EFFECT OF TEMPERATURE AND HYDRAULIC RETENTION TIME ON HYDROGEN PRODUCING GRANULES: HOMOACETOGENESIS AND MORPHOLOGICAL CHARACTERISTICS. <u>Abreu A.A.</u> , Danko A.S., Alves M.M. (Portugal).	2901. NEW BIOCHEMICAL PATHWAY FOR BIPHENYL DEGRADATION IN PLANTS: STRUCTURAL, MECHANISTIC AND BIOTECHNOLOGICAL ASPECTS Pacios L.F., Campos V.M., Merino, I., <u>Gomez L.</u> , (Spain)
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10:30-10:45	2579 FERMENTATIVE HYDROGEN PRODUCTION FROM COMBINATION OF TOFU PROCESSING AND ANAEROBIC DIGESTER SLUDGE WASTES USING A MICROBIAL CONSORTIUM You-Kwan Oh, Mi-Sun Kim (South Korea)	10:30-11:00	2871 EFFECT OF SULFADIAZINE ON THE ABUNDANCE OF GENES INVOLVED IN THE N TURNOVER IN AGRICULTURAL SOILS.Schauss K., Sharma S., Kotzerke A., Heuer H., Wilke B.M., Smalla K., <u>Schloter M.</u> (Germany)
10:45-11:00	2536 EFFECT OF SUBSTRATE CONCENTRATION ON HYDROGEN PRODUCTION. Ramirez-Sáenz D., Guerrero-Barajas C., <u>García-Peña I.</u> (Mexico).		

11:00-11:15	2578 MICROBIOLOGICAL HYDROGEN PRODUCTION BY ANAEROBIC FERMENTATION AND PHOTOSYNTHETIC PROCESS. <u>Asada Y.</u> , Ohsawa M., Nagai Y., Fukatsu M., Ishimi K., Ichi-ishi S. (Japan).	2301 ARBUSCULAR MYCORRHIZAL SYMBIOSIS ALLEVIATES DIESEL TOXICITY ON <i>Melilotus albus</i> . Hernández-Ortega H.A., <u>Alarcon A.</u> , Ferrera-Cerrato R., Zavaleta-Mancera H.A. (Mexico).
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POSTER EVALUATION PRESENTATION OF THE BEST POSTER
(POSTER SECTION OF TUESDAY 24 SEPTEMBER)
(5 minutes each presentation, total 6 posters)

COFFEE BREAK

12:15-12:30	2607 IMPROVEMENTS IN FERMENTATIVE BIOLOGICAL HYDROGEN PRODUCTION THROUGH METABOLIC ENGINEERING. <u>Hallenbeck P.C.</u> , Dipankar Ghosh D., Sabourin-Provost G. (Canada).	ROUNDTABLE SOIL PROTECTION, REMEDIATION, AND RECUPERATION CARMEN LOBO BEDMAR, MICHAEL SCHOLTER, VANGRONSVELD, LUIS FERNÁNDEZ, TERESA ALVAREZ ALIAGA, JOSE LUIS RODRIGUEZ GALLEGO,
12:30-12:45	2580 HYDROGENASES IN FRANKIA. <u>Sellstedt A.</u> , Leul M. (Sweden).	



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12:45- 13:00	IEA-HIA Annex 21 PRESENTATION Jim Yake ROUNDTABLE NEW ENERGY SUSTAINABILITY JIM MIYAKE, ALDO GONZALEZ, HECTOR POGGI, ALFONS STAMS, EJBYE SCHMIDT, EJBYE SCHMIDT SOME PERSONS TO BE CONFIRMED	AG-Ambiental, Naturalbiotech,
13:00- 13:15		
13:15- 13:30		EIADES (Remediation and recuperation of soil) GROUP PRESENTATION Lobo Bedmar María del Carmen
13:30- 13:45		
13:45_ 16:30	TIRME (www.tirme.com) MEAL To visit the installation of TIRME	
16:30- 18:00	CONCLUSIONS IN ROUNTABLE FUTURE OF IMEBE, 4IMEBE CLOSING OF 3IMEBE	